THE ROLE OF THE STUDENT-TEACHER RELATIONSHIP IN THE LIVES OF FIFTH GRADERS: A MIXED METHODS ANALYSIS

By

Christopher M. Knoell

A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Doctor of Philosophy

Major: Educational Studies

(Teaching, Curriculum, & Learning)

Under the Supervision of Professor Delwyn L. Harnisch

Lincoln, Nebraska

May, 2012
THE ROLE OF THE STUDENT-TEACHER RELATIONSHIP IN THE LIVES OF FIFTH GRADERS: A MIXED METHODS ANALYSIS

Christopher M. Knoell
University of Nebraska, 2012
Advisor: Delwyn L. Harnisch

The intent of this mixed methods study was to develop a more holistic understanding of the student-teacher relationship from the perspective of the fifth graders in two mid-western elementary schools on either end of the poverty spectrum. Quantitative data was gathered through the ClassMaps Survey (CMS) and analyzed for correlations with growth in student achievement data as measured by the Measure of Academic Progress (MAP). In the qualitative follow-up, the CMS data was further explored through semi-structured interviews. The qualitative data sources were analyzed for themes so as to provide a more in-depth understanding of the dynamics and importance of the student-teacher relationship in the lives of the fifth grade students in both schools.

Results showed students attending both types of schools could have similar, favorable perceptions of their relationships with their teachers and that it is the individual teacher which has an effect on student’s perceptions of those relationships. Quantitative analysis revealed a greater number of significant correlations between student performance (MAP) and student perceptions of the student-teacher relationship (CMS) in the more affluent school. Also, a greater number of students in the affluent school felt their teachers had an effect on them and their lives outside of school than students
attending the poverty school. The most important findings came from theme-analysis of the student interviews, which produced a list of teacher characteristics most-valued by students in both schools. These themes/characteristics included: a sense of humor; consistent help (with high expectations); active listening; value for the group as well as the individual; the inclusion of games for learning; and the use of spoken and written encouragement. In other words, students appreciated when their teachers actively listened and encouraged them, as well as provided a fun and supportive, yet challenging environment where the entire class could learn. Additionally, students seemed to be much more concerned with the behaviors and treatment from their teachers than with the physical appearance of their teachers. In addition to providing goals for teachers, these themes may also serve to assist administrators in hiring positions to more effectively choose teachers.
ACKNOWLEDGEMENTS

My dearest, Kami
We made it, my love. I will never be able to thank you enough.

Maci, Benjamin, Alec, and Samuel
Thank you for your loving hugs and kisses,
and for always asking how my paper was going.
It’s finally done!

Special Thanks to:

My Lord and My God
For giving me a deeper understanding of Your love
and the necessity of my dependence upon You
throughout this process and my life as a whole

My parents, Gary and Patty
For always believing in me, your unconditional love,
and for your constant prayers

My family, extended family, and cherished friends
For your continual support and prayers

Dr. Delwyn Harnisch
For giving me the guidance and space to learn and grow
For your example of patience, enthusiasm, and most of all for your care

My Dissertation Committee
Dr. Ruth Heaton, Dr. Jody Isernhagen, Dr. David Fowler, & Dr. Ronald Shope
For your recommendations, advice, guidance, and help

My Scholarly Support Team
Dr. Sherry Crow, Dr. Max McFarland, & Dr. Teara Archwamety
For always knowing the correct answer or asking the right question

My UNK colleagues in the Teacher Education Department:
For your care and support in my doctoral studies

The wonderful students and teachers at
“Birch Elementary” and “Maple Elementary”
For opening your doors and sharing your stories
TABLE OF CONTENTS

Chapter 1: Introduction ......................................................................................................................1
  Purpose of the Study ........................................................................................................................2
  Research Questions ..........................................................................................................................3
    Central Question ............................................................................................................................3
    Quantitative Research Questions ................................................................................................3
    Qualitative Research Questions ..................................................................................................3
    Mixed Method Research Question ............................................................................................4
  Definition of Key Terms ..................................................................................................................4
  Significance of Study .......................................................................................................................6
  Summary ..........................................................................................................................................6

Chapter 2: Literature Review .............................................................................................................8
  Relationships .....................................................................................................................................8
  Student-Teacher Relationships .......................................................................................................9
    Teacher Connections ......................................................................................................................9
    Student Voice in Relationships ..................................................................................................10
    Importance of Student-Teacher Relationships ...........................................................................11
    Creating Success in Classrooms ................................................................................................12
    Characteristics of Student-Teacher Relationships ......................................................................14
  Importance of Current Study ..........................................................................................................15
  Methodological Stance ....................................................................................................................15
  Diverse Student Voices ..................................................................................................................16
Summary ...........................................................................................................................................17

Chapter 3: Methods .........................................................................................................................19
Definition of Mixed Methods .........................................................................................................19
Type of Design Used and Definition ..............................................................................................19
Meeting the Challenges of the Design ............................................................................................20
Participants/Settings .......................................................................................................................21
Data Collection and Analysis .........................................................................................................23
  Quantitative Data Collection and Instrumentation ......................................................................24
    ClassMaps Survey (CMS) ...........................................................................................................24
    Measure of Academic Progress (MAP) .....................................................................................25
  Quantitative Data Analysis ...........................................................................................................26
  Validity Approaches in Quantitative Research ............................................................................26
  Qualitative Data Collection and Instrumentation ......................................................................28
  Purposeful Sampling Technique ..................................................................................................29
  Qualitative Data Analysis ...........................................................................................................29
  Validity Approaches in Qualitative Research ............................................................................31
  Mixed Methods Data Analysis ....................................................................................................32
  Validity Approaches in Mixed Methods Research ....................................................................33
Researcher’s Resources and Skills .................................................................................................33
Potential Ethical Issues ..................................................................................................................34
Research Study Timeline ..............................................................................................................35
Summary ...........................................................................................................................................36

Chapter 4: Results ..........................................................................................................................37
Research Questions ........................................................................................................................................39

Central Question ........................................................................................................................................39

Quantitative Research Questions ..............................................................................................................39

Qualitative Research Questions ................................................................................................................39

Mixed Method Research Question ............................................................................................................40

Quantitative Results .....................................................................................................................................40

Student-Teacher Relationships ..................................................................................................................40

Student Achievement ..................................................................................................................................48

Student-Teacher Relationships and Student Achievement .................................................................50

Qualitative Results ........................................................................................................................................53

Themes from the ClassMaps Follow-Up Questions ...................................................................................54

Sense of Humor ...........................................................................................................................................54

Consistent Help (with High Expectations) .................................................................................................55

Games for Learning ....................................................................................................................................56

Active Listening ............................................................................................................................................57

Sense of belonging .......................................................................................................................................58

Encouragement .............................................................................................................................................58

Focus on Character Instead of Appearance ..............................................................................................59

Themes from the Teacher Influence Questions ..........................................................................................60

Differences Between Schools ......................................................................................................................60

Use of Time Outside of School ....................................................................................................................60

Choices Outside of School ............................................................................................................................61

Similarities Between Schools ......................................................................................................................62
Friend Selection .................................................................62
Behaviors in School ............................................................63
Learning ...........................................................................64

Mixed Methods Results ........................................................................65

ClassMaps Survey and ClassMaps Follow-up Questions.............................65

Supported Student Responses ..................................................................66
Unsupported Student Responses ................................................................66

Quantifying the Teacher Influence Questions .........................................67
Differences .....................................................................................68
Effect Size .....................................................................................69
Similarities .....................................................................................69

Conclusion ....................................................................................70

Chapter 5: Findings and Conclusions ..................................................73
Quantitative Findings ...........................................................................73
Qualitative Findings ...........................................................................74

Responses to ClassMaps Follow-up Questions .......................................75

Sense of Humor ...............................................................................75
Consistent Help (with High Expectations) .............................................75
Games for Learning ..........................................................................75
Active Listening ...............................................................................76
Sense of belonging ...........................................................................77
Encouragement ...............................................................................77
Focus on Character Instead of Appearance ........................................78
Responses to Teacher Influence Questions .......................................................... 78
Mixed Methods Findings .......................................................................................... 79
Lessons Learned ........................................................................................................ 81
Limitations of the Study ............................................................................................ 82
Recommendations for Future Studies ....................................................................... 83
Contributions to Research Literature ....................................................................... 85
Final Reflections .......................................................................................................... 85
References .................................................................................................................. 87
Appendices .................................................................................................................. 96
List of Tables

Table 1  Demographic Characteristics of School Sites ..............................................23

Table 2  Comparison of Mean Scores for Each Item on the Teacher-Student Section of the CMS by School .............................................44

Table 3  Comparison of p-values for Each Item on the Teacher-Student Section of the CMS by Teacher .................................................................47

Table 4  Comparison of RIT scores for subtests on the Measure of Academic Progress (MAP) by school .................................................................50

Table 5  Correlations of items on the Teacher-Student section of the CMS with growth in academic performance in math and reading as measured by the Measure of Academic Proficiency (MAP) for both schools ..................................................................................51

Table 6  Correlations of items on the Teacher-Student section of the CMS with growth in academic performance in math and reading as measured by the MAP ..................................................................................53

Table 7  Number of supported “yes” or “no” responses (and corresponding percentages), by school, to the qualitative questions for the semi-structured fifth grader interviews ........................................68
List of Figures

Figure 1  Comparison of mean scores by school on the Teacher-Student section of the CMS .................................................................41

Figure 2  Comparison of mean scores by school on items from the Teacher-Student section of the CMS ...........................................43

Figure 3  Comparison of mean scores by teacher on the Teacher-Student section of the CMS .............................................................45

Figure 4  Comparison of mean scores by teacher on questions on the Teacher-Student section of the CMS .........................................46

Figure 5  Comparison of mean RIT scores for math and reading subtests by school on Measure of Academic Progress (MAP) ...............49
List of Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A: Visual Diagram of Study</td>
<td>96</td>
</tr>
<tr>
<td>Appendix B: Survey Instrument</td>
<td>98</td>
</tr>
<tr>
<td>Permission to Use ClassMaps Survey (CMS)</td>
<td>99</td>
</tr>
<tr>
<td>ClassMaps Survey (CMS)</td>
<td>100</td>
</tr>
<tr>
<td>Appendix C: Research Questions and Data Sources Matrix</td>
<td>104</td>
</tr>
<tr>
<td>Appendix D: Institutional Review Board Letter of Approval</td>
<td>106</td>
</tr>
<tr>
<td>Appendix E: Semi-Structured Student Interview Protocol</td>
<td>109</td>
</tr>
<tr>
<td>Appendix F: Consent and Assent Forms</td>
<td>114</td>
</tr>
<tr>
<td>Teacher Consent Form</td>
<td>115</td>
</tr>
<tr>
<td>Parental Consent Form</td>
<td>117</td>
</tr>
<tr>
<td>Youth Assent Form</td>
<td>119</td>
</tr>
<tr>
<td>Appendix G: Confidentiality Agreement with Transcription Agency</td>
<td>120</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

With the 2001 implementation of No Child Left Behind, the age of accountability was ushered in. Student achievement and the emphasis on adequate yearly progress (AYP) have seemingly taken their place in the center of the educational landscape. This development has practitioners and researchers alike searching high and low for strategies and programs that will produce substantial and sustainable growth. School districts, building administrators, and classroom teachers are all looking to help students learn more, faster and better. Instead of looking for new and innovative ways of producing these results, this researcher argues for what many studies have pointed toward (Brophy & Evertson, 1976; Hughes, 1999; Lee, 2007; Liu, 1997; Silins & Murray-Harvey, 1995; Soar & Soar, 1979) and many successful teachers have known all along; the importance of the student-teacher relationship.

One area that needs further developing is understanding the dynamics, similarities and differences of the student-teacher relationships for students of differing abilities and in different types of schools and situations. The goal for this study was to examine the importance and impact of the student-teacher relationship in a community of fifth graders in two schools that are similar in size, yet very different in terms of socioeconomics, mobility, and overall achievement. A mixed methods design was utilized to more effectively reach this goal as “the use of quantitative and qualitative approaches in combination provides a better understanding…than either approach alone” (Creswell & Plano Clark, 2006, p. 5).
Purpose of the Study

The intent of this mixed methods study was to develop a more holistic understanding of the student-teacher relationship. An explanatory mixed method design was used, a type of design in which the researcher collected qualitative data in an effort to explain the quantitative data gathered in the first phase of research (see Appendix A). Quantitative data, gathered through the ClassMaps Survey (CMS) which was developed by Beth Doll and associates, provided a specific level of understanding of the student-teacher relationship from the perspective of fifth graders in two elementary schools in this rural mid-western community (see Appendix B for documentation of permission to use and copy of the CMS). The CMS is made up of 55 items divided into eight subtests, which probe the classroom elements that have been empirically demonstrated to be vital to students’ academic success (Doll, Kurien, LeClair, Spies, Champion, & Osborn, 2009). This rigorously tested and empirically supported instrument has been piloted and revised several times with thousands of upper elementary and middle school students from across the nation since its initial development in 1999 (Doll, Spies, LeClair, Kurien, & Foley, 2010b). This student survey data generated via the CMS was analyzed for correlations with their student achievement data as measured by the Measure of Academic Progress (MAP) as well as for the magnitude of difference between scores, or what is commonly referred to as effect size, by school and classroom. In the qualitative follow-up, this CMS data on the students’ perceptions of the student-teacher relationship was further explored through semi-structured interviews with 24 of the fifth grade students. The qualitative data sources were then examined so as to provide a better understanding of the quantitative data gathered from the CMS, as well as provide a more in-depth
understanding of the dynamics and importance of the student-teacher relationship in the lives of the fifth grade students in both schools.

**Research Questions**

**Central Question.**

1. What role does the student-teacher relationship play in the lives of fifth graders in two elementary schools in a rural mid-western community?

**Quantitative Research Questions.**

2. How do students rate their student-teacher relationship with their current teacher as measured by the ClassMaps Survey (CMS)?

3. To what extent are measures of student achievement (Measure of Academic Progress) correlated with scale scores from the ClassMaps Survey (CMS)?

**Qualitative Research Questions.**

4. How do fifth grade students describe their student-teacher relationship with their current fifth grade teacher?

5. Of what value are student-teacher relationships to fifth grade students, in regard to:
   - who they are as a person?
   - choices they make in school?
   - learning (personal goals)?
   - how hard they work on their school work (work ethic)?
   - friendships?
   - ways they relate to adults?
   - behaviors?
choices they make outside of school?  
- how much or how well they study?  
- home life or family relationships?  
- choices they make outside of school (extra-curricular activities, etc.)?

**Mixed Methods Research Question.**

6. In what ways do the semi-structured interviews help to explain the students’ responses on the Teacher-Student section of ClassMaps Survey (CMS)?

   The prompts from the Teacher-Student section of ClassMaps Survey (CMS) are as follows:

   My teacher listens carefully to me when I talk.
   
   My teacher helps me when I need help.
   
   My teacher respects me.
   
   My teacher likes having me in this class.
   
   My teacher makes it fun to be in this class.
   
   My teacher thinks I do a good job in this class.
   
   My teacher is fair to me.

Several data sources were utilized to answer the quantitative, qualitative, and mixed methods research questions posed in the current research study (see Appendix C).

**Definition of Key Terms**

For the purpose of this study, the following definitions are defined.

*Affluent schools* are defined as having no more than 10% of the students receive free or reduced price lunch (U.S. Department of Education, 1994).
Poverty schools are defined as having more than 75% of students receive free or reduced priced lunch (U.S. Department of Education, 1998).

Relationships are defined by “strong, frequent, and diverse interdependence that lasts over a considerable period of time” (Kelley et al., 1983.)

Resilient Classrooms are classrooms “where all children can be successful emotionally, academically, and socially” (Doll, Zucker, & Brehm, 2004, p. 7). Individual characteristics and the corresponding definitions of a resilient classroom include (Doll et al., 2004):

Academic efficacy is defined as the ability of students to see themselves as competency and effective learners.

Autonomy self-determination is defined as the ability of students to set and work toward self-selected learning goals.

Behavioral self-control is the ability of students to behave appropriately and adaptively with a minimum of adult supervision.

Teacher-student relationships are defined as caring and authentic relationships between teachers and the students.

Peer-relationships are defined as on-going and rewarding relationships between classmates.

Home-school relationships are defined by families knowing about and strengthening the learning that happens in the classroom.

Student-teacher relationships are defined by “emotions-based experiences that emerge out of teachers’ on-going interactions with their students” (Pianta, 1999).
Significance of Study

Information gained in this study not only added to the current literature on student-teacher relationships but also added another dimension of understanding to the data usually gleaned through the administration of the ClassMaps Survey (CMS). Having students, through their own words, share their back-stories and examples as to why they replied as they did to each of the prompts in the Teacher-Student section of the CMS provided a level of specificity that would not normally be possible by the simple administration of this otherwise powerful instrument. This additional level of data provided powerful insight into the impact and importance of the student teacher relationship as perceived by the students themselves, which should enable practicing teachers to place greater value and investment in this vital factor of student success.

Summary

The organization of this dissertation followed the recommendations in How to Prepare a Dissertation Proposal by Krathwohl and Smith (2005). Chapter One introduced the reader to the general background information with regard to the student-teacher relationship and the current study including relevant terminology. Chapter 2, a review of the relevant literature regarding the student-teacher relationship, so as to equip the reader with a broad view of the importance of relationships, before narrowing to those studies focused in particular on the impact and importance of the student-teacher relationship. In similar fashion, Chapter 3 began with general definitions of mixed methods research and the explanatory design employed in this study, as well as some of the challenges most common with this design. Next, the specific quantitative and qualitative methods and instruments were discussed, including the data collection and analysis procedures in the
methods chapter. The results of the data analyses were provided in Chapter 4. Findings, conclusions and recommendations follow in the final chapter along with limitations to be considered for the interpretations in this study.
Chapter 2: Literature Review

This chapter comprises a review of the literature related to this study on the importance and impact of the student-teacher relationship in the lives of fifth graders in two schools that are similar in size, yet very different in terms of socioeconomics, mobility, and overall achievement. The first section deals with the literature about the importance of relationships in general followed by a section focusing on the findings dealing specifically with student-teacher relationships. The chapter concludes with a discussion of the importance of this study due to gaps in the current literature.

Relationships

Relationships, whether positive or negative in nature, have proven to have profound effects on quality of life. Landsford, Antonucci, Akiyama, and Takahashi (2005) found that well-being is directly tied to personal relationships. In this mixed methods study, participants, ranging from teenagers to senior citizens from both the United States and Japan, were surveyed revealing that in both countries social relationship quality was equally related to well-being. This well-being was accomplished specifically “by providing love, intimacy, reassurance of worth, tangible assistance, and guidance” (p. 1). Vanzetti and Duck (1996) shared similar as well as other benefits to relationships, which include physical support, a sense of belonging, having a “sounding board” for emotional reactions and opinions, being able to say what you really think, providing a reassurance of worth, opportunities to help others, and validation and support for the way we do things and interpret experience (p. 15-18).

Conversely, Lansford et al. (2005) reported that the lack of high quality relationships resulted in negative effects including depression, anxiety, and poor health in
general. And Ehrensaft’s (2005) meta-analysis review of research of juveniles with conduct problems also suggested that problems of self-conduct, especially with regard to females, were linked to impaired interpersonal relationships.

**Student-Teacher Relationships**

With this basic understanding of the apparent necessity and importance of relationships in mind, the following section will focus more specifically on the importance and impact of student-teacher relationships.

A request for what constitutes effective teaching will undoubtedly produce a long and varied list of responses. The list may include, but not be limited to a teacher’s knowledge of subject, pedagogical competence, instructional effectiveness, and/or classroom management skills. Banner and Cannon (1997) describe the difficulty in defining exactly what it means to be an effective teacher, “We think we know great teaching when we encounter it, yet we find it impossible to say precisely what has gone into making it great” (p. 3). The situation is further convoluted when considering whether teaching is an art or a science. As stated by McEwan (2002), “An ample amount of research exists showing that content and caring are not exclusive commodities; effective teachers emphasize both...”(p. 6).

**Teacher connections.** One of the attributes that will undoubtedly make most lists is a teacher’s ability to connect with students. It may be referred to as an ability to cultivate relationships or be more formally labeled as “nurturing pedagogy”. It may be defined as a mix of high expectations and caring support; or as Pianta (1999) defines the student-teacher relationship, “Emotions-based experiences that emerge out of teachers’ on-going interactions with their students.” Strahan and Layell (2006) noted the
importance of “establishing a learner-centered environment that featured warm, supportive relationships with students,” (p.153) a concept confirmed by Silins and Murray-Harvey (1995). McEwan (2002) makes the case quite eloquently stating, “Effective teachers appear to be those who are… ‘human’ in the fullest sense of the word. Their classrooms seem to reflect miniature enterprise operations in the sense that they are more open, spontaneous, and adaptable to change” (p. 30). Hargreaves (1994) apparently agrees, stating:

Good teaching is charged with positive emotion. It is not just a matter of knowing one’s subject, being efficient, having correct competencies, or learning all the right techniques. Good teachers are not just well oiled machines. They are emotional, passionate beings who connect with their students and fill their work and classes with pleasure, creativity, challenge and joy. (p. 835).

Liu (1997), when talking specifically about the impact of a multi-year experience in China’s secondary schools, also attests to the importance of the student-teacher relationship stating, “The close emotional bond between teachers and students led students to recognize the school as a home away from home. The teachers’ dedication to students’ growth helped inspire students to meet the school’s requirements, both academic and behavioral.” According to Roeser, Midgley and Urdan (1996), students who reported more positive teacher-student relationships also reported greater feelings of belonging, thus felt more academically efficaciousness and less self-conscious. In the same vein, Koplow (2002) proposed that effective student-teacher relationships encourage greater confidence and classroom engagement in much the same manner as sensitive parenting encourages a greater sense of security and confidence.

**Student voice in relationships.** The overall importance of the student-teacher relationship is possibly best-voiced by the students themselves. Unfortunately, there are
few studies to date that make use of the student voices to convey this important message. According to Doda and Knowles (2008) when asked to respond to the question, “What should middle school teachers know about middle school students?” approximately 2,700 middle school students from diverse communities from across North America responded emphatically that they desired “healthy and rewarding relationships with their teachers and with their peers” (p. 27). These relationships were most generally “characterized by compassion, respect, personalization, fellowship, and friendship” (Doda & Knowles, 2008, p. 27). According to Doda and Knowles (2008), one student response captured it best:

The key to being a good teacher is to know the kids. You have to know every single one and have a relationship with every single one. I think that one thing that really allows me to work hard is knowing that my teacher knows where I am in life at that moment. If they don’t know me, I will tend not to work as hard for them. (p. 28).

And Saul (2005), who interviewed two distinct groups of Canadian students from the Atlantic coast as well as the Pacific coast, found that all students interviewed for the study noted the vital importance of the student-teacher relationship to their success. The most convincing quote came from Tali (a 9th grader) who said, “The teacher needs to be willing to have a relationship, and not just be assessing us. It makes a big difference if they take the time to understand how you are feeling, if they understand and connect” (p. 19).

**Importance of student-teacher relationships.** In addition to the general sentiments expressed above, the importance of the student-teacher relationship has been brought to light in seminal studies and analyses. The APA Work Group of the Board of Educational Affairs (1997), a Presidential Task Force, produced *Learner-centered*
Psychological Principles: A Framework for School Reform and Redesign, which included 14 fundamental principles about learners and learning. Of these principles, Principle 11 – The Social Influence on Learning stated, “Learning is influenced by social interactions, interpersonal relations, and communication with others.” Similarly, McCombs and Whisler (1997), offered five premises for helping each learner develop to their fullest potential, which included “Learning occurs best in an environment that contains positive interpersonal relationships and interactions and in which the learner feels appreciated, acknowledged, respected, and admired.”

In Classroom Management that Works - Research-based strategies for every teacher, Marzano (2003) presents the results of several meta-analyses centered on teacher effectiveness. The initial results indicated four general components of importance including: rules and procedures, disciplinary interventions, mental set, and teacher-student relationships. The latter, though not the highest in terms of effect size (-.869), is suggested to be “the keystone for the other factors” (p. 41).

Creating success in classrooms. Student-teacher relationships have shown to be an important factor in student success in the classroom. Pianta (1994) attests that teacher-student relationships are influential on students’ success in school; and Lee (2007) found that the trust developed between the student and the teacher can contribute to students’ academic performance. Noddings (1988 & 1992) shared that students make learning a higher priority and thus work harder for teachers whom they care about and perceive as also valuing their learning. Lyubomirsky, King, and Diener (2005) noted “numerous successful outcomes, as well as behaviors paralleling success” (p. 803); and Birch and Ladd (1996 & 1998) reported that the student-teacher relationship can influence students’
future paths toward academic success and was positively linked with children’s academic performance. Lastly, Miller (2000) found that the student-teacher relationship play an important role in helping reduce the chances of future bad outcomes, i.e. – dropping out of school.

With all of this in mind, it should be of no surprise that caring, supportive teachers are often found in schools of high achievement. Silins and Murray-Harvey (1995), reported students who indicated high feelings of adequacy in their interactions with their teachers in academically successful schools; and Hughes (1999) found “teachers who identify and address individual student needs” in high achieving, rural, high-poverty elementary schools.

Positive outcomes from strong student-teacher relationships are not only confined to the realm of academics. Hamre and Pianta (2001) reported “the quality of teacher–child relationships is a stronger predictor of behavioral than of academic outcomes” (p. 634). Doll, Zucker, and Brehm (2004), developers of the ClassMaps Survey (CMS) used in the current study, attest that the quality and consistency of the teacher’s rapport is “the most essential ingredient in forging a safe, supportive classroom environment” (p. 18). Moreover, Howes, Hamilton and Matheson (1994) reported that student-teacher relationships influence students’ relationships with peers in their classrooms. Griggs, Gagnon, Huelsman, Kidder-Ashley, and Ballard (2009) summed this best stating, “student–teacher relationships matter…and may reduce the risk of negative behavioral outcomes…” (p. 562).
The importance of the student-teacher relationship has also been studied with regard to specific populations and cultures. To start with, different cultures put different degrees of importance on the student-teacher relationship. Jacob and Lefgren (2007) found that in high-poverty schools, teacher requests are based more on a teacher’s ability to improve student achievement than on student satisfaction, whereas in low-poverty schools the opposite was found to be true. Hudley, Daoudd, Hershberger, Wright-Castro, and Polanco (2003) revealed that individuals of different cultures, Latino and Angelo students, value different elements of the student-relationship and also act within the relationship differently based upon their perceived-level of satisfaction. Lastly, several studies looking specifically at mentor-mentee relationships in educational settings with high-risk youth (Rockwell, 1997; Spencer, 2006) as well as gifted youth (Irving, Moore, & Hamilton, 2003; Schatz, 1999) found that positive relationships have similar benefits for both populations of students. The benefits included an increase in self-esteem and confidence, as well as improvement in studying skills and in the ability to use classroom knowledge.

**Characteristics of student-teacher relationships.** In efforts to better understand the student-teacher relationship, some studies have focused directly on some of the characteristics of the student-teacher relationship. Decades ago, Barr (1958) and later Good and Brophy (1995) identified teacher characteristics that students found to be most likable, including consideration, buoyancy, and patience. And Boals et al. (1990), noted the importance of establishing high expectations when working with students of poverty. Jacobson (2000) found that the first step in creating this type of environment was getting to know each student, thus allowing the teacher a better chance of developing a positive
rapport that can in turn facilitate and support the student’s learning. Though these studies provide important insight, the limitations of these studies most notably include their inability to explain how these characteristics then affect students and ultimately the student-teacher relationship.

**Importance of Current Study**

The current mixed methods study focused on diverse student voices to convey the dynamics of the student-teacher relationship as seen through the eyes of students in two very different schools.

**Methodological stance.** Quantitative data, which is generally considered to be closed-ended information, is typically gathered through attitude, behavioral, and performance instruments, as well as checklists (Creswell & Plano Clark, 2006, p. 6) in an attempt to answer narrow questions and explain relationships between variables. Quantitative researchers then analyze the data using statistical procedures, comparing results with prior predictions and earlier research studies, then presenting a final report in a standard format which displays researcher objectivity and lack of bias (Creswell, 2002, p. 58). As described within this chapter, a series of quantitative studies on the student-teacher relationship have provided a strong foundation from which the current study was able to develop (Birch & Ladd, 1996; Griggs, Gagnon, Huelsman, Kidder-Asherly, & Ballard, 2009; Hamre & Pianta, 2001; Jacob & Lefgren, 2007; Marzano, Marzano, & Pickering, 2003; Strahan & Layell, 2006 & 1998).

Alternately, qualitative data can consist of open-ended information gathered through interviews (Creswell & Plano Clark, 2006, p. 6) in an attempt to describe a central phenomenon through the answers to broad, general questions. The data gathered
is analyzed for themes from which the researcher interprets the meaning of the information, drawing from both past research and personal reflections. The information is then presented in a final report that is flexible in nature, displaying the researcher’s biases and thoughts (Creswell, 2002, p. 58). As discussed earlier in this chapter, two qualitative studies, which stressed the importance of student-teacher relationships from the students’ perspective, provided a starting point from which the current study could begin (Saul, 2005; Doda & Knowles, 2008).

Beyond these simplistic descriptions, Creswell (2002) contends, “the difference between quantitative and qualitative research is more than numbers versus words, or instruments verses interviews – the distinction appears at all phases of the research process” (p. 58). With this appreciation of the distinction between the two, Creswell & Clark (2006) emphasize that through the mixing of the two types of research or methods “the researcher provides a better understanding of the problem” (p. 7) than if either type of research had been used exclusively. They go on to share that the mixing of the methods “provides strengths that offset the weaknesses of both quantitative and qualitative research” (p. 9) and that mixed methods research enables the researcher to be “free to use all methods possible to research the problem” (p.10), as well as “provides more comprehensive evidence” (p. 9) for answering a research problem.

**Diverse student voices.** Because of the strengths of the data collected through both methods, as well as the lack of mixed methods studies in the area of student-teacher relationships that both methods were chosen for the current study. With a strong understanding of what each type of research brings to a study, the quantitative data gathered through the administration of the CMS was an important data source, but the
semi-structured student interviews were considered as the centerpiece in the current study. Converse, Schuman and Converse (1974) contend that interviews “are conversations where meanings are not only conveyed, but cooperatively built up, received, interpreted, and recorded by the interviewer” (as cited in Weinberg, 2002, p. 117). The interviews were semi-structured, yet open-ended, beginning first with broad questions that eventually narrowed in on the experiences that illuminated heart of the central question– What role does the student-teacher relationship play in the lives of fifth graders in two elementary schools in a rural mid-western community? (Creswell, 2007, p. 133). In particular, student voices were sought in order to illuminate the issue from their individual points of view. “Setting each child as a unique and valued experiencer of his or her world” (Greene & Hogan, 2005, p. 3). This focus on the stories and perceptions of the fifth grade students from differing levels of achievement, including low, medium, and high levels of achievement on the Measure of Academic Progress (MAP) in the two different schools, designated as affluent and poverty schools allowed for a diverse and rich representation of voices from which to understand the importance and impact of the student-teacher relationship.

Summary

In summation, many studies have quantitatively pointed toward the importance of the student-teacher relationship, yet others have qualitatively described important elements or factors of the student-teacher relationship. This researcher’s goal is to attempt to connect the dots between both types of research. This goal includes exploring the dynamics of the student-teacher relationship through the eyes of students in two very different schools that individually serve poverty or affluent populations. The hope was to
learn from both ends of the spectrum and to provide teachers, administrators, and teacher education departments with some tangible targets for better establishing and cultivating student-teacher relationships with students.
Chapter 3. Methods

Definition of Mixed Methods

Creswell and Plano Clark (2006) provided the definition of mixed methods which served as a guide for this study:

Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of the qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone. (p. 5).

Type of Design Used and Definition

This study used an Explanatory mixed methods design. The explanatory design is a two-phase mixed methods design. The overall purpose of this is that the qualitative data helps explain or build upon initial quantitative results (Creswell & Plano Clark, 2006, p. 71). A variation of the follow-up explanations model was utilized in order for qualitative data to be built upon the initial quantitative results (Creswell & Plano Clark, 2006).

This method fit nicely into the pragmatic worldview held by this researcher who naturally gravitates toward outcomes and “what works” (Patton, 1990) as opposed to the conditions that concern many other worldviews. Within this pragmatic worldview, it is understood that researchers need to be “free to choose the methods, techniques, and procedures of research that best meet their needs” and that they look to the “what and the how...based on it’s intended consequences” (Creswell, 2007, p. 23). The pragmatic worldview served also well in this study, as it enabled the focus to be on methods that not
only provided the best opportunity to uncover the richness of the student-teacher relationship, but also to do so in a manner that minimized the threat to the fifth graders that were interviewed. The administration of the quantitative instrument to all participating students in an upbeat and non-threatening manner served as a prelude that encouraged the students to open up and share their thoughts and feelings in the follow up semi-structured interviews.

**Meeting the Challenges of the Design**

The explanatory mixed methods design requires a lengthy amount of time for implementing the two phases (Creswell & Plano Clark, 2006, p. 74).

- I implemented my plan for collecting and analyzing both types of data during the 2010-2011 school year. This timeline fit well within the time constraints imposed by the completion of my doctoral work with regard to the University Nebraska Lincoln Doctoral Program as well as my position at the University of Nebraska Kearney. The timeline followed for the completion of my study is explained later in this proposal.

The researcher must decide whether to use the same individuals for both phases, to use individuals from the same sample for both phases, or to draw participants from the same population for the two phases (Creswell & Plano Clark, 2006, p. 74).

- The fifth graders who were interviewed were purposefully sampled from those fifth graders who attended their school for grades kindergarten through fifth grade and completed the ClassMaps Survey (CMS) in Phase 1 of this study.
It can be difficult to secure Institutional Review Board approval for this design because the researcher cannot specify how participants will be selected for the second phase until initial findings are obtained (Creswell & Plano Clark, 2006, p. 75).

- Institutional Review Board approval was sought and granted (see Appendix D) based upon the specificity of the purposeful sampling technique, which was outlined in the initial doctoral proposal.

The researcher must decide which quantitative results need to be further explained (Creswell & Plano Clark, 2006, p. 75).

- The ClassMaps Survey (CMS) gathers quantitative data on many social and emotional elements within the classrooms. The current study is focused on the dynamics and importance of the student-teacher relationship so the obvious choice was to have students explain their reason on the Teacher/Student section of the CMS.

**Participants/Settings**

The participants in this study were fifth grade students, generally 10 to 11 years of age, recruited from two elementary schools in a rural mid-western community. The two elementary schools were located within the same local school district. Each school had two fifth grade classrooms from which students were chosen to participate. To be eligible for this study, students needed to have completed their entire scholastic career, kindergarten through fifth grade, at their current school. This helped insure that students involved in the study were truly participants in and of the culture of the school. Pseudonyms were used in the reporting of this study for the two schools, as well as for any teacher or student names.
Both schools, from the same Class A school district were located within a rural mid-western community of roughly 30,000 people. Overall the district was comprised of one high school with a population of approximately 1500 students, two middle schools with 1040 students collectively enrolled, 12 elementary schools which served a total of 2500 kindergarten through fifth grade students, and three preschools which served approximately 70 children. Classrooms within the district reported a student-to-teacher ratio of 17-1 in the high school, 16-1 at the middle school level, and 25-1 within the elementary schools. Of the 382 teachers employed by the district, 51% had earned Master’s degrees and 98% were teaching within their endorsement area. Overall, the district reported a population with 4% identified as English Language Learners (ELL), 14% received special education services, and 32% were identified as receiving free/reduced lunches. The district also reported a mobility rate of 9% and a drop out rate of 1.6%.

The two schools identified within the school district for this study, though almost identical in number of students (both serving approximately 260 students), had unique and different populations with regard to the socio-economic level of students who attended, mobility rates, and ELL populations (see Table 1).
Table 1

*Demographic Characteristics of School Sites*

<table>
<thead>
<tr>
<th>Birch Elementary (n = 257)</th>
<th>Percentage</th>
<th>Characteristic</th>
<th>Maple Elementary (n = 258)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>81.71</td>
<td>Poverty</td>
<td>10.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.75</td>
<td>English Language Learner</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.77</td>
<td>Mobility</td>
<td>3.10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The two schools (reported under pseudonyms) were chosen with both diversity and practicality in mind. The diversity represented by the unique populations of each building provided a wide backdrop with which to study the student-teacher relationship. Also, with Birch Elementary being qualified as a Poverty School and Maple Elementary being designated as an Affluent School allowed for greater insight and understanding of the similarities and differences regarding the student-teacher relationship for student in both schools (see *Definitions and Terms* section in Chapter One of this study for specific definitions for each type of school). Also, differences in both mobility rates and in the number of students served as English-language learners enabled each school’s individual story to be brought to light, thus provided a more comprehensive understanding of student-teacher relationships in both locations.

**Data Collection and Analysis**

Data collection was conducted in two distinct phases. Phase 1 was quantitative in nature and Phase 2 was qualitative.
Quantitative data collection and instrumentation. In Phase 1 of the study, survey data and student achievement data were collected using the ClassMaps Survey (CMS) and the Measure of Academic Progress (MAP).

ClassMaps Survey (CMS). Quantitative Data was collected using the CMS. The CMS was initially modeled after sociometric rating procedures in which students effectively described their classmates’ social strengths and weaknesses (Asher & Hymel, 1986; Coie & Kupersidt, 1983; Parker & Asher, 1989). The CMS, as developed by Beth Doll and associates, is a series of 5 to 8 item, anonymous student surveys that are easy to administer, code and analyze. Students report their degree of agreement for each of the 55 items that comprise the CMS using the following descriptors and corresponding four point scale (Never = 0; Sometimes = 1; Often = 2; Almost Always = 3) (Doll et al., 2009). The data is then easily converted to a graphic display. The survey is made up of eight subtests, which probe the classroom elements that have been empirically demonstrated to be vital to students’ academic success. Five of the subtests gather data to describe the relational aspects of the classroom, while the other three describe the autonomy and perceived competence characteristics within the classroom. This rigorously tested and empirically supported instrument was has been revised and subsequently piloted several times with thousands of upper elementary and middle school students from across the nation since its initial development in 1999. This rigorous work and piloting with several age groups has been completed on the part of the authors to insure that the ClassMaps probe is reliable, valid, and user-friendly (Doll et al., 2010b). The most recent revisions/pilotings include administration and analysis for 345 students drawn from two grades 3-5 public schools, with one of the schools being located in a
Midwestern plains state and the other a metropolitan East coast state, as well as 1019 middle grades students (fifth through eighth grade) from public and parochial schools in eastern Nebraska (Doll, et al., 2010a). According to Doll, et al (2010a), results from both studies suggest that the CMS “is a promising measure to support school practices that foster resilience” (p. 347).

The CMS is administered to the entire class and takes about 15-25 minutes to complete. The CMS gathers data on the following classroom elements/resiliency factors: Academic Efficacy, Behavioral Self-Control, Autonomy Self-Determination, Effective Teacher-Student Relationships, Effective Peer Relationships, and Effective Home-School Relationships. Administration of ClassMaps produces individual student feedback for each of the resiliency factors, also allowing for data aggregation at the classroom level (Doll et al., 2009).

In regard to the internal consistency of the ClassMaps instrument, the means and standard deviations of the individual probes showed good dispersion of scores for the Academic Efficacy and Self-determination, and adequate dispersion of scores for Teacher-Student, Home-school, and Peer Relationships. All coefficient alphas for the subscales were in the acceptable range of the upper .80s to mid .90s, with the highest score recorded for the Teacher-Student section of the CMS at 0.96 (Doll et al., 2009).

**Measure of Academic Progress (MAP).** Student achievement data was gathered by the local school district early in the fall of 2010 and again in the winter of 2010. The local district used the Measures of Academic Progress (MAP), developed by Northwest Evaluation Association, to gather the data in the areas of reading and mathematics. The MAP test is a computerized adaptive assessment, which means that as the student
responds to the questions the test responds by adjusting up or down in difficulty. Student scores, for this norm-referenced assessment are reported on an equal-interval scale called the RIT scale, which is continuous across grades, thus ideal for studying growth over time (“Kingsbury Center,” n.d.; “Northwest Evaluation Association,” n.d.). The school district’s decision to administer the MAP test (reading and math) early in the school year (fall) as well as at the midpoint of the school year (winter) allowed for the reporting of growth in both reading and math by student, classroom, and school. Due to the timing of the administrations of the MAP, the growth in the RIT scale scores was considered an effect of students working with their current teacher (Sanders & Rivers, 1996).

**Quantitative data analysis.** In addition to analyzing the mean scores of CMS student survey data at the school and teacher levels through the application of the Analysis of Variance (ANOVA) for the both the Teacher-Student section as a whole as well as by question/item within the section, the CMS data was analyzed for correlations with the growth in student achievement data as measured by the Measure of Academic Progress (MAP). The Analysis of Variance (ANOVA) was also applied to this data to determine strength of the correlations between growth as measured by the Measure of Academic Progress (MAP) scores and scores from Teacher-Student section of the CMS. In addition to the procedures above, analysis for effect size, or the magnitude of the differences between scores, was also figured when appropriate.

**Validity approaches in quantitative research.** Validity is of utmost importance when examining the inferences in a quantitative study. According to Stiggins (2005), one way to think about validity is in the quality of the research in terms of its fidelity to the results that are produced. As a researcher, one must first ask whether the scores are
stable and reliable over time, this is also known as reliability. And if the scores are stable and reliable, one must ask whether meaningful and useful inferences can be drawn from the results to the population. Ultimately, the evidence in an endeavor such as this comes from both the empirical findings of a study and consistency with other knowledge sources, including but not limited to past findings and theories (Creswell, 2002; Shadish, Cook, & Campbell, 2002).

Several avenues can be pursued when one considers validity in quantitative research. Several of the types of validity as well as accompanying validation strategies are discussed below (Creswell, 2002; Shadish et al, 2002).

*Content validity* determines the degree to which the instrument’s items represent all possible questions.

- Validity strategies include having experts review the degree to which test items match test objectives.

*Criterion-related validity* determines the degree to which the scores from an instrument predict the outcome they were designed to predict.

- Validity strategies often include correlation of the instrument with a well-respected outside instrument.

*Predictive validity* determines the degree to which scores from an instrument predict outcome variables.

- Validation strategies often include correlation of scores with the predicted outcome variables.

*Construct validity* determines the significance, meaning, purpose, and use of scores from an instrument.
Validation strategies often include content analysis, correlation coefficients, factor analysis, ANOVA studies demonstrating differences between differential groups or pretest-posttest intervention studies, factor analysis, and multi-trait/multi-method studies.

Both instruments that were utilized in this study, the Measure of Academic Progress (MAP) and the ClassMaps Survey (CMS), had undergone an extensive and rigorous validation process prior to them being used in the current study.

**Qualitative data collection and instrumentation.** The data gathered in Phase 2 of this study was the result of semi-structured interviews with 12 fifth grade students from each school for a total of twenty-four student interviews (see Appendix E). The interviews each included the asking of two separate sets of questions, the *ClassMaps Follow-up Questions* and the *Teacher Influence Questions*. A case study approach was chosen for qualitative data collection as it allowed for the exploration of multiple cases through “detailed, in-depth data collection” (Creswell, 2007, p. 73) such as interviews. The qualitative data gathered in the interviews was used to follow up and clarify participants’ survey results (Creswell, 2007, p. 11), as well as to provide for the sharing of the individual stories of the participants (Stake, 1995, p. 1). Interviews allow for the researcher to hear the stories of the individual cases, in this study through the voices of each of the fifth graders that were interviewed, with intent of discovering the similarities between the cases as well as the uniqueness of each student’s story or case (Stake, 1995, p. 1).

Purposeful sampling was implemented in this study to identify the students for the semi-structured interviews that gave voice to the individual participants. This enabled the
students to be able to express their personal experiences in rich detail so as to better illuminate both the perceived importance of the student-teacher relationship and its impact on their lives. This data effectively also explained the differences and similarities between the different learning environments within each of the distinct schools.

**Purposeful sampling technique.** “Purposeful sampling” is a technique used to select individuals that will purposefully contribute to the answering of research questions (Creswell, 2007). A multi-stage, purposeful sampling technique was utilized to select students for Phase 2 of the study. Students who returned parental consent and student assent forms from each school were rank ordered according to the growth made on the math subtest of the Measure of Academic Progress (MAP) between the fall 2010 and the winter 2010 administrations. Then students were again rank ordered, this time according to the growth made on the reading subtest of the Measure of Academic Progress (MAP) between the fall 2010 and the winter 2010 administrations. The rank order lists for each subtest, at each school, were then divided in half according to student’s growth creating the categories of high growth and low growth. These two lists were then synthesized. Students received their final designation by school as those who had high growth on both subtests (H-H), high growth on one subtest and low growth in another (H-L), or low growth on both subtests (L-L). Then four students from each designation (H-H; H-L; L-L) for a total of 12 from each school or 24 students overall were chosen to complete the semi-structured interviews. Interviews were audio recorded and then transcribed by an outside agency.

**Qualitative data analysis.** “The search for meaning often is a search for patterns, for consistency, for consistency within certain conditions, which we call
‘correspondence’” (Stake, 1995, p. 78). In an effort to find “correspondence” between the different cases in each school, as well as between the cases at the two different schools, the method of analyzing qualitative data within the case study approach was utilized: “create and organize files for data; read through the text make marginal notes, form initial codes; use categorical aggregation to establish themes or patterns” (Creswell, 2007, p. 156). In other words, the cases in this study were “studied primarily for generalizing to other cases” (Stake, 1995, p. 85) within context of the study.

Analysis of the qualitative data gathered in the 24 student interviews was completed following word for word transcription of the semi-structured interviews by an outside agency. Both sets of questions, the ClassMaps Follow-up Questions and the Teacher Influence Questions were analyzed separately. For each set of questions, this analysis began with the researcher reading through all the transcripts several times with the hopes of immersing himself in the details as well as to get a bird’s eye view of the entire database. During this process notes were recorded in the form of short phrases, ideas, and key concepts in the margins of each transcript. Five to six initial or tentative themes “emerged” from this process.

Next, to promote better within-case analysis, all student responses for each question were organized on one spreadsheet. Each student, with all the alphabetized Birch students first and the Maple students last, was listed in a designated row in the first column with that student’s responses for each question in the subsequent column cells to the right. This enabled the easy analysis of all student responses by question simply by reading from the top of the column down. As the reading of student responses by question continued, the quantity of themes naturally grew. After a final list of 10 to 15
initial themes was developed, the process of working to reduce that total number back to the more manageable number of five to six began (Creswell, 2007). The reduction to a manageable number of themes was accomplished by looking for “similarities and differences among the cases” (Creswell, 2007, p. 163); and these generalizations became the themes that were later reported as “lessons learned” (Creswell, 2007).

**Validity approaches in qualitative research.** In terms of qualitative research, when examining validity, the question becomes, “Did we get the story right?” (Stake, 1995, p. 107). The answer to this question interestingly enough is that there is truly no “right,” only perspectives. Another way to look at validity or validation as Creswell (2007) refers to it is whether the account of the researcher and the participants is accurate and can be trusted.

In terms of validation of the qualitative data gathered for the current study, I followed many of the suggestions by Creswell (2007), who synthesized the work of many other researchers. These recommendations included the use of:

- Triangulation, or the corroborating of evidence from many different sources, to better expose a theme or perspective. The data sources utilized to meet this end included: CMS data and the semi-structured student interview data.
- Peer review or debriefing sessions, which were provided most notably by Dr. Delwyn Harnisch, who was affiliated with the current study as my doctoral advisor, and Dr. Sherry Crow, who was not affiliated with the project. Ongoing debriefing sessions with these two colleagues helped keep the research honest and on-track.
Transferability, which was accomplished through the use of rich, thick descriptions with the goal of enabling readers to transfer or apply information to other settings.

**Mixed methods data analysis.** Within the scope of this study, the “quantitizing” was accomplished differently for the *ClassMaps Follow-up Questions* than for the *Teacher Influence Questions*. The qualitative results to *ClassMaps Follow-up Questions* were “quantitized” with hopes of forming a more complete and coherent picture (Denzin & Lincoln, 1994), while the *Teacher Influence Questions* results were transformed into quantitative data for a better understanding of the number of occurrences of specific student responses in the qualitative data (Creswell & Plano Clark, 2006).

For the *ClassMaps Follow-up Questions*, each question and response was read for each student transcript. Each student response in the transcript that supported the student’s response on the ClassMaps Survey (CMS) was recorded as a (+), while each student response in the transcript that did not support the student’s response on the ClassMaps Survey (CMS) was recorded as a (-). Lastly, the student responses in the transcripts that received a (+) were tallied and a percentage figured to show the percentage of the responses that supported the CMS responses.

The “quantitizing” of the qualitative data gathered via the *Teacher Influence Questions* was accomplished through the use of the spreadsheet used within the qualitative analysis, where each student was listed in a designated row in the first column with that student’s responses for each question in the subsequent column cells to the right. Like in the qualitative analysis, this enabled the easy analysis of all student responses by question simply by reading from the top of the column down (Creswell,
Each student response for each of the Teacher Influence Questions that included “yes” and corroborating details was marked with a (Y), while each response that included a “no” and corroborating details was marked as (N). Then, the number of (Y) and (N) for each column were totaled, converted to percentages and reported by school.

**Validity approaches in mixed methods research.** In addition to validating quantitative and qualitative research respectively within this study, I also considered the impact that the mixing of methods had in regard to validity. Creswell and Plano Clark (2006) offered the following validation strategies based upon his and the writing of others which were used within varying degrees in this study:

- Both quantitative and qualitative validity were analyzed and reported.
- The term *validity* was used to refer to validity procedures that will be used in both quantitative and qualitative research, as opposed to other terms that have been proposed by other researchers.
- Validity was discussed in regard to the type of mixed methods design of the study (i.e. - triangulation, embedded, explanatory, exploratory). In this particular study, the explanatory design will be used.
- Potential threats to validity in the mixed methods study were discussed throughout the study in regular debriefing sessions with Dr. Delwyn Harnisch, affiliated with the study as my doctoral advisor, and Dr. Sherry Crow, who was not affiliated with this study.

**Researcher’s Resources and Skills**

As part of my doctoral work, I completed a number of formal research tools courses at the University of Nebraska Lincoln. With regard to Quantitative research, I
successfully completed EdPs 859 Statistical Methods. Qualitatively, I successfully completed EdPs900K Qualitative Research. Lastly, my formal coursework was brought together with the completion of EdPs 936 Mixed Methods Research.

More informally, I completed a two-year, 18-hour Assessment endorsement through the University of Nebraska Lincoln (Nebraska Assessment Cohort). After a variety of activities that provided members with a common language and understanding of research/research techniques the course work allowed members to create research studies/projects with an assessment focus that had members gathering and analyzing both quantitative and qualitative data. The experience allowed me to develop my research skills through authentic studies/projects in an environment that provided both guidance and support.

**Potential Ethical Issues**

1 - The schools where the research was conducted are in the same school district in which I formerly taught.

   - This issue was dealt with on the grounds that though the schools where the research was conducted and the school that I formerly taught in are in the same school district, the amount of contact that I had with the students was incidental at most.

2 – As a college instructor, I had college pre-service teachers working in one of the schools where the research was conducted.

   - The pre-service teachers, though in the school where the research was conducted did not work with fifth grade students who were participants in this study.
Research Study Timeline

After having my doctoral proposal approved by both my doctoral committee, as well as the Institutional Review Board at the University of Nebraska Lincoln, my study unfolded along the following timeline. The data sources gathered and analyzed are also included at each step.

Phase 1

August 2010

• Student achievement data was gathered via the Measure of Academic Progress (MAP) in both schools (fall administration).

November 2010

• Permission to complete research was granted by the school district as well as by the four fifth grade teachers (see Appendix F).

December 2010

• After introducing myself and my study to the fifth graders, the Parental Consent Form/Child Assent Form was sent home with all fifth grade students in both classrooms at the two proposed schools (see Appendix F).

• Student achievement data was gathered via the Measure of Academic Progress (MAP) in both schools (winter administration).

• CMS was administered to all approved students in each fifth grade classroom (see Appendix B for ClassMaps instrument).

• Purposeful Sampling technique was implemented (see description earlier in this chapter).

January 2011

• Quantitative data was analyzed. Sources include: CMS data and Measure of Academic Progress data
Phase 2

March 2011

- Semi-structured interviews were conducted with 12 identified students from each school.

- Semi-structured interviews were transcribed by an outside transcription agency (see Appendix G).

May 2011- November 2011

- Qualitative data (transcripts of semi-structured interviews) was analyzed.

- Quantitative and Qualitative data was mixed and analyzed (Mixed Methods).

- Doctoral dissertation was written and revised.

December 2011

- Doctoral dissertation was defended.

Summary

Chapter 3 presented the design and procedures for this mixed methods study. The chapter began with a discussion of the study’s mixed methods design and challenges that accompany this design as well as the manner in which these challenges were dealt. Next the participants were introduced in addition to the instruments that were used. This was followed by descriptions of the procedures that were utilized for collection, analysis, and validation of the quantitative and qualitative data in the two distinct phases of the study, as well as the methods used as the two data sources were mixed. This chapter concluded with sections that discussed my skills as a researcher, potential ethical issues, and the timeline for the current study. Chapter 4 will highlight the results of this study that were used to better understand the student-teacher relationship as viewed by fifth grade students attending schools on alternate ends of the socioeconomic spectrum.
Chapter 4: Results

Student-teacher relationships have long been pointed toward as an important factor in student success and achievement. Some studies have sought to quantitatively measure the effects of the student-teacher relationship, while others have analyzed student-teacher relationships from the perspective of the teacher or an observer in the classroom. This researcher’s goal was to better understand the dynamics and nuances of the student-teacher relationship through the eyes of fifth grade students from both ends of the socio-economic spectrum; to really help teachers understand what is important to students.

The purpose for conducting this study was to better understand the role that the student-teacher relationship plays in the lives of fifth graders in two elementary schools in a rural mid-western community. Data was collected in two phases. The first phase was comprised of the collection of quantitative data through the administration of the ClassMaps Survey (CMS). This survey data was analyzed for correlations within the different classrooms and schools as well as with student achievement data measured as growth between the fall and winter administrations of the Measure of Academic Progress (MAP). Effect size, or the magnitude of difference between scores or groups, was also calculated in many instances. For example, the effect size or the degree of difference between the average or mean achievement test scores for two different schools was calculated by dividing the difference between the schools’ mean scores by the average of the standard deviations for the mean scores from each school. The use of effect size provides a common language for looking at the degree to which the values observed for one variable differ from the values of the other (Rosenthal, 2001). The following
descriptors and the corresponding effect sizes were adapted and used operationally within this study for labeling the size or magnitude of each difference throughout this study (Rosenthal, 2001, p. 158):

<table>
<thead>
<tr>
<th>Range Used (operationally in study)</th>
<th>Size of Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between ±0.01 and ±0.35</td>
<td>Small</td>
</tr>
<tr>
<td>Between ±0.36 and ±0.65</td>
<td>Medium</td>
</tr>
<tr>
<td>Between ±0.66 and ±1.05</td>
<td>Large</td>
</tr>
<tr>
<td>±1.06 or greater</td>
<td>Very Large</td>
</tr>
</tbody>
</table>

The second phase of this study consisted of the gathering of qualitative data. The majority of this data was gathered via semi-structured follow-up interviews with 24 of the fifth graders who completed the CMS. A multi-stage, purposeful sampling technique was utilized to select students for the interviews. Students who returned parental consent and student assent forms from each school were rank ordered according to the growth made on the math subtest of the Measure of Academic Progress (MAP) between the fall 2010 and the winter 2010 administrations. Then students were again rank ordered, this time according to the growth made on the reading subtest of the Measure of Academic Progress (MAP) between the fall 2010 and the winter 2010 administrations. The rank order lists for each subtest, at each school, were then divided in half according to student’s growth creating the categories of high growth and low growth. These two lists were then synthesized. Students received their final designation by school as those who had high growth on both subtests (H-H), high growth on one subtest and low growth in another (H-L), or low growth on both subtests (L-L). Then four students from each designation (H-H; H-L; L-L) for a total of 12 from each school or 24 students overall
were chosen to complete the semi-structured interviews. After a review of the initial research, this chapter presents the research results as found in the two phases of data collection.

**Research Questions**

**Central Question.**

1. What role does the student-teacher relationship play in the lives of fifth graders in two elementary schools in a rural mid-western community?

**Quantitative Research Questions.**

2. How do students rate their student-teacher relationship with their current teacher as measured by the ClassMaps Survey (CMS)?

3. To what extent are measures of student achievement (Measure of Academic Progress) correlated with scale scores from the ClassMaps Survey (CMS)?

**Qualitative Research Questions.**

4. How do fifth grade students describe their student-teacher relationship with their current fifth grade teacher?

5. Of what value are student-teacher relationships to fifth grade students, in regard to:
   
   - who they are as a person?
   - choices they make in school?
   - learning (personal goals)?
   - how hard they work on their school work (work ethic)?
   - friendships?
   - ways they relate to adults?
- behaviors?
- choices they make outside of school?
- how much or how well they study?
- home life or family relationships?
- choices they make outside of school (extra-curricular activities, etc.)?

**Mixed Methods Research Question.**

6. In what ways do the semi-structured interviews help to explain the students’ responses on the Teacher-Student section of ClassMaps Survey (CMS)?

The prompts from the Teacher-Student section of ClassMaps Survey (CMS) are as follows:

My teacher listens carefully to me when I talk.
My teacher helps me when I need help.
My teacher respects me.
My teacher likes having me in this class.
My teacher makes it fun to be in this class.
My teacher thinks I do a good job in this class.
My teacher is fair to me.

**Quantitative Results**

**Student-teacher relationships.** The developers of the ClassMaps Survey (CMS), understanding that adequate reliability of the CMS was necessary for its widespread use in schools, have spent the last decade refining the survey. Due to the briefness of the subscales and there being no alternate form to the four response format, coefficient alpha was the most suitable measure of reliability for the CMS. All coefficient
alphas for the subscales were in the acceptable range of the upper .80s to mid .90s, with the highest score recorded for the Teacher-Student section of the CMS at 0.96 (Doll et al., 2009).

In this current study, it is interesting to note that the overall results of the CMS between the two schools were similar with regard to student-teacher relationships. Overall, students attending Maple Elementary, designated as an affluent school, rated the teacher-student relationships at a mean score of 2.56 out of a possible three points (0= Never; 1= Sometimes; 2= Often; 3= Almost Always) and fifth grade students attending Birch Elementary, designated as a poverty school, rated the teacher-student relationships slightly lower with a mean score of 2.53 on the same scale (see Figure 1).

![Figure 1. Comparison of mean scores by school on the Teacher-Student section of the CMS](image)

Through the use of the Analysis of Variance, the difference between the schools, with regard to the mean scores on the Teacher-Student section of the CMS, was not
significant, $F(1, 60) = 0.06, p = 0.81$. Effect size, or the magnitude of difference between the mean scores on the Teacher-Student section for the two schools, was also calculated and found to be small (0.04).

By narrowing the focus and looking at mean scores for the two schools (reported under pseudonyms), on each question of the Teacher-Student section of the CMS, one finds that students at Maple Elementary (affluent school) rated relationships with their fifth grade teachers slightly higher on four of the section questions, while students at Birch Elementary (poverty school) rated relationships with their fifth grade teachers slightly higher on the remaining three questions. More specifically, mean scores for each question were slightly higher for questions dealing with respect (Respect - My teacher respects me), being liked (Likes - My teacher likes having me in this class), fun (Fun - My teacher makes it fun to be in this class), and positive feedback (Good job - My teacher thinks I do a good job in this class) from students at Maple Elementary than students at Birch Elementary. While questions regarding listening (Listens - My teacher listens carefully to me when I talk), helping (Helps - My teacher helps me when I need help), and fairness (My teacher is fair to me) had slightly higher mean scores from students at Birch Elementary verses students at Maple Elementary (see Figure 2).
Fig. 2. Comparison of mean scores by school on items from the Teacher-Student section of the CMS

In line with the ANOVA results for the overall mean scores by school, an analysis of individual item means by school showed that the differences were also not significantly different (p > .05, See Table 2). Effect size, or the magnitude of difference between mean scores for the two schools on the seven items from Teacher-Student section of the CMS, was also calculated and ranged from small (0.10 and -0.16) to medium (-0.37 and 0.44), with the overall difference in effect size between the schools being very small (see Table 2).
Table 2

*Comparison of Mean Scores for Each Item on the Teacher-Student Section of the CMS by School*

<table>
<thead>
<tr>
<th>The 7 items on Teacher-Student Section of CMS^</th>
<th>Birch n=26</th>
<th>Maple n=36</th>
<th>Students (n=62)</th>
<th>p-value</th>
<th>F</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listens</td>
<td>2.58 0.74</td>
<td>2.39 0.86</td>
<td>0.31</td>
<td>1.05</td>
<td></td>
<td>0.23</td>
</tr>
<tr>
<td>Helps</td>
<td>2.69 0.61</td>
<td>2.42 0.64</td>
<td>0.14</td>
<td>0.25</td>
<td></td>
<td>0.44</td>
</tr>
<tr>
<td>Respects</td>
<td>2.46 0.84</td>
<td>2.72 0.65</td>
<td>0.16</td>
<td>2.01</td>
<td></td>
<td>-0.35</td>
</tr>
<tr>
<td>Likes</td>
<td>2.65 0.62</td>
<td>2.75 0.60</td>
<td>0.60</td>
<td>0.27</td>
<td></td>
<td>-0.16</td>
</tr>
<tr>
<td>Fun</td>
<td>2.42 0.79</td>
<td>2.67 0.53</td>
<td>0.19</td>
<td>1.76</td>
<td></td>
<td>-0.37</td>
</tr>
<tr>
<td>Good Job</td>
<td>2.42 0.74</td>
<td>2.58 0.60</td>
<td>0.38</td>
<td>0.76</td>
<td></td>
<td>-0.24</td>
</tr>
<tr>
<td>Fair</td>
<td>2.50 0.80</td>
<td>2.42 0.80</td>
<td>0.65</td>
<td>0.21</td>
<td></td>
<td>0.10</td>
</tr>
</tbody>
</table>

| Averages                                      | 2.56 0.73  | 2.53 0.75  |                |         |     | -0.05       |

* p < .05 one-tailed

^ Items coded as 0 = Never, 1 = Sometimes, 2 = Often, 3 = Almost Always

When focusing on the responses from students in each individual classroom (reported under teacher pseudonyms), the students of Banya and Whatley from Birch Elementary (poverty school) had a greater difference between their mean scores on the Teacher-Student section of the CMS with Banya receiving a mean score of 2.82 and Whatley receiving a mean score of 2.32. And while the two teachers at Maple Elementary (affluent school) earned overall mean scores that were closer to one another,
with Newman receiving a 2.61 and Sacamano receiving a 2.52, their combined mean of 2.53 was greater than combined mean scores for the two teachers at Birch Elementary (2.65) (see Figure 3).

![Graph comparing mean scores by teacher on the Teacher-Student section of the CMS](image)

**Figure 3.** Comparison of mean scores by teacher on the Teacher-Student section of the CMS

Through the use of the Analysis of Variance, the difference between the teachers, with regard to the mean scores on the Teacher-Student section of the CMS, was found to be significant, $F(3, 58) = 2.85, p = 0.05$. The effect size between teachers at each school was also figured with regard to mean scores on the Teacher-Student section of the CMS. The effect size, or the magnitude of the differences between the mean scores, was large (0.81) for the teachers at Birch Elementary, while the effect size between the mean scores for teachers at Maple Elementary was small (0.14).

Lastly, mean scores for the items on the Teacher-Student section of the CMS were compared (see Figure 4). Banya’s students gave him the highest rating on six of the seven items. Only on one item (Likes - My teacher likes having me in this class.) was
Banya outscored and that was only by a slight edge of 0.02 by Newman. The effect size for the other three teachers was also figured using Banya’s overall score for the comparison. The magnitude of the differences between the scores for the Teacher-Student section of the CMS ranged from medium effect sizes for Newman (0.40) and Sacamano (0.55) to large for Whatley (0.81).

![Figure 4. Comparison of mean scores by teacher on questions on the Teacher-Student section of the CMS](image)

The mean scores for items on the ClassMaps Survey (CMS) were then analyzed using ANOVA. Differences between teachers were not found to be significant on five of the seven items on the Teacher-Student section of the CMS. Only items dealing with student perceptions of their teachers making class fun and being fair showed scores between teachers to be significantly different, $F(3, 231) = 2.97, p = 0.03$ and $F(3, 231) = 4.02, p = 0.01$ (See Table 3). The effect sizes, or the degree to which scores differed in magnitude from Banya’s scores who was rated highest overall, ranged from very small (-0.02 and -0.04) to very large (1.96 and 1.47) with the majority of the effect sizes falling into the small to medium range (see Table 3).
Table 3
Comparison of p-values for Each Item on the Teacher-Student Section of the CMS by Teacher

<table>
<thead>
<tr>
<th>Item</th>
<th>Birch Elementary (n=26)</th>
<th>Maple Elementary (n=36)</th>
<th>All (n=62)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Banya (n=11)</td>
<td>Whatley (n=15)</td>
<td>Newman (n=18)</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Effect Size</td>
</tr>
<tr>
<td>Listens</td>
<td>2.82</td>
<td>0.58</td>
<td>--</td>
</tr>
<tr>
<td>Helps</td>
<td>2.91</td>
<td>0.29</td>
<td>--</td>
</tr>
<tr>
<td>Respects</td>
<td>2.64</td>
<td>0.77</td>
<td>--</td>
</tr>
<tr>
<td>Likes</td>
<td>2.82</td>
<td>0.39</td>
<td>--</td>
</tr>
<tr>
<td>Fun</td>
<td>2.82</td>
<td>0.39</td>
<td>--</td>
</tr>
<tr>
<td>Good Job</td>
<td>2.73</td>
<td>0.45</td>
<td>--</td>
</tr>
<tr>
<td>Fair</td>
<td>3.00</td>
<td>0.00</td>
<td>--</td>
</tr>
</tbody>
</table>

* p < .05 one-tailed

^ Items coded as 0 = Never, 1 = Sometimes, 2 = Often, 3 = Almost Always
**Student achievement.** The RIT Scale, used by Northwest Evaluation Association as a curriculum scale on the Measure of Academic Progress (MAP), is an accurate, equal interval scale that enables the measurement of growth over time. Though the students from Maple Elementary (affluent) achieved higher than the Birch Elementary students (poverty) on both the reading and the math subtests of the MAP on both the fall as well as the winter administrations of the assessment, both schools showed growth. Growth in math and reading were defined by a positive or negative increase in scores on each of the two subtests between the fall 2010 and the winter 2010 administrations of the MAP. The fifth graders at Birch Elementary began the year a RIT scale mean of 197.56 in math and, after achieving a growth in the mean of 6.26, concluded the semester with a RIT scale mean of 203.92. With a mean RIT score of 215.17, the fifth graders at Maple Elementary began the year considerably higher than their Birch counterparts ended the year on the same math subtest. After growth of 8.00, the Maple fifth graders concluded with a mean of 223.17. A similar pattern was revealed when examining at growth form the fall to winter administrations of the reading subtest of the MAP (see Figure 5).
The mean growth in RIT Scale scores from the math and reading subtests of the Measure of Academic Progress (MAP) were then examined for effect size, or the degree of magnitude between the growth scores. To remain consistent with the analyses of effect size, Birch Elementary was used as the control group, thus does not have an effect size reported. The effect size, or difference in the magnitude of the scores, for growth in mean scores between the two different schools on the Measure of Academic Progress (MAP) for the math subtest was small (-0.21), while the growth for mean scores on the reading subtest were medium in size (0.40) (see Table 4).

Figure 5. Comparison of mean RIT scores for math and reading subtests by school on Measure of Academic Progress (MAP)
Table 4
Comparison of RIT Scores for Subtests on the Measure of Academic Progress (MAP) by School

<table>
<thead>
<tr>
<th>School</th>
<th>Mean Fall</th>
<th>SD</th>
<th>Mean Winter</th>
<th>SD</th>
<th>Mean Growth</th>
<th>SD</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birch (n=26)</td>
<td>197.56</td>
<td>14.58</td>
<td>203.92</td>
<td>13.15</td>
<td>6.63</td>
<td>6.29</td>
<td>---</td>
</tr>
<tr>
<td>Maple (n=36)</td>
<td>215.17</td>
<td>9.78</td>
<td>223.17</td>
<td>10.49</td>
<td>8.00</td>
<td>6.95</td>
<td>-0.21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School</th>
<th>Mean Fall</th>
<th>SD</th>
<th>Mean Winter</th>
<th>SD</th>
<th>Mean Growth</th>
<th>SD</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birch (n=26)</td>
<td>195.92</td>
<td>19.19</td>
<td>203.88</td>
<td>15.37</td>
<td>8.29</td>
<td>11.27</td>
<td>---</td>
</tr>
<tr>
<td>Maple (n=36)</td>
<td>212.89</td>
<td>11.13</td>
<td>217.42</td>
<td>9.23</td>
<td>4.53</td>
<td>7.65</td>
<td>0.40</td>
</tr>
</tbody>
</table>

**Student-teacher relationships and student achievement.** The survey data gathered through the Teacher-Student section of the ClassMaps Survey (CMS) was then analyzed for correlations with growth students showed from the first administration of the Measure of Academic Progress (MAP) in the fall of 2010 to the winter administration in 2010 in the areas of Math and Reading. The CMS data was gathered in December of 2010, the same month as the winter administration of the Measure of Academic Progress (MAP). Analysis of Variance was used in this analysis. A look at the strength of the correlations for all students (n=62) shows that only the item dealing with the helping behavior of the teacher (Helps - My teacher helps me when I need help) was significantly
correlated with growth in either math or reading and it was shown to be significantly correlated with growth in both (see Table 5).

Table 5

*Correlations of Items on the Teacher-Student Section of the CMS with Growth in Academic Performance in Math and Reading as Measured by the Measure of Academic Proficiency (MAP) for Both Schools*

<table>
<thead>
<tr>
<th>The 7 items on Teacher-Student Section of CMS^</th>
<th>Pearson Correlation of item with growth in:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MAP math</td>
</tr>
<tr>
<td>Listens</td>
<td>0.10</td>
</tr>
<tr>
<td>Helps</td>
<td>0.30*</td>
</tr>
<tr>
<td>Respects</td>
<td>-0.07</td>
</tr>
<tr>
<td>Likes</td>
<td>0.05</td>
</tr>
<tr>
<td>Fun</td>
<td>-0.02</td>
</tr>
<tr>
<td>Good Job</td>
<td>0.20</td>
</tr>
<tr>
<td>Fair</td>
<td>0.08</td>
</tr>
</tbody>
</table>

* p < .05 one-tailed
^ Items coded as 0 = Never, 1 = Sometimes, 2 = Often, 3 = Almost Always

Next, correlations between the mean scores for the seven items on the Teacher-Student section of the CMS were analyzed for correlations with performance as measured by growth on the Measure of Academic Progress (MAP) in the areas of math and reading by school. Growth in math and reading were defined by a positive or negative increase in scores on each of the two subtests between the fall 2010 and the winter 2010 administrations of the MAP. At Birch Elementary (n = 26), the school designated as a
poverty school, the only correlation that was significant \( (p<0.05) \) was between growth in reading, as measured by the MAP, and the CMS item dealing with listening (Listens - My teacher listens carefully to me when I talk) (see Table 6).

A similar analysis at Maple Elementary, designated as the affluent school, revealed several correlations of significance. The CMS item dealing with helping (Helps - My teacher helps me when I need help) was significantly correlated with growth in student achievement as measured on the MAP between the fall and winter administrations of the math and reading subtests (see Table 6). This analysis at the school-level revealed that the correlation on the item dealing with helping (Helps - My teacher helps me when I need help) and growth on the MAP subtests for both schools (see Table 5) may have been due to the strength of the correlations at Maple Elementary (see Table 6). Items dealing with the students’ perceptions of the teachers’ ability to listen (Listens - My teacher listens carefully to me when I talk) and provide positive feedback (Good job - My teacher thinks I do a good job in this class) also correlated significantly with growth in the student achievement in math (MAP). Lastly, student achievement in reading (MAP) correlated with the students’ perception of the Maple teachers’ fairness (My teacher is fair to me) along with helping (My teacher helps me when I need help) (see Table 6).
Table 6

*Correlations of Items on the Teacher-Student Section of the CMS with Growth in Academic Performance in Math and Reading as Measured by the MAP*

<table>
<thead>
<tr>
<th>The 7 items on Teacher-Student Section of CMS(^\wedge)</th>
<th>Birch Elementary (n=26)</th>
<th>Maple Elementary (n=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation of item with growth in:</td>
<td>Pearson Correlation of item with growth in:</td>
</tr>
<tr>
<td></td>
<td>MAP math</td>
<td>MAP reading</td>
</tr>
<tr>
<td>Listens</td>
<td>-0.22</td>
<td>-0.41*</td>
</tr>
<tr>
<td>Helps</td>
<td>0.21</td>
<td>-0.02</td>
</tr>
<tr>
<td>Respects</td>
<td>-0.10</td>
<td>-0.05</td>
</tr>
<tr>
<td>Likes</td>
<td>-0.11</td>
<td>0.03</td>
</tr>
<tr>
<td>Fun</td>
<td>-0.14</td>
<td>0.01</td>
</tr>
<tr>
<td>Good Job</td>
<td>0.01</td>
<td>-0.13</td>
</tr>
<tr>
<td>Fair</td>
<td>-0.19</td>
<td>-0.17</td>
</tr>
</tbody>
</table>

* p < .05 one-tailed  
\(^\wedge\) Items coded as 0 = Never, 1 = Sometimes, 2 = Often, 3 = Almost Always

An analysis of the strength of the correlations between feedback on the seven items of the Teacher-Student section of the CMS and student achievement, in reading and math, as measured via growth between the fall and winter administrations of the Measure of Academic Progress (MAP) by classroom was not possible due to the populations for each of the individual classrooms being under 20 students.

**Qualitative Results**

The audio recordings of the 24 semi-structured student interviews were transcribed by an outside agency, then analyzed for codes and themes by the researcher. The results are reported under the two designations of *ClassMaps Follow-up Questions* and *Teacher Influence Questions*. Though all data were garnered from the same series of
interviews, the results are reported separately due to the different themes that emerged from the different questions.

**Themes from the ClassMaps Follow-up Questions.** The *ClassMaps Follow-up Questions* were initially posed to answer the study’s Mixed Methods Question, *In what ways do the semi-structured interviews help to explain the students’ responses on the Teacher-Student section of ClassMaps Survey (CMS)?*. In addition to serving this purpose, posing the *ClassMaps Follow-up Questions* allowed for further analysis, which brought to light seven themes. These themes included common characteristics the different teachers possessed, some of which were explicitly stated and one theme that emerged due to its obvious omission from the interview transcripts.

**Sense of humor.** The first theme that emerged as valued by the students and possessed by the teachers included a strong sense of humor. Students from three of the classrooms specifically mentioned that their teacher possessed this characteristic. There were two main ways in which this sense of humor was expressed, but both seemed to evoke the same result -- the students enjoying time with their teacher.

Two of the teachers, Mrs. Whatley and Mrs. Newman, each showed her sense of humor mainly through telling funny stories about her respective family. One of Mrs. Whatley’s students, Kylie, shared an example of this, “Well, she’ll talk about her family, and some of it’s funny. She told me about her daughter when she slept walked and she walked all the way down the stairs, opened the fridge, got the milk out and then went back to bed. That was funny.” One of Mrs. Newman’s students shared a similar example stating, “She’s funny, she’s nice and she tells a lot of stories of like her with her grandkids and stuff.” Another student backed this sentiment stating, “She’s always
making us laugh and she tells us stories about her grandchildren.” Mr. Banya was
described by several of his students as hilarious and they shared that he tells lots of jokes.
One student summed it best stating, “If someone makes him laugh he’ll add another thing
that makes the other person laugh.”

**Consistent help (with high expectations).** Another theme that the fifth graders felt
strongly about was that their teachers were consistently helpful, yet still held them
accountable for their own learning. One student shared, “most of the time I don’t need
help but when I do, she always does.” Other students stated that, “When I need help, I
know that she’ll come...” and, “If we need help, she’ll always call on us and say, “What
can I help you with?.” Students in all four classrooms shared different ways in which this
help was delivered. Some of the help was given as class was in session, other times it was
provided in a small group or individually after school or at recess, and still another one of
the teachers offered her help via a sign-up list on the board. In this last situation, if a
problem was encountered as the student worked on assignments and tasks, he or she
added their name to the bottom of the “help list.” Then the teacher systematically worked
down the list student by student until everyone received the assistance they needed.
Again, it didn’t appear to be important to the students how the help was provided, but that
it was consistent and available to all.

Not only did students value when their teachers provided the help, they also
valued the expectations of orderliness and students trying on their own. Several
mentioned that the assistance was always available, but that there were procedures that
needed to be followed, most importantly the raising of hands while patiently waiting in
one’s seat. Others spoke of the teacher not doing for students what they are able to do on
their own, “Because sometimes she thinks we should do it by ourself and try and figure it out to give us more experience with it. And sometimes she helps us because she knows we don’t get it very much...Other times we do get it but we just aren’t showing it very much.” This student concluded with, “She helps us the right amount.” Yet another student showed that these two expectations, consistent help with orderliness and students trying on their own, are not always expressed through an either/or situation. When troubled by the spelling of a word, one student discussed how the teacher met her halfway, “She gave me the dictionary, and then we couldn’t find it in the dictionary, we looked it up on the Internet and we found it (together).”

Games for learning. Students also valued when their teachers made learning fun, more specifically when their teachers made games part of the learning process. Fourteen students of the 24 interviewed from all of the four teachers’ classrooms specifically mentioned the implementation of games that reinforced or included learning as a reason they felt their teacher made learning fun. Some of the games mentioned were used as impromptu review sessions. Such an example included, “…in grammar and math, she makes up games on the topic review, which is a lot of fun. She makes really fun games.” And “Sometimes we play fun games, but then it’s also teaching us.” Another student shared, “Yeah, it is very fun to be in the class, because when we’re learning, he does like games instead of just telling us…In Language, we race to the board and circle the one first. Whoever gets it first, wins.” And, “…before a spelling test we get to play this game called Cherry Pie.” When asked by the interviewer, “Do you feel like the games help you learn?” one student answered, “Yeah. For grammar they really do with the pronouns, ‘cause a lot of us were getting ‘em confused, but with the games it helps (us) remember
them.” Another example included, “when we’re in grammar usually it’s kind of boring but sometimes she puts games in it.” Yet another student shared, “He lets us play these little games, and if we get an answer correct, he’ll let us go to this miniature basketball hoop and shoot from a certain line.” “She lets us do little fun games with our learning. Like when we’re doing spelling tests she has us do Cherry Pie. It’s where you go in a circle and everything and you have to spell a word out. She sometimes lets us do Hangman on the marker board, and she lets us have free time to do fun things like that.”

“Well I was going to say every Friday we have these things called “Mathertations” and we get to play all sorts of games.”

**Active listening.** Another theme that emerged from the interviews was the importance of teachers exhibiting active listening. Nearly two thirds of the students chosen for the interviews marked on the CMS that their teachers *Almost Always* listened to them. When asked how they knew when their teacher was listening to them, the vast majority of the students (nearly 71%) stressed the importance of being looked at, more specifically looked in the eye, as they spoke. They also shared that the teacher needed to give them both nonverbal feedback, such as nodding one’s head; and verbal confirmation that they have understood what the student is saying. Some notable quotes included, “He looks at me and nods his head...” And another shared, “She’s looking me in the eyes and she’s not looking anywhere else. Sometimes she is side by side with you and she’s looking at your paper or at you.” And, yet another stated, “He doesn’t turn his head and say something else while I’m doing it (speaking to him).” And still another said, “He’ll look at (me). And...if the class is bothering us, he’ll like tell them to be quiet and like have me start over.” “She just pays attention to me, looks me in the eye...She’ll be like
telling me, ‘Okay, I understand that,’ and stuff like that.” “Because he always looks at me and like he’s trying to understand what I’m saying. He...sometimes makes a glare (a focused look), and then kind of looks around to see what everyone else is doing, and looks back at me.” “He doesn’t turn his head and say something else while I’m doing it (speaking to him).”

**Sense of belonging.** One theme that was more implicit in nature, but found throughout the responses to the different interview questions, was the communal or group-oriented thinking by most of the 24 students interviewed. With the exception of a question inquiring about the teacher making class fun (My teacher makes it fun to be in this class), the other seven questions posed for students to expand on were geared more to individual responses such as “I” and “me.” Thirteen of the 24 students made use of the pronouns “we” and “us” rather than “I” and “me” on at least two of their prompt follow-ups. On the ClassMaps prompt dealing with fairness (My teacher is fair to me), 16 of the 24 students who were interviewed had marked *Almost Always* in the survey. When asked in the follow-up interview, “Does he/she treat everyone fairly?” and “Is that important to you?” the students emphatically said “yes” to both. Some comments that displayed this thinking include, “Because he shows fairness to everybody in the class. He shows the same amount.” “Like I’ve been saying all along, she really takes time for each and every one of us.” “Or if we have a question or an answer he doesn’t like just keep moving on, he makes sure that everybody can ask their question and get an answer.”

**Encouragement.** Two-thirds of the students interviewed expressed that their teachers almost always felt they (the students) did a good job in class. And two-thirds spoke of specific ways that the teachers conveyed to students that they were doing a good
job in the classroom. Though there were a couple examples shared by students that included the earning of stickers or candy, the manner most mentioned by the fifth graders was verbal encouragement and/or compliments that were expressed either by spoken or written language. The majority of the examples shared by the students were spoken in nature and most generally expressed as “Good job!” or other variances of this compliment. Other examples included, but were not limited to “Awesome job!” and “Nice job!” Some of the students included their own name in their examples and others included some specificity in terms of what the student actually did that was worthy of praise. But based upon the infrequency of these details, in spoken encouragements, it seems the salient aspect was not specificity or name usage, but the fact the compliment was expressed. Conversely, written forms of this encouragement or compliments were more valued when they were specific. The students shared examples of teachers not only writing “Good job!” on their papers, but also writing the “good” grade earned on top of particular assignments with accompanying smiley faces and notes which included specific compliments and encouragement.

Focus on character instead of appearance. The final theme was exposed due to its complete and total omission by all of the students interviewed. There were no references to the physical appearance and dress or style of any of the four teachers. The four teachers in the study range in age from roughly their early thirties to their mid-fifties, and in terms of style of clothing or dress from extremely casual, as in khaki’s and casual shoes to a much more professional look, as in a dress shirt, slacks and a tie. Regardless of these details, students focused their descriptions and comments solely on the behaviors and character traits their teachers exhibited. Interestingly enough, the first question of the
interview, “Tell me about Mr(s). _________.”, could have been interpreted as a request for a physical description, but again, there was not one mention of the physical appearance of the teachers by any of the students interviewed. Some examples of student responses include, “Well, Mr. Banya is fun and hilarious, and every time when it’s sunny we always go to Collins Park.” Another student shared this about Mrs. Newman, “I love her. She’s awesome… She’s nice and she teaches really, really good and she always finds a way to make us laugh. If something’s really boring, she’ll find a way to make it fun.” A boy in Mr. Sacamano’s room shared, “He’s a really nice guy, and he can be strict, but that’s a good thing, because sometimes teachers can be too nice, and so that will lead kids to be a little more disrespectful.” Lastly, one of Mrs. Whatley’s students shared what was the closest reference to style as he said, “She’s a westerner. I think she’s southern.” When encouraged by the interviewer to explain further, the young man followed suit with the rest of the interviewees as he responded with, “Because like she has the accent.”

Themes from the Teacher Influence Questions. Analysis of the student responses to the Teacher Influence Questions also produced two overarching themes that focused on the differences and similarities between the two schools.

Differences between schools. The theme regarding differences between the two schools produced two sub-themes which included the effects that teachers had on how students spent their time spent outside of school, as well as the effect teachers had on the choices students made outside of school.

Use of time outside of school. Some interesting differences between Birch Elementary (poverty school) and Maple Elementary (affluent school) were revealed with
regard to the effect their teachers have on the choices that the fifth graders do with their
time and behaviors outside of school. The first difference was in response to the question,
“Does (enter your teacher name), or your relationship with him/her have an effect on
what you do with your free time outside of school (extra-curricular activities)?” The
opposing results provide a glimpse into differences in the perceived carryover effect of
their teachers on their lives outside of school. A closer review of the responses of the
Maple Elementary students shows that eight of the nine who felt that their teacher
affected what they do with their free-time outside of school were encouraged to engage in
activities that included schoolwork or studying first, and then fun. Some quotations that
backed this sentiment included, “Yes, because she encourages us to get our homework
done before we play with other things at home.” Another student shared, “Sometimes
reading and stuff. She’ll influence us to do that... Yeah, and study more. If a big test is
coming up, she’ll say, ‘Well, there’s a big test and it’s really hard and you need to
study.’” Though the Maple Elementary teachers encouraged their students to use their
time for school, the teachers were not *all work and no play*, as this student shared, “He
tells us to study and that gets me away from like playing video games too much. Or like
playing sports, he motivates us to play sports. Get active with your body. Don’t just sit
around on the couch.” On the other hand, the two students from Birch Elementary who
responded “yes” both also felt similarly encouraged to engage in schoolwork and/or
balance homework and play, while their other ten peers conveyed that they perceived no
carryover effect at all.

*Choices outside of school.* Another qualitative question that showcased a major
difference between the schools also dealt with the teachers’ effect on students outside of
school, in this case the choices that they made, “Does (enter your teacher name), or your relationship with him/her have an effect on the choices you make outside of school?” Because this question directly followed a prompt that inquired about behaviors, the student interpreted it to mean behavior outside of school and shared appropriate examples. Again, very few, two out of the 12, of the Birch Elementary fifth graders saw an effect from their teacher on their choices outside of school, while nine of their 12 counterparts at the more affluent school affirmed and could validate the effect. Nine of the ten Birch fifth graders who did not perceive a carryover responded to the question with a simple “no” or “nope.” Conversely, this carryover outside the school walls was explained by one Maple Elementary student’s response, “Yeah, because when I’m inside school she helps me make choices and so I always like make better choices because she turns me to better choices. And so I just think of her being there when I’m trying to make a good choice (outside of school).” Another Maple student shared the importance of his teacher’s opinion of him, “Yeah... because someone might know him and tell him how I would be, and then that’d reflect on how he thinks of me as a student.” Lastly yet another Maple fifth grader bridged the gap between the two previous responses as she stated, “If it was late at night and I didn’t want to do my homework, (and) I would think of her. And like she gets sad when we miss a (problem).”

**Similarities between schools.** Sub-themes also emerged with regard to some similarities between the students in the two types schools, which included the influence teachers had on students’ choice of friends, behaviors at school, and learning.

*Friend selection.* The majority of both sets of students saw very little teacher influence on whom they chose as friends. Few fifth graders from either school, 16.6%
from Birch Elementary and 33.3% from Maple Elementary, responded “yes,” when asked, “Does (enter your teacher name), or your relationship with him/her have an effect on who you have as friends?” The vast majority of students interviewed in both schools responding with a definitive “no.” Those who did respond “yes,” were encouraged to avoid the negative influences and make better choices of friends. Some notable quotes included, “Well, she knows who is a good person to have as a friend and who isn’t...” and another shared that when there was a problem, her teacher was available, “…to help you make better choices for friends.” One of the boys shared that his teacher talks with him and helped him come to the following conclusion, “…if I hang out with bad people I’d be bad and pretty much get expelled from school.” And another student shared, “Sometimes like he says if somebody’s not treating you very nicely at recess than you don’t have to just go tell him or somebody who’s watching you, you can just not be friends with them and maybe get different friends.” Yet another student summed it up as, “Sometimes she says that this person could be a bad influence and I think you shouldn’t be hanging out with these people.”

_Behaviors in school._ Some interesting results were revealed via the question “Does (enter your teacher name), or your relationship with him/her have an effect on how well you behave?” The majority of the students from both schools, 67% from Birch Elementary and nearly 92% from Maple Elementary, shared that their teachers influence their behaviors through either the encouragement of good behavior or through the threat or handing out of consequences. One student was motivated both by his teacher and her encouragement to pursue the _Quantum Learning’s Eight Keys of Excellence_ stating, “She encourages...and wants me to get a key out of the _Eight Keys._” Another young lady
shared the importance of her teacher modeling good behavior, “I don’t really know how to describe it but she just acts -- she behaves really nicely in class.” She even went on to explain why she felt teachers have such an influence on their students as she stated, “Because they’re part of our life, like almost every day, except for the weekends. And we see them like every morning, every afternoon.” Another student shared, “Yeah, because he tells us that what we need to do right, and what we don’t do right.” And yet another shared his teachers subtle and not-so-subtle clues, “If it’s bad he’ll look at me kind of weird and then sometimes he’ll send me to think time...Or he’ll cough; he’ll be like, ‘Ahem.’” Some other interesting quotes included, “Because if we do something that we aren’t supposed to...and if it’s like really bad, he’ll send us think time.” and “Yes, because... when you behave badly, you might pull a card and you wouldn’t get to go out for extra recess. It just teaches how to act good.” And though not all students saw an influence, overall the students seemed to convey that they appreciated their teachers’ concern for their behaviors.

Learning. Three other questions dealt with the students’ perceptions of the effect that their teachers have on different aspects of their learning. “Does (enter your teacher name), or your relationship with him/her have an effect on your learning?”; “Does (enter your teacher name), or your relationship with him/her have an effect on how hard you work on your schoolwork?”; and “Does (enter your teacher name), or your relationship with him/her have an effect on how much or how well you study?” Overall, the majority of the fifth graders interviewed from both schools responded “yes” and were able to provide validation though a follow-up example or story. Again, students perceived that their teachers influenced them most via encouragement and pushing for better. One
student shared, “Well, because she wants me to work very hard... She helps me if I’m stuck on a problem. I raise my hand and she comes up and tries to help my problem.” Another shared, “...she wants us to work hard so our grades go up.” Another shared, “Yeah, sometimes like she influences me to like learn more, do my best, and not fail.” He went on to share, “At parent-teacher conferences she shows me my grades and I feel really confident about my grades right now.” Another young lady shared how this encouragement affected her, “Yeah, she...like in a sense made me push myself so I could actually try hard. She tried giving me different suggestions on how to get to school on time to get my quick checks done.” Another student shared some of the specific encouragement that he received, “Just work hard...so I get really focused on my work and I just do my work, just don’t pay attention to other people. I just pay attention to my work and get it done.”

**Mixed Methods Results**

**ClassMaps Survey and ClassMaps Follow-up Questions.** The mixing of the quantitative results from the Teacher-Student section of the ClassMaps Survey (CMS) and the qualitative results, in the form of the student responses to the *ClassMaps Follow-up Questions* from the semi-structured student interviews served well to answer the Mixed Methods question of the study, *In what ways do the semi-structured interviews help to explain the students’ responses on the Teacher-Student section of ClassMaps Survey (CMS)?* The *ClassMaps Follow-Up Questions* were posed to provide students the opportunity to explain or expand upon the following survey prompts:

My teacher listens to me when I talk.

My teacher helps me when I need help.
My teacher respects me.
My teacher likes having me in this class.
My teacher makes it fun to be in this class.
My teacher thinks I do a good job in this class.
My teacher is fair to me.

**Supported student responses.** The mixing of these two different types of data sources revealed some noteworthy results. Of the 168 total student responses on the Teacher-Student section of the CMS only two responses (1.2%) in the semi-structured interviews did not verify or support the student’s survey responses with corresponding examples or supportive details. In general, students easily and quite eagerly supplied details that supported their response on the survey, often times not even needing further questioning from the interviewer to go into greater detail.

**Unsupported student responses.** These two unverified responses came from two different students; and the two students were low achievers as designated by their first-quadrant scores in the fall administration on the Measure of Academic Progress (MAP). One of the students, a boy in Mrs. Whatley’s class marked her only at Sometimes in response to the ClassMaps prompt on teacher fairness (My teacher is fair to me), yet in the interview supplied the following response as to why he marked her this way, “She’s really fair. She doesn’t give other people a lot of homework. She gives us the same homework…” The other example, also a student in Mrs. Whatley’s class, but this time a girl, marked Almost Always on her survey in response to My teacher likes having me in class. In the subsequent follow-up question to the same prompt the interviewer asked, “Does she do anything to show you that she likes having you there?” to which the young
lady answered, “Not really.” The interviewer then pressed more asking, “Does she ever say anything that lets you know that she likes having you there?” to which the student responded, “No.”

**Quantifying the Teacher Influence Questions.** After being transcribed by an outside agency and analyzed for themes, the qualitative data (the student responses in the semi-structured interviews) was quantified by designating student responses as “yes” when students answered “yes” and could provide some reasoning to validate or support their answer; and designating student responses as “no” when they answered so or could provide no follow-up information or examples to validate or support their initial “yes.” After this quantifying of the data, some interesting differences and similarities between the responses from the students in the poverty school and the students in the affluent school were revealed. The table below provides an overview of these student responses at each school, as well as a comparison between the two schools, i.e. – cross-site analysis (see Table 7).
Table 7

*Number of Supported “Yes” or “No” Responses (and Corresponding Percentages), by School, to the Qualitative Questions for the Semi-Structured Fifth Grader Interviews*

<table>
<thead>
<tr>
<th>Interview Prompt:</th>
<th>Birch Elementary/poverty school (n = 12)</th>
<th>Maple Elementary/affluent school (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responded YES (N%) to the prompt</td>
<td>Responded NO (N%) to the prompt</td>
<td>Responded YES (N%) to the prompt</td>
</tr>
<tr>
<td><strong>who you are as a person?</strong></td>
<td>4 (33%)</td>
<td>8 (67%)</td>
</tr>
<tr>
<td><strong>the choices you make (in school)? your learning?</strong></td>
<td>6 (50%)</td>
<td>6 (50%)</td>
</tr>
<tr>
<td><strong>how hard you work on your schoolwork? who you have as friends?</strong></td>
<td>8 (67%)</td>
<td>4 (33%)</td>
</tr>
<tr>
<td><strong>the ways in which you relate to other adults? how well you behave?</strong></td>
<td>9 (75%)</td>
<td>3 (25%)</td>
</tr>
<tr>
<td><strong>the choices you make outside of school? how much or how well you study? your home life or family relationships? what you do with your free-time outside of school?</strong></td>
<td>2 (17%)</td>
<td>10 (83%)</td>
</tr>
<tr>
<td><strong>Overall Totals</strong></td>
<td>57 (43%)</td>
<td>75 (57%)</td>
</tr>
</tbody>
</table>

**Differences.** A salient finding is in the overall statistical difference between how students of the two schools perceived the influence their teachers had on their lives. This influence refers to students seeing their relationship with their teacher affecting decisions or behaviors in other areas of their lives. Of the 132 total possible responses to the questions at each school, over two-thirds (68%) of the affluent Maple Elementary students felt that their teachers had an effect on them and their lives, as compared to less than half (43%) of the Birch Elementary students when asked the same questions. And
though on many questions, the majority of the fifth graders at both schools did not see a
carryover effect from their teacher, it is important to note that more students from the
affluent school than the poverty school answered “yes” and supported their response on
ten of the eleven questions. The only question that had more “yes” responses and
validation by Birch Elementary was, “Does (enter your teacher name), or your
relationship with him/her have an effect on how hard you work on your school work?”;
and this was by a slight margin of one response (see Table 7).

*Effect size.* Using the data from Table 7 and Birch Elementary as the control
group, effect size, or the magnitude of the difference between the number of “yes”
responses between schools was calculated and found to be very large in size (-1.22).

After transforming the nominal responses to ratios to account for unequal numbers of
students for each teacher, further analysis of the same data, this time by the number of
“yes” responses by teacher was also calculated with Mr. Banya as the control. The effect
size, or magnitude of difference between the number of “yes” responses for Mr. Banya
and Mrs. Whatley was small (-0.04). While the effect size, or magnitude of difference
between the number of “yes” responses for Mr. Banya and Mrs. Newman (-1.20) and the
effect size between Mr. Banya and Mr. Sacamano (-1.39) were very large.

*Similarities.* An overall analysis of the student responses from the two different
schools showcased some similarities and differences. In broad terms, student responses
were categorized as similar (where a majority of the students from both schools either
answered “yes” or “no”; or the responses were equally split at each school) or different
(where a majority of the responses from one school were “yes” and responses from the
other school were “no” or visa-versa; or a majority of the responses from one school were
“yes” or “no” and the other school were equally split). This basic analysis shows that student responses were similar in both schools for six of the questions (Does (enter your teacher name), or your relationship with him/her have an effect on: 1) your learning?; 2) how hard you work on your schoolwork?; 3) who you have as friends?; 4) how well you behave?; 5) how much or how well you study?; and, 6) your home life or family relationships?). In similar fashion, the student responses from the two schools were designated as different on five of the questions (Does (enter your teacher name), or your relationship with him/her have an effect on: 1) who you are as a person?; 2) the choices you make (in school)?; 3) the way in which you relate to other adults?; 4) the choices you make outside of school?; and, 5) what you do with your free-time outside of school?) (see Table 7).

**Conclusion**

The results from this study showed that fifth grade students attending schools, which serve alternate ends of the socioeconomic spectrum respectfully could have similar, favorable perceptions of their relationships with their classroom teachers. Furthermore, this study and the research found in literature suggested that it is the individual teacher that has an effect on student’s perceptions of the student-teacher relationship.

Analysis of student performance (MAP) and student perceptions of the student-teacher relationship (CMS) revealed a significant correlation between growth in reading and students’ perceptions of whether their teacher listens to them in a poverty school. In an affluent school, these same analyses revealed correlations of significance between growth in reading (MAP) and whether their students feel respected and treated fairly by
their teachers (CMS), as well as between growth in math achievement (MAP) and whether the students perceive their teachers listen, help, and convey they are doing a good job in their classrooms (CMS).

With regard to the qualitative data, the most important findings of the study came about from theme-analysis of the student responses to the ClassMaps Follow-up Questions. What emerged is a list of common characteristics of the teachers in both schools that were greatly valued by students. The students really appreciated when their teachers actively listened and encouraged them, as well as provided a fun and supportive, yet challenging environment where the entire class could learn. Additionally, students in both schools, poverty and affluent, seemed to be much more concerned with the behaviors and how their teachers treated them than with the physical appearance of their teachers.

Theme-analysis of the student responses to the Teacher Influence Questions also enabled other salient themes to emerge, which included key differences and similarities between the schools. The major differences between the schools included how much more of an effect the teachers in the affluent school had on students’ use of their time and the choices they make outside of school. Similarities included that in both schools students perceived that their teachers had little effect on who they chose as friends, yet were very influential with regard to the students’ behaviors in school, as well as their learning.

Mixing of the quantitative and qualitative data also produced some relevant findings. Posing questions initially administered in the ClassMaps Survey (CMS) again as the ClassMaps Follow-up Questions in the semi-structured interviews provided a
starting point for students to share rich descriptions and explanations for their survey responses. In addition to illuminating the themes mentioned in the qualitative section, the student responses also provided evidence that the ClassMaps Survey is a powerful tool for accurately capturing student perceptions as 98.8% of the students’ CMS responses were supported with corresponding details or examples.

Lastly, the “quantifying” of the student interview responses to the Teacher Influence Questions showcased differences between the two schools, most notably that over two-thirds (68%) of the affluent students felt that their teachers had an influence on their lives, compared to less than half (43%) of the students in the poverty school.

The two phases of this study and the subsequent analysis and mixing of the quantitative and qualitative data have enabled the exploration of the dynamics of the student-teacher relationship through the eyes of students in two very different schools that individually serve poverty or affluent populations. Chapter 5 will present summary conclusions as well as implications from both ends of the spectrum with hopes of providing teachers, administrators, and teacher education departments with tangible targets for better establishing and cultivating student-teacher relationships with all students. This chapter will also include recommendations for future research on the student-teacher relationship.
Chapter 5: Findings and Conclusions

This chapter is focused on the findings and conclusions that emerged from a two-phase mixed methods study. The purpose of the study was to provide a more in-depth understanding of the dynamics and importance of the student-teacher relationship in the lives of the fifth grade students attending two Midwestern elementary schools of similar size, but very different in terms of the socioeconomic status. The first phase of this study included the collection of quantitative data through the administration of the CMS. This survey data was analyzed for correlations within the different classrooms and schools as well as with student achievement data measured as growth between the fall and winter administrations of the Measure of Academic Progress (MAP). The second phase of this study focused on the gathering of qualitative data. This data was gathered via semi-structured follow-up interviews with 24 of the fifth graders who completed the CMS.

Quantitative Findings

Narrowing the focus on the quantitative results revealed several findings. These findings were supported by relevant research but also added to the current body of knowledge on student-teacher relationships. The students from Birch Elementary (poverty school) and Maple Elementary (affluent school), though very different in socioeconomic designation as well as on the indicators that usually accompany these designations, were not significantly different in terms of how they rated their teachers as measured by the overall mean score on the Teacher-Student section of the CMS (see Figure 1). This was also true when comparing each school’s mean score on each item of the Teacher-Student section of the CMS (see Table 2). However, further analysis revealed a significant difference between the overall mean scores attributed to individual
teachers (see Figure 3). When synthesized, these results suggest that the socioeconomic designation of a school doesn’t necessarily have a real bearing on how students feel about their teachers, but that the characteristics and behaviors of individual teachers does have an impact on student perception of their influence.

The analysis for correlations between the survey data from the Teacher-Student section of the CMS combined from both schools and student achievement, as measured by growth in math and/or reading from the fall to the winter administrations of the Measure of Academic Progress (MAP), exposed only one correlation as significant (see Table 4). Though mainly attributed to the strength of the correlation in the affluent school, the item on teacher’s helping behaviors (My teacher helps me when I need help) was revealed to be significant in both schools. This emphasis on helping behaviors was also reported by Hughes in 1999, who had found that “teachers… identify and address individual student needs” in high achieving, rural, high-poverty elementary schools. Lee (2007) reported that the trust developed between the student and the teacher can contribute to students’ academic success. The lack of significance between schools or the remaining questions on the Teacher-Student section of the CMS and the student achievement data also shows the elusiveness of this often-sought correlation.

**Qualitative Findings**

Student responses to the ClassMaps Follow-up Questions and the Teacher Influence Questions also revealed some relevant findings. Again, these findings were supported by as well as added to the current body of knowledge on student-teacher relationships.
Responses to ClassMaps Follow-up Questions. The analysis of the student responses to the ClassMaps Follow-up Questions posed in the semi-structured interviews revealed themes, which this researcher feels are perhaps the most important implications of this study.

Sense of humor. Findings showed that fifth grade students value teachers who exhibit a caring sense of humor. Whether expressed though humorous stories of friends and family or through appropriate, well-intention jokes, this caring sense of humor conveys to students that their teachers are “human’ in the fullest sense of the word” (McEwan, 2002, p. 30; APA Work Group, 1997; McCombs & Whisler, 1997; Saul, 2005). School is more than achievement and test scores, but instead an environment where children can grow and develop, secure in the knowledge they are surrounded by those who care and are willing to share of themselves.

Consistent help (with high expectations). Students need to trust that their teachers are going to be there to help them when needed, but are going to do so while retaining high expectations for their students (Boals et al., 1990). This sense of trust with regard to a teacher’s willingness to help was shown to be developed differently in each of the classrooms, but ultimately teachers need not only be available to assist, but also be seeking out students in need of help. The identification and addressing of student needs and the resulting trust that is developed can contribute to students’ academic success (Lee, 2007; Hughes, 1999).

Games for learning. According to the fifth graders, teachers need to keep learning fun and upbeat in their classrooms but this needs to happen in such a way so that learning is indeed still taking place. Spontaneous and relatively simple games for
reviewing concepts, such as a class “Quiz Bowl,” when implemented at appropriate times, were most appreciated by students. The implementation of such a game or activity at a particularly tedious time can breathe life into the most stagnant of environments. Even something as simple as allowing a student who has answered a question correctly the chance to shoot at a classroom mini-basketball hoop or throw a safety-tipped dart at the classroom dart board can instill a sense of fun in the classroom while keeping the focus on the learning targets; and according to Frey and Wilhite (2005) who built upon the work of William Glasser, this “combination of laughing and learning can maximize the relationship that educators have with students” (p. 157).

Active listening. Another implication deeply rooted in the fifth graders’ responses is the importance of teachers actively listening to their students. The school day can be extremely hectic and busy, yet students need to know that they are being heard. Active listening, such as getting down to the student’s level and maintaining eye contact, giving non–verbal feedback such as nodding, and responding appropriately, does not take much effort on the teacher’s part, yet goes a long way to help students feel appreciated, acknowledged, and respected (McCombs & Whisler, 1997). In addition to these general suggestions for actively listening to students, Faber and Mazlish (1995) also have some non-standard suggestions for responding to insure that students leave the conversation feeling appreciated and that their teacher has understood. Beyond the basics of active listening, recommendations include the reflection of student comments, avoiding criticism or blame, and helping student arrive at a plan as opposed to suggesting solutions.
**Sense of belonging.** With over half of the fifth graders expressing group-oriented or communal thinking, it is important for teachers help students experience a feeling of belonging in their classrooms. According to Osterman (2000), when students feel that they belong, they are “more helping, more considerate of others, and more accepting of others, including those not in the friendship group” (p. 334). And Jensen (2009) author of *Teaching with Poverty in Mind* stated, “What you want to emphasize at school is moderate social status and group acceptance” (p. 90). He went on to emphasize the importance of developing a sense of community within the classroom stating, “Students who know, trust, and cooperate with one another typically do better academically” (p. 92) and that students who “feel accepted, have sufficient social status, and maintain positive relationships,…bloom academically” (p. 90).

**Encouragement.** Another suggestion that stems from the responses to the fifth graders included how their teachers convey that they (the students) are doing a good job. As early as 1925, Dr. Elizabeth Hurlock studied fourth and sixth graders and how different types of feedback affected their math performance. The findings indicated that all feedback can improve performance, however students who were identified by name and praised in front of their peers showed a 71% improvement in their performance, while those receiving criticism showed only a 19% gain. In *Teaching with Poverty in Mind*, Jensen (2009) shares some of the strategies purported by Seligman and Csikszentmihalyi (2000) that can instill much needed hope in schools of poverty. Hope, along with learned optimism, is a crucial factor in “turning low-SES students into high achievers”. The strategies include, “Offering help, encouragement, and caring as often as needed,” and “Building academic, emotional, and social assets in students” (p. 113).
This encouragement should be both spoken and written. The students interviewed in this study shared examples of teachers not only writing “Good job!” on their papers, but also writing the “good” grade earned on top of particular assignments with accompanying smiley faces and notes which included specific compliments and encouragement. With regard to the written forms of encouragement that might be included on assignments and/or notes to students, Rath and Clifton (2005) propose it is “most appreciated and effective when it is individualized, specific, and deserved” (p. 80).

**Focus on character instead of appearance.** The final theme revealed was the fifth graders’ complete omission of any reference to their teachers’ physical appearance or style. The implication of this result is perhaps more beneficial for administrators and human resource hiring officials than for teachers. According to a recent *Newsweek* poll, 63% of those polled felt that good looks were an advantage for getting a job for women and 72% indicated that physical attractiveness of men was advantageous in being hired (Princeton Survey Research Associates International, 2010, June 30). The responses of the fifth graders in this study, suggest this focus on appearance or “lookism,” need not be a consideration, at least not when hiring fifth grade teachers. An interesting future study would be in the development of a valid and reliable instrument that could be administered to all applicants that could effectively predict which potential teachers possessed the characteristics most desired by students. It would then be up to the hiring officials to put more emphasis on this information as opposed to the physical appearance or style when making their final decisions.

**Responses to Teacher Influence Questions.** Analysis of the student responses to the *Teacher Influence Questions* enabled other prominent themes to emerge. Students in
both schools noted the importance of teacher encouragement, most notably the explicit encouragement in the areas of good behaviors at school and for a solid effort in students’ learning. The students shared that they felt that their teachers were very influential with regard to their behaviors in school. Marzano et al. (2003) backed this sentiment reporting that strong student-teacher relationships can be a major factor to decreased disruptions in classrooms. The students in both schools also conveyed that their teachers had an influence on their learning. Both of these implications are in direct alignment with the work of Harris (2006) who stated that the relationships built by teachers with students “form the single strongest access to student goals, socialization, motivation, and academic performance.” Marzano et al. (2003) also supports this sentiment, going so far as to state that strong student-teacher relationships are “critical to the success” (p. 64) of the other factors for effective classroom management, which ultimately affect student success.

Mixed Methods Findings

Lastly, the mixing of the quantitative and the qualitative data revealed important findings that not only were supported by, but also built upon current research on student-teacher relationships. According to Doll et al. (2010a & 2010b), results from their extensive studies revealed that the ClassMaps Survey (CMS) is a valid and reliable resource to consider when gathering data on the teacher-student relationships in schools as shown by a coefficient alpha score of 0.96 (Doll et al., 2009). The analysis conducted within this study to answer the Mixed Methods question, In what ways do the semi-structured interviews help to explain the students’ responses on the Teacher-Student section of ClassMaps Survey (CMS)? also showed CMS to be a powerful tool for
collecting accurate student perceptions with 98.8% of the answers marked by students on the CMS being verified by suitable examples and details provided in the semi-structured interviews.

The “quantifying” of the student responses to the Teacher Influence Questions, also posed in the semi-structured interviews, exposed some important differences with regard to the influence teachers had on their lives in the poverty and the affluent schools. Overall, the effect size, or the magnitude of the difference between the schools for the number of student responses proposing teacher influence was very large (-1.22). This apparent lack of teacher influence on the lives of the students in the poverty school could point to potential problems in these students’ academic future. Balfanz and Legters, (2004) reported poverty as the strongest correlate to students dropping out of high school. Fortunately, there is hope. According to Lee and Burkham (2003), strong student-teacher relationships are key. Students who have positive bonds with teachers and others in the school setting are more likely to graduate from high school.

Another important difference dealt with student choices and behaviors outside of school. On the questions dealing with their teacher’s influence on choices and behaviors outside of school, only five of the 24 Birch Elementary student responses reported that the teacher was influential, while 18 of the 24 Maple Elementary student responses reported similarly (see Table 7). One implication of this statistic is that students in the poverty school may need more mentoring from teachers in terms of the choices that they make with their time and behaviors outside of school. Explicit mentoring has been shown to help students make better choices outside of school, which may ultimately affect their schoolwork and relationships at school (Jekielek, Moore, & Hair, 2002).
**Lessons Learned**

Independent of one another the different types of data and analyses have revealed some interesting findings, but a more complete picture of the dynamics and importance of the student-teacher relationship is revealed when the quantitative, qualitative, and mixed methods data are analyzed together. A broad, holistic analysis of the data resulted in several lessons learned, most notably on how student-teacher relationships play out in classrooms with students who have very positive perceptions of the relationships they share with their teachers, regardless of the socio-economic composition of the school. The first broad-stroke finding was that students from both schools felt respected (My teacher respects me), valued (My teacher likes having me in this class), and appreciated for their efforts (My teacher thinks I do a good job in this class) when their teachers explicitly told them so. Another important finding was that students in both schools shared favorable perceptions of their teachers’ abilities to listen (My teacher listens carefully to me when I talk), support (My teacher helps me when I need help), and respect them (My teacher respects me) due to their teachers “being there” or more specifically, when teachers focused upon and attended to their students personally. The final broad-stroke finding of this study was that teachers may not have influence in all areas of students’ lives, but the influence is most easily identified and acknowledged when teachers talked *with* their students and expressed specific care and concern about the different facets of the students’ lives. In other words, these three findings underscored the students’ desire and need for caring and personal relationships with their teachers.
Limitations of the Study

There were several limitations with this study. The first limitation was that according to the results of the Teacher-Student section of the CMS, all four teachers in the study had already developed strong student-teacher relationships in their classrooms. Though not revealed until after the administration of the CMS, this could be viewed as limiting the analysis from the perspective of students from classrooms who do not rate their student-teacher relationship favorably.

A second limitation of this study is in the ability to generalize the findings. According to Stake (1995), “The real business of case study is particularization, not generalization” (p. 8). This design by its very nature emphasizes the study of a case with the intent of coming to “know it well” (Stake, 1995, p. 8), as opposed to being able to generalize the findings to other, even similar cases. According to Creswell (2007), “To best generalize, however, the inquirer needs to select representative cases for inclusion” (p. 74). In line with this suggestion, a total of 24 individual case studies were completed (e.g., the 24 students that were interviewed) and a purposeful sampling technique was utilized at the two schools to ensure sampling of students from three different categories of growth in achievement data.

Another similar limitation of this study is that the teachers voluntarily agreed to take part in the study. The results from the study may have differed greatly had the teachers from the two different types of schools, designated affluent or poverty, been randomly assigned to the study. Random assignment may have produced survey results that were not as favorable.
A fourth limitation stemmed from the fact that I, the primary researcher, had previously worked in the school district and knew three of the four teachers in which the study focused upon. My history with the three teachers did not include working in the same building and the extent of my actual contact during the study with the teachers was minimal, though a small degree of bias may be suggested with regard to the reporting and interpretation of the study’s results and findings.

**Recommendations for Future Studies**

In light of these limitations, this study provided some insights into the importance and dynamics of the student-teacher relationship from the perspective of the students. It also revealed some significant correlations between student perceptions of the teacher-student relationship and student achievement that warrant further research. The four teachers’ mean scores by question in the Teacher-Student section of the CMS were significantly different for two of the items (My teacher makes it fun to be in this class and My teacher is fair to me) (see Table 3). Also when analyzed at the school-level, Maple Elementary, designated as an affluent school, had many more significant correlations than Birch Elementary, which was designated as a poverty school (see Table 6). Investigators should continue to study why the teachers’ mean scores for the ClassMaps items dealing with fun and fairness were significantly different, as well as to explore the reasoning behind the affluent school’s increased number of significant correlations in other areas.

Another salient finding from the analysis of correlations between the growth in student performance and the student perceptions of the student-teacher relationship was that only Maple Elementary, the affluent school, showed significant correlations between
growth in both math and reading with students’ perceptions of their teacher’s degree of helpfulness. Conversely, the students at the more affluent Maple Elementary perceived their teacher’s degree of helpfulness as lower than their peers perceived their teachers’ degree of helpfulness at Birch Elementary. Further study of this intersection between teachers’ degree of helpfulness, or lack thereof, and student achievement is in order.

A follow-up study that would be beneficial would be a longitudinal, mixed methods study that follows the fifth grade students from this study into their sixth grade classrooms and beyond. How would the overall survey results for the fifth grade teachers differ from the results of the students’ middle school teachers? Would the student responses on the Teacher-Student section of the CMS results be justified as readily by the responses of the students in the semi-structured interviews? Would the same themes be valued by students in the middle school environment? Would the lesser effect or influence of the teacher on the lives of students who attended the poverty school (see Table 7) correlate with higher future dropout rates? These questions and many more may be answered with additional studies.

A final study of interest would be a longitudinal, ethnographic study of classrooms where a strong learning culture is sustained. Studying different groups of students’ perceptions of the same teacher over several years may serve well to illuminate specific factors that contribute to the teacher’s ability to create and maintain a successful learning environment. This idea could also readily be applied to a longitudinal study of individual schools where high student achievement is sustained over several years.
Contributions to Research Literature

This study provided a comprehensive look at the student-teacher relationship from both quantitative and qualitative perspectives, as well as in the mixing of the two data types. One of this study’s primary contributions was that it revealed similarities and differences between student-teacher relationships at elementary schools on either end of the poverty spectrum, as well as what is most important to students in both types of elementary schools. This study also provided additional reliability and validity for the ClassMaps Survey (CMS) with regard to students’ perceptions of resiliency factors in fifth grade classrooms. Lastly, the study participants provided evidence for their need to have teachers develop deep and personal relationships with them.

Final Reflections

This study has shown the student-teacher relationship to be a dynamic factor in classrooms of both poverty and affluent schools. The fifth graders in this study rated their teachers highly on student-teacher relationship factors assessed with the ClassMaps Survey (CMS). These ratings revealed the level of value and appreciation students had for efforts on the part of their teachers to develop personal and deep relationships. Additionally, this study has shown the ClassMaps Survey (CMS) to be a useful tool for capturing student perceptions of the student-teacher relationship. The ClassMaps Survey (CMS) allows for the monitoring and assessment of the resiliency factors, as well as personal reflection by teachers regarding student-teacher relationships within their classrooms as it brings to light areas in need of improvement as well as areas of strength. Beyond overall improvement of the culture of classrooms, the results of this study should target behaviors and attitudes teachers can focus upon to more effectively develop
relationships with their students, as they strive to provide a supportive environment that is built upon high expectations, positive encouragement, and a healthy dose of humor. These same themes, which were valued by students, may also serve to assist administrators to more effectively hire teachers, at least for fifth grade positions.

In conclusion, student test scores, teacher accountability, and school rankings have taken center stage in today’s educational landscape. The need for on-going professional development through which teachers learn the latest research-based methods of instruction, as well as how to utilize the newest technologies is more important now than ever before. However, teachers must never overlook the importance of cultivating student-teacher relationships in their classrooms. Student-teacher relationships are built through purposeful and continual effort, primarily on the part of the teacher. It is in the relationship between teacher and student where learning takes root and begins to grow; and the degree to which a teacher invests in those interactions not only affects learning outcomes and student behavior in the classroom, but also potentially impacts each student’s future achievements and success.
References


ClassMaps Survey: A framework for promoting positive classroom environments.
In R. Gilman, S. Huebner, & and M. Furlong (Eds.), Handbook of positive
psychology in the schools (pp. 213-227). New York: Routledge.

ClassMaps Survey: A measure of middle school science students’ perceptions of

perceptions of classroom learning environments: Development of the ClassMaps

development of conduct problems. Clinical Child and Family Psychology

Associates.

the function of behavior. Intervention in School and Clinic, 40(3),156-60.

White Plains, NY: Longman.


Appendix A

Visual Diagram of Study
THE ROLE OF THE STUDENT-TEACHER RELATIONSHIP IN THE LIVES OF FIFTH GRADERS: A MIXED METHODS ANALYSIS

**Quan data collection**
Measure of Academic Progress (MAP) & ClassMaps Survey (CMS)

**Quan data analysis**
Analysis of Variance, Effect Size, & Pearson Correlation

**Quan results**

**QUAL participant selection**
Multi-stage Purposeful Sampling Technique

**QUAL data collection**
Semi-structured Student Interviews

**QUAL data analysis**
Organization of data; Code Development; Collapse of Codes into Themes

**QUAL results**

**Interpretation**
Quan → QUAL
Appendix B

Survey Instrument

1. Permission to Use ClassMaps Survey (CMS)
2. ClassMaps Survey (CMS)
Of course you can use the ClassMaps Survey. I'm attaching a not-yet-published chapter on the measure, but we have other references as well. And I'm attaching the latest version. Please feel free to contact me for more information as you need to.

Beth Doll
Professor and Director, School Psychology Program
University of Nebraska Lincoln
ClassMaps Survey (CMS)

DIRECTIONS: THESE QUESTIONS ASK WHAT IS TRUE ABOUT YOUR CLASS.
FOR EACH QUESTION, CIRCLE THE CHOICE THAT IS TRUE FOR YOU. DO
NOT PUT YOUR NAME ON THE PAPER. NO ONE WILL KNOW WHAT YOUR
ANSWERS ARE.

I am a: "BOY / MALE" GIRL / FEMALE I am in the ____ grade.

Believing in Me – Responses for each question include: NEVER – SOMETIMES – OFTEN - ALMOST ALWAYS

1. I can do my work correctly in this class,

2. I can do as well as most kids in this class.

3. I can help other kids understand the work in this class.

4. I can be a very good student in this class.

5. I can do the hard work in this class.

6. I can get good grades when I try hard in this class.

7. I know that I will learn what is taught in this class.

8. I expect to do very well when I work hard in this class.

My Teacher – Responses for each question include: NEVER – SOMETIMES – OFTEN - ALMOST ALWAYS

9. My teacher listens carefully to me when I talk.

10. My teacher helps me when I need help.

11. My teacher respects me.

12. My teacher likes having me in this class.

13. My teacher makes it fun to be in this class.

14. My teacher thinks I do a good job in this class.

15. My teacher is fair to me.
**Taking Charge** – Responses for each question include: NEVER – SOMETIMES – OFTEN – ALMOST ALWAYS

16. I want to know more about the things we learn in this class.

17. In this class, I can guess what my grade will be when I turn in my work.

18. I work as hard as I can in this class.

19. I find and fix my mistakes before turning in my work.

20. I learn because I want to and not just because the teacher tells me to.

21. When the work is hard in this class, I keep trying until I figure it out.

22. I know the things I learn in this class will help me outside of school.

23. I can tell when I make a mistake on my work in this class.

**My Classmates** – Responses for each question include: NEVER – SOMETIMES – OFTEN – ALMOST ALWAYS

24. I have a lot of fun with my friends in this class.

25. My friends care about me a lot.

26. I have friends to eat lunch with and play with at recess.

27. I have friends that like me the way I am.

28. My friends like me as much as they like other kids.

29. I have friends who will stick up for me if someone picks on me.

**Following the Class Rules** – Responses for each question include: NEVER – SOMETIMES – OFTEN – ALMOST ALWAYS

30. Most kids work quietly and calmly in this class.

31. Most kids in this class listen carefully when the teacher gives directions.

32. Most kids follow the rules in this class.

33. Most kids in this class pay attention when they are supposed to.

34. Most kids do their work when they are supposed to in this class.

**Talking With My Parents** – Responses for each question include: NEVER – SOMETIMES – OFTEN – ALMOST ALWAYS
36. My parents and I talk about my grades in this class.

37. My parents and I talk about what I am learning in this class.

38. My parents and I talk about my homework in this class.

39. My parents help me with my homework when I need it.

40. My parents and I talk about ways that I can do well in school.

41. My parents and I talk about good things I have done in this class.

42. My parents and I talk about problems I have in this class.

**I worry that ....** – Responses for each question include: NEVER – SOMETIMES – OFTEN – ALMOST ALWAYS

43. I worry that other kids will do mean things to me.

44. I worry that other kids will tell lies about me.

45. I worry that other kids will hurt me on purpose.

46. I worry that other kids will say mean things about me.

47. I worry that other kids will leave me out on purpose.

48. I worry that other kids will try to make my friends stop liking me.

49. I worry that other kids will make me do things I don’t want to do.

50. I worry that other kids will take things away from me.

**Kids In This Class** – Responses for each question include: NEVER – SOMETIMES – OFTEN – ALMOST ALWAYS

51. Kids in this class argue a lot with each other.

52. Kids in this class pick on or make fun of each other.

53. Kids in this class tease each other or call each other names.

54. Kids in this class hit or push each other.

55. Kids in this class say bad things about each other.

© Beth Doll, University of Nebraska Lincoln
Appendix C

Research Questions and Data Sources Matrix
<table>
<thead>
<tr>
<th>Question Type</th>
<th>Question(s)</th>
<th>Data Source(s)</th>
</tr>
</thead>
</table>
| Quantitative  | How do students rate their student-teacher relationship with their current teacher as measured by the ClassMaps Survey (CMS)?  
To what extent are measures of student achievement (Measure of Academic Progress) correlated with scale scores from the ClassMaps Survey (CMS)? | Teacher-Student section of ClassMaps Survey (CMS)  
Measure of Academic Progress (MAP) |
| Qualitative   | How do fifth grade students describe their student-teacher relationship with their current fifth grade teacher?  
Of what value are student-teacher relationships to fifth grade students, in regard to:  
- who they are as a person?  
- choices they make in school?  
- learning (personal goals)?  
- how hard they work on their school work (work ethic)?  
- friendships?  
- ways they relate to adults?  
- behaviors?  
- choices they make outside of school?  
- how much or how well they study?  
- home life or family relationships?  
- choices they make outside of school (extra-curricular activities, etc.)? | Semi-structured student interviews |
| Mixed Methods | In what ways do the semi-structured interviews help to explain the students’ responses on the Teacher-Student section of ClassMaps Survey (CMS)?  
The prompts from the Teacher-Student section of ClassMaps Survey (CMS) are as follows:  
My teacher listens carefully to me when I talk.  
My teacher helps me when I need help.  
My teacher respects me.  
My teacher likes having me in this class.  
My teacher makes it fun to be in this class.  
My teacher thinks I do a good job in this class.  
My teacher is fair to me. | Semi-structured student interviews  
Teacher-Student section of ClassMaps Survey (CMS) |
Appendix D

Institutional Review Board Letter of Approval
Sent By: IRB NUgrant System  
Sent On: 08/06/2010 08:04 am  
Reference: IRBProjectForm - 12316  
Subject: Official Approval Letter for IRB project #10426  
Message: August 3, 2010  

Christopher Knoell  
Teaching, Learning and Teacher Education  
612 W 20th St, Kearney, NE 68845  

Delwyn Herrisch  
Teaching, Learning and Teacher Education  
125A HECO, UNL, 68588-0800  

IRB Number: 20100810426EP  
Project ID: 10426  
Project Title: The role of the student-teacher relationship in the lives of fifth graders  

Dear Christopher:  

This letter is to officially notify you of the approval of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. It is the Board’s opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study based on the information provided. Your proposal is in compliance with this institution’s Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46). Your project was approved as an Expedited protocol, category 6 & 7.  

You are authorized to implement this study as of the Date of Final Approval: 08/03/2010. This approval is Valid Until: 08/02/2011.  

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:  
* Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;  
* Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;  
* Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;  
* Any breach in confidentiality or compromise in data privacy related to the subject or others; or  
* Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.
For projects which continue beyond one year from the starting date, the IRB will request continuing review and update of the research project. Your study will be due for continuing review as indicated above. The investigator must also advise the Board when this study is finished or discontinued by completing the enclosed Protocol Final Report form and returning it to the Institutional Review Board.

If you have any questions, please contact the IRB office at 472-6065.

Sincerely,

William G. Thomas, Ph.D.
Chair for the IRB
Appendix E

Semi-Structured Student Interview Protocol
The role of the student-teacher relationship in the lives of fifth graders

Primary Researcher – Mr. Christopher Knoll

Field Notes: Be sure to note Demeanor, facial expressions, body language, etc.

Name____________________________________
Date________________
(*) Classroom Teacher: Mr. Banya - Mrs. Whatley – Mr. Sacamano – Mrs. Newman
School: Birch Elementary or Maple Elementary
Gender: male or female
Age: __________

I want to thank you for taking the time to talk to me today. It should take about 20 minutes to complete our session. I will be recording and taking notes on what you say today so I can remember all the details later.

What I am interested in discovering through this study is how fifth graders feel about their teacher and the relationship that they have with their teacher. Remember that none of your answers will be shared with your teacher. I just really want to know your perspective so please be honest and share all you can.

1. Tell me about (*). (Describe your teacher.)

How do you feel about the relationship that you have with (*)?

2. Does (*) or your relationship with her/him have an effect on who you are as a person? (YES OR NO) How so? (if yes)

3. Talk about some important choices you have made in the past few weeks. Did (*) or your relationship with her/him have an effect on the choices you made (in school)? (YES OR NO) How so? (if yes)

4. Does (*) or your relationship with her/him have an effect on your learning?(personal goals) (YES OR NO) How so? (if yes)
The role of the student-teacher relationship in the lives of fifth graders

Field Notes:
Be sure to note: Demeanor, facial expressions, body language, etc.

5. Does (*) or your relationship with her/him have an effect on how hard you work on your schoolwork? (YES OR NO) How so? (if yes)

6. Does (*) or your relationship with her/him have an effect on who you have as friends? (friendships) (YES OR NO) How so? (if yes)

7. Does (*) or your relationship with her/him have an effect on the ways in which you relate to other adults? (YES OR NO) How so? (if yes)

8. Does (*) or your relationship with her/him have an effect on how well you behave? (behaviors) (YES OR NO) How so? (if yes)

9. Does (*) or your relationship with her/him have an effect on the choices you make outside of school? (YES OR NO) How so? (if yes)

10. Does (*) or your relationship with her/him have an effect on how much or how well you study? (YES OR NO) How so? (if yes)
The role of the student-teacher relationship in the lives of fifth graders
Primary Researcher – Mr. Christopher Knoell

11. Does (*) or your relationship with her/him have an effect on your home life or family relationships? (YES OR NO) How so? (if yes)

12. Does (*) or your relationship with her/him have an effect on what you do with your free-time outside of school? (extra-curricular activities) (YES OR NO) How so? (if yes)

ClassMaps Follow-Up
I am now going to ask you to explain why you marked as you did on some of the questions that I had you answer on the ClassMaps survey. Please tell me all that you can about each question. (What is the reasoning behind individual student responses on the teacher-student section of ClassMaps?)

A. On 9. My teacher listens carefully to me when I talk. You marked <Never, Sometimes, Often, Almost Always> Please tell me why you answered this way or a maybe time when (*) listened carefully to you?

B. On 10. My teacher helps me when I need help. You marked <Never, Sometimes, Often, Almost Always> Please tell me why you answered this way or a time when (*) helped you when you needed help?

C. On 11. My teacher respects me. You marked <Never, Sometimes, Often, Almost Always> Please tell me why you answered this way or a time when (*) showed respect for you?
The role of the student-teacher relationship in the lives of fifth graders

Primary Researcher – Mr. Christopher Knoell

Field Notes:
Be sure to note: Demeanor, facial expressions, body language, etc.

D. On 12. My teacher likes having me in this class. You marked <Never, Sometimes, Often, Almost Always> Please tell me why you answered this way or an example when (*) showed you that they like having you in this class?

E. On 13. My teacher makes it fun to be in this class. You marked <Never, Sometimes, Often, Almost Always> Please tell me why you answered this way or a time when (*) made it fun to be in this class?

F. On 14. My teacher thinks I do a good job in this class. You marked <Never, Sometimes, Often, Almost Always> Please tell me why you answered this way or a time when (*) let you know that you did a good job in this class?

G. On 15. My teacher is fair to me. You marked <Never, Sometimes, Often, Almost Always> Please tell me why you answered this way or a time (*) treated you fairly?

Are there any questions that you answered earlier that you have thought of something that you would like to add? YES or NO

Is there anything else that you can tell me about ___________ or the relationship that you have with him or her? YES or NO
Appendix F

Consent and Assent Forms

1. Teacher Consent Form
2. Parental Consent Form
3. Youth Assent Form
TEACHER CONSENT FORM

The Role of the Student-teacher Relationship in the Lives of Fifth Graders

You are invited to participate in this research study. The following information is provided in order to help you to make an informed decision whether or not to participate. If you have any questions please do not hesitate to ask.

You are eligible to participate in this study because you are a fifth grade elementary school teacher.

The purpose of this study is to investigate how fifth graders feel about their teacher and the relationship that they have with that teacher. The study will be conducted in two distinct phases at your school and will not interfere with core instructional time.

The first phase of this study consists of a short, online survey in which each student will decide whether or not he or she agrees with a series of statements regarding their classroom, teacher and classmates. This survey will be administered to all fifth grade students whose parents have given their consent and will take approximately 20 minutes. All student data gathered in this survey will be analyzed to showcase strengths and weaknesses for different elements within your classroom and will also be examined for correlations with student achievement data. Student achievement will be measured by growth from the fall administration to the Mid-winter administration of the Measure of Academic Progress assessment.

Also during this first phase, one 20-30 minute classroom observation will take place in your classroom. I, as the primary investigator, will be conducting the observation where I will be looking for and recording details regarding all student-teacher interactions during the 20-30 minutes session.

In phase two, of the students who completed the survey, up to twelve students will be randomly chosen to discuss and expand on his or her responses from the survey in a 15-30 minute follow-up interview. I will be conducting the interviews in the school library at a time deemed best by you, the classroom teacher. All interviews will be audio-recorded so that responses may be reviewed at a later time by the researcher.

The information obtained from this study may help us to better understand the role of the student-teacher relationship in the lives of fifth graders. There are no known risks associated with this research. Any information obtained during this study that could identify you, your school, or the school district will be kept strictly confidential. Also, any observations of you interacting with children in your classroom will not be shared with any administrators or supervisors. The information will be kept in a locked file in the investigator’s office for 5 years and then will be erased. The information obtained in this study may be published in my doctoral dissertation, in scientific journals or presented at scientific meetings, but your identity will be kept strictly confidential.

118 Henzlik Hall / P.O. Box 880365 / Lincoln, NE 68586-0365 / (402) 472-2231 / FAX (402) 472-2837
You may ask any questions regarding this research and have those questions answered before agreeing to participate in or during the study by calling me at (308) 865-8339. Please leave a message for a quick response. You may also email questions to knoellcm@unk.edu. If you would prefer to visit with my doctoral advisor you can contact Dr. Delwyn Harnisch at (402) 472 – 9413 or harnisch@unl.edu.

Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965 for the following reasons:
- You wish to talk to someone other than the research staff to obtain answers to questions about your rights as a research participant
- To voice concerns or complaints about the research
- To provide input concerning the research process
- In the event the study staff could not be reached

Participation by you and/or your classroom in this study is voluntary. You are free to decide not to enroll in this study. You can refuse to participate or withdraw at any time without harming your relationship with the researchers/the University of Nebraska-Lincoln, or the administrators/administration your school. There will be no penalty or loss of benefits to which you are otherwise entitled should you decide to withdraw yourself or your classroom from this study.

**DOCUMENTATION OF INFORMED CONSENT**

You are voluntarily making a decision to allow for and participate in both phases of the research study. Your signature certifies that you have decided to participate having read and understood the information presented. You will be given a copy of this consent form to keep.

__________________________
Signature of Teacher
__________________________
Date

**INVESTIGATORS**

Primary Investigator: Mr. Christopher Knoell,
Assistant Professor, Dept of Teacher Education
University of Nebraska Kearney
College of Education, B-164
Kearney, NE 68849
TEL: (308) 865-8339 FAX: (308) 865-8097
email: knoellcm@unk.edu

Secondary Investigator: Dr. Delwyn Harnisch,
Professor, Dept of Teaching, Learning & Teacher Education
University of Nebraska - Lincoln
College of Education and Human Sciences, 125 Home Economics
Lincoln, NE 68588 - 0800
TEL: (402) 472-9413 FAX: (402) 472-2895
email: harnisch@unl.edu
PARENTAL CONSENT FORM

The Role of the Student-teacher Relationship in the Lives of Fifth Graders

You are invited to permit your child to participate in this research study. The following information is provided in order to help you to make an informed decision whether or not to allow your child to participate. If you have any questions please do not hesitate to ask.

Your child is eligible to participate in this study because they are a fifth grade elementary school student. Your child will also be asked if he/she is willing to participate.

The purpose of this study is to investigate the how fifth graders feel about their teacher and the relationship that they have with that teacher. The study will be conducted in two distinct phases at your child’s school and will not interfere with core instructional time.

The first phase of this study consists of a short, online survey in which your child will decide whether or not he or she agrees with a series of statements regarding their classroom, teacher and classmates. This survey will be administered in your child’s school media center to all fifth grade students whose parents have given their consent and will take approximately 20 minutes of your child’s time. All student data gathered in this survey will be analyzed to showcase strengths and weaknesses for different elements within the classroom and will also be examined for correlations with student achievement data. Student achievement will be measured by growth from the fall administration to the Midwinter administration of the Measure of Academic Progress assessment.

Also during this first phase, one 20-30 minute classroom observation will take place in your child’s classroom. I, as the primary investigator, will be conducting the observation where I will be looking for and recording details regarding all student-teacher interactions during the 20-30 minutes session.

In addition to completing the survey and attending class in the classroom during the observation, your child may be chosen to participate in phase two of this research study. Of the students who completed the survey, up to six students will be randomly chosen to discuss and expand on his or her responses from the survey in a 15-30 minute follow up interview. I will be conducting the interviews in the school library at a time deemed best by the classroom teacher. All interviews will be audio-recorded so that responses may be reviewed at a later time by the researcher.

The information obtained from this study may help us to better understand the role of the student-teacher relationship in the lives of fifth graders. There are no known risks associated with this research. Any information obtained during this study that could identify your child will be kept strictly confidential. The information will be kept in a locked file in the investigator’s office for 5 years and then will be erased. The information obtained in this study may be published in my doctoral dissertation, in scientific journals or presented at scientific meetings, but your child’s identity will be kept strictly confidential.

118 Henzlik Hall / P.O. Box 880365 / Lincoln, NE 68588-0365 / (402) 472-2231 / FAX (402) 472-2837
You may ask any questions regarding this research and have those questions answered before agreeing to participate in or during the study by calling me at (308) 865-8335. Please leave a message for a quick response. You may also email questions to knoellcm@unk.edu. If you would prefer to visit with my doctoral advisor you can contact Dr. Delwyn Harmsch at (402) 472-9413 or harmsch@unl.edu.

Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6905 for the following reasons:

- You wish to talk to someone other than the research staff to obtain answers to questions about your rights as a research participant
- To voice concerns or complaints about the research
- To provide input concerning the research process
- If in the event the study staff could not be reached

Participation in this study is voluntary. You are free to decide not to enroll your child in this study. You can refuse to participate or withdraw your child at any time without harming their or your relationship with the researchers or the University of Nebraska-Lincoln, your child’s school, or in any other way receive a penalty or loss of benefits to which you are otherwise entitled.

**DOCUMENTATION OF INFORMED CONSENT**

You are voluntarily making a decision whether or not to allow your child to participate in both phases of the research study. Your signature certifies that you have decided to allow your child to participate having read and understood the information presented. You will be given a copy of this consent form to keep.

________________________
Child’s Name

________________________
Signature of Parent
________________________
Date

**INVESTIGATORS**

Primary Investigator: Mr. Christopher Knoll,
Assistant Professor, Dept of Teacher Education
University of Nebraska Kearney
College of Education, B-164
Kearney, NE 68849
TEL: (308) 865-8339 FAX: (308) 865-8007
email: knoellcm@unk.edu

Secondary Investigator: Dr. Delwyn Harmsch,
Professor, Dept of Teaching, Learning & Teacher Education
University of Nebraska - Lincoln
College of Education and Human Sciences, 125 Home Economics
Lincoln, NE 68588 - 0800
TEL: (402) 472-5413 FAX: (402) 472-2895
e-mail: harmsch@unl.edu
YOUTH ASSENT FORM

The Role of the Student-teacher Relationship in the Lives of Fifth Graders

I am inviting you to participate in this study because you are a fifth grade elementary school student and I am interested in how you feel about your teacher and your relationship with her or him.

There are two parts or phases in this research study. If you agree to participate you will first take a short, online survey where you decide whether or not you agree with statements about your classroom, classmates, and teacher. This survey will take approximately 20 minutes to complete and will take place in your school’s media center with other students who have chosen to take part in this study. During this first phase, I will also be conducting a 20-30 minute observation in your classroom where I will be looking for and recording details regarding all student-teacher interactions during this session. After completing the short survey and being in your classroom during the classroom observation, you may also be chosen to discuss and expand on your answers in a follow-up interview on another day. This follow-up interview will take place in the school library and should take between 15 and 30 minutes to complete. In the interview you will give me a chance to explain the answers you provided on the survey and share your views and ideas on your teacher and your relationship with her or him.

Being in the study will not have direct benefits to you, but it may help researchers and teachers better understand how fifth graders view their teachers and the relationships that they have with them. Also, it’s important that you know that choosing to not participate will have no effect on your grades. Your answers will be private, and your teachers will not look at your answers or know specifically what you have said or shared. I may publish a summary of everybody’s responses or present such a summary at a scientific meeting, but your identity and your responses would be totally confidential. I will also ask your parents for their permission for you to do this study. Please talk this over with them before you decide whether or not to participate. If you have any questions at any time, please ask me.

_________________________  __________________________
Signature of Student                  Date

INVESTIGATORS
Primary Investigator: Mr. Christopher Knox,
Assistant Professor, Dept of Teacher Education
University of Nebraska, Kearney
College of Education, B-364
Kearney, NE 68849
TEL: (308) 865-8339  FAX: (308) 865-8097
email: knoxtc@unl.edu

Secondary Investigator: Dr. Delwyn Hamisch,
Professor, Dept of Teaching, Learning & Teacher Education
University of Nebraska - Lincoln
College of Education and Human Sciences, 125 Home Economics
Lincoln, NE 68588-0800
TEL: (402) 472-9413  FAX: (402) 472-2895
email: hamisch@unl.edu

118 Henzeik Hall / P.O. Box 880365 / Lincoln, NE 68588-0365 / (402) 472-2231 / FAX (402) 472-2837
Appendix G

Confidentiality Agreement with Transcription Agency
CONFIDENTIALITY AGREEMENT

Date:
"Verbal Ink": Outskirts, Inc. dba Verbal Ink
"Client":

This Confidentiality Agreement ("Agreement") is entered into by and between Client and Verbal Ink as of the above date in connection with discussions between the parties with respect to Verbal Ink performing transcription services for Client ("Services"). Whereas Client intends to provide Verbal Ink with certain confidential and proprietary information regarding Client and/or its business for transcription purposes and Verbal Ink intends to maintain the confidentiality of such information, now, therefore, in consideration of the disclosure of such information, and other good and valuable consideration, the parties agree as follows:

1. The parties acknowledge that related to any Services provided by Verbal Ink to Client, Client may make available to Verbal Ink certain information and materials (i) in writing, by email, by audio tape or other tangible electronic storage medium clearly marked and identified by Client as "Confidential" or "Proprietary" or (ii) that, by the nature of the information and circumstances surrounding their disclosure made in good faith, be treated as proprietary and/or confidential (hereafter referred to as "Confidential Information"). Excluded from Confidential Information are: (i) information which is known to Verbal Ink prior to entering into this Agreement, (ii) information which becomes known to Verbal Ink from a third party who is not subject to a confidentiality agreement with Client, (iii) information which is required to be disclosed as a matter of law, and (iv) information which is generally known to the public.

2. Verbal Ink acknowledges that all Confidential Information furnished to it is considered proprietary and is a matter of strict confidentiality. Verbal Ink further acknowledges that the unauthorized use or disclosure of any Confidential Information may cause irreparable harm to Client. Accordingly, Verbal Ink agrees that Client will be entitled to seek equitable relief including injunctive relief and specific performance, in addition to all other remedies available at law or in equity for any breach of this Agreement. In the event of any dispute under this Agreement, each party and its managers, directors, executives, owners, members, shareholders, employees, agents, advisors, representatives, and, in the case of Verbal Ink, its transcriptionists, ("Representatives") monetary liability to the other party and its Representatives for all claims related to this Agreement shall be limited to direct and proven damages. Neither party (nor its Representatives) will be liable for or entitled to any indirect, incidental, consequential, exemplary or consequential damages arising out of its performance or non-performance under this Agreement, whether or not they had been advised of the possibility of such damages. In the event of any dispute related to this Agreement, each party (and its Representatives) shall pay its own attorneys' fees and other litigation costs.

3. Verbal Ink agrees that, except to its Representatives to the extent necessary to permit them to assist in the performance of the Services, it will not distribute, disclose or convey to third parties any of Client's Confidential Information without Client's prior written consent. All transcriptionists working with Verbal Ink are subject to and must pass criminal background checks before starting work with Verbal Ink. Confidential information shall not be distributed, disclosed or conveyed to any Representative unless such Representative is advised of this Agreement and agrees to be subject to the terms hereof or a similar agreement.

4. Verbal Ink agrees that all Confidential Information received from Client shall at all times remain the sole property of Client and upon completion of the Services shall be either: (i) returned to Client, if Client has made such prior written request, or (ii) deleted from Verbal Ink's files such destruction certified to the client. Notwithstanding the immediately proceeding sentence, Verbal Ink may (but shall not be obligated to) retain one copy of Confidential Information in its files for legal or regulatory requirements only (subject to the confidentiality requirements hereof). No rights or licenses, express or implied, are granted by Client to Verbal Ink under any patents, copyrights, trademarks, service marks, or trade secrets owned by Client as a result of, or related to, this Agreement.

5. This Agreement is effective upon the date first written above. This Agreement shall remain in full force and effect for three (3) years from the above date.
6. This Agreement is binding on the parties and their successors and assigns, and its provisions may only be waived by written agreement of the parties.

7. This is a binding agreement that contains all of the agreements and understandings of the parties and any amendments to this Agreement must be in writing. This Agreement and any claims related directly or indirectly to this Agreement shall be governed and construed in accordance with the laws of the State of California (without giving regard to the conflicts of law provisions thereof). No such claim shall be commenced, prosecuted or continued in any forum other than the courts of the State of California located in the City and County of Los Angeles or in the United States District Court for the Central District of California, and each of the parties hereby submits to the jurisdiction of such courts. Each of the parties hereby waives on behalf of itself and its Representatives, successors and assigns any and all right to argue that the choice of forum provision is or has become unreasonable in any legal proceeding. This Agreement may be executed in counterparts by facsimile.

READ, AGREED AND ACCEPTED:

By: Christopher M. Knowl

Its: Christopher M. Knowl

Outskirts, Inc. dba Verbal Ink

By: __________________________

Its: Andrea Kincannon