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# Preservice Teacher Understanding and Implementation of Caring Teaching-Learning Student Relationships

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PRESERVICE TEACHER UNDERSTANDING AND IMPLEMENTATION OF  
CARING TEACHING-LEARNING STUDENT RELATIONSHIPS

by

Daniel J. Shafer

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 Education

Major: Educational Studies

Under the Supervision of Professor Jon E. Pedersen

Lincoln, Nebraska

June, 2015

PRESERVICE TEACHER UNDERSTANDING AND IMPLEMENTATION OF  
CARING TEACHING-LEARNING STUDENT RELATIONSHIPS

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University of Nebraska, 2015

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This study was motivated by the interactions I have had with preservice teachers over the past 15 years as a science teacher who builds relationships with students to impact their motivation and success in school. The research focuses on the use of specific research-based relationship building strategies used with high school biology students. The purpose of this single case study was to explore the natural phenomenon that occur in a biology classroom when a cooperating teacher models these strategies for a preservice teacher during their student teaching experience. This study was supported with high school student perception data, as well as data obtained through surveys sent to several preservice teachers that previously completed their student teaching experience with my classes. The results indicated that: (a) caring teachers go beyond the curriculum and develop caring teaching-learning relationships, (b) teachers with an ethic of care take action to show they care, and (c) the end result for caring teachers is that they find success in relationship building. This study contributes to understanding how preservice teachers develop caring teaching-learning student relationships with high school students through their use of relationship-building strategies such as: (a) begin the year with a focus on relationships, (b) greet students as they enter the room, (c) call on all students in class, (d) make time for personal interactions, (e) nonverbal communication, (f) learn

student names, (g) get to know your students, (h) listen, (i) reveal some of yourself to students, (j) don't be overly serious, and (k) model enthusiasm.

## Dedication

To my loving God, wife, and family.

## Acknowledgments

As a senior in college, I had the opportunity to complete my own student teaching experience with Dr. Richard D. Powers. It was one of the most growing, exciting, and educational experiences of my student career. Since that time, he has pushed me to improve my teaching, listening, and take time off to play. Without his support and inspiration as we worked together to complete our degrees, I am not certain I would have made it this far.

I would like to thank Dr. Byron and Phyllis Demorest, my grandparents, for their continued support of my educational goals. Their love of Shakespeare, learning, musicals, dramas, and their grandchildren has had a long lasting impact in my life and the lives of many others. And to my parents, Scott and Kathy Brown, for their prayerful support and encouragement to persevere in my writing, we are looking forward to spending time with you in celebration.

I also want to acknowledge and thank several educators who have taken time to listen, offer advice, and support, throughout this journey as well: Susan Cassata, for listening, pushing, and getting excited about the hard work that educators do. Dr. Kay Byers, who when asked if I should continue my own education said, “Why not?” It was the incentive I needed to move forward. And especially my advisor Dr. Jon Pedersen for believing, motivating, and prompting me to reach my goals and complete this important work, particularly when it felt that all hope was lost. His dedication to the teaching profession and desire to see students grow has been of astronomical importance to my success.

Finally, I would like to thank my wife Deborah K. Shafer for sustaining me, sticking with me, and encouraging this lifelong goal of completing my doctorate in education. You are my true passion and to feel your support in this process has been priceless. Thank you for loving me throughout this growing experience.

## TABLE OF CONTENTS

Chapter 1: Introduction .....	1
Background for the Problem of Practice .....	2
Statement of the Problem of Practice .....	4
Definitions related to the Problem of Practice.....	5
Cooperating Teacher as Guide.....	6
Research Questions.....	6
Chapter 2: Review of the Literature.....	8
A Learner-Centered Environment .....	9
Caring in Education .....	10
Building the Relationship .....	11
Living the Relationship .....	13
Listening .....	14
Integrity.....	16
Passionate Teaching.....	17
Caring.....	19
The Fruits of Relationship Building .....	21
Student Motivation.....	24
Conceptual Framework .....	25
Teacher Preparation .....	27
Specific Relationship Building Strategies .....	28
Begin the year with a focus on relationships .....	30
Greet students as they enter the room.....	30



Call on all students in class .....	30
Make time for personal interactions .....	31
Nonverbal Communication: smile, wink, and high five .....	31
Learn student names .....	31
Get to know your students personally: Create opportunities for students to share their interests and talents .....	32
Listen .....	32
Reveal some of yourself to students .....	32
Don't be overly serious: using humor and having fun .....	33
Model enthusiasm for learning: Being passionate .....	33
Chapter 3: Research Methods .....	34
Case Selection.....	35
Research Sample.....	36
Preservice Teacher .....	36
Previous Preservice Teachers .....	37
High School Students .....	37
Data Collection.....	38
Observations .....	38
Interviews.....	39
Journaling.....	40
Measuring Student Perceptions.....	40
Previous Preservice Teacher Surveys .....	41
Research Timeline .....	42

Data Analysis.....	43
Research Bias .....	44
Chapter 4: Results .....	46
Becky.....	47
Phase I: Orientation and Observation.....	47
Role as the Cooperating Teacher and Guide.....	48
Classroom Setting: Our Room .....	51
Student Perceptions.....	55
Phase II: Assuming the Instructional Role .....	58
Role as the Cooperating Teacher and Guide.....	58
Classroom Setting: Becky's Room .....	59
Building the Relationships.....	61
Ethan .....	62
Katie.....	63
Building Walls .....	64
Tara .....	64
Quentin.....	65
Student Perceptions.....	66
Phase III: Transitions and Final Reflections.....	69
Role as the Cooperating Teacher and Guide.....	70
Classroom Setting: Becky's Room .....	71
Building Relationships.....	72
Zane.....	72

Liz .....	74
Student Perceptions.....	74
PPST Surveys.....	77
EmergEd Themes .....	78
Caring is important to the success of high school students in science courses .....	78
We show we care by using strategies to develop relationships .....	80
The students that see I care trust me .....	81
Teacher who care make themselves available to help students .....	83
Humor: Being funny and having fun .....	85
Teachers provide students with individual attention to build relationships.....	87
Finding success building CTSLRs in science courses.....	89
Chapter 5: Discussion .....	92
Finding 1: Caring teachers go beyond the curriculum and develop caring teaching learning student relationships. ....	95
Finding 7: Teachers with an ethic of caring take action to show they care.....	97
Action means using the relationship building strategies that were modeled .....	98
Developing Trust .....	98
Teachers who care make themselves available to their students .....	99
Humor: Being funny, and having fun .....	100
Providing individual attention.....	102
Finding 3: The end result for caring teachers is that they find success in relationship building.....	103
Implications.....	105

Implications for Practice .....	105
Implications for Teacher Educators .....	106
Implications for Future Research.....	107
Strengths and Limitations .....	110
Conclusion .....	112
Epilogue .....	113
References .....	116
Appendices .....	124
Appendix A: Informed Consent for Preservice Teacher .....	124
Appendix B: Participant Informed Consent .....	126
Appendix C: Parent/Legal Guardian Consent Form.....	128
Appendix D: Student Assent Form.....	130
Appendix E: 1 <sup>st</sup> Interview Protocol .....	131
Appendix F: 2 <sup>nd</sup> and 3 <sup>rd</sup> Interview Protocol .....	132
Appendix G: 4 <sup>th</sup> Interview Protocol .....	133
Appendix H: PST Journal Protocols .....	134
Appendix I: WIHIC Survey .....	137
Appendix J: Modified Attitude Scale Modeled on TOSRA Survey .....	141
Appendix K: Previous Preservice Teacher Survey .....	142
Appendix L: IRB Approval .....	144

## LIST OF TABLES

Table 2.1 Research-based Relationship Building Strategies.....	29
Table 3.1 Previous preservice teacher participant demographics .....	37
Table 3.2 Research Timeline .....	43
Table 4.1 WIHIC Student Response Table for Phase I .....	56
Table 4.2 Modified TOSRA Results for Phase I .....	57
Table 4.3 WIHIC Student Response Table for Phases I & II .....	67
Table 4.4 Modified TOSRA Results for Phase II .....	69
Table 4.5 WIHIC Student Response Table for Phases I, II & III .....	75
Table 4.6 Modified TOSRA Results for Phase III .....	77
Table 4.7 Caring is important to the success of high school students in science courses	79
Table 4.8 We show we care by using strategies to develop relationships .....	80
Table 4.9 The students that see I care trust me .....	82
Table 4.10 Teachers who care make themselves available to help students .....	84
Table 4.11 Humor: Being funny and having fun .....	86
Table 4.12 Teachers provide students with individual attention to build relationships ...	88
Table 4.13 Finding success building CTLSRs in science courses .....	91
Table 5.1 Participant response showing care related to student engagement .....	96
Table 5.2 Coding example used to produce theme .....	101

## LIST OF FIGURES

Figure 1.1 Conceptual framework of the CTLSRs built during the student teaching experience in a high school biology classroom.....	25
Figure 1.2 Conceptual framework of the transition in the roles of the PST and CT during the student teaching experience in a high school biology classroom.....	27
Figure 4.1 Room arrangement.....	52

## CHAPTER 1

### **Introduction**

Each year, across the United States, preservice teachers (PSTs) are welcomed into classrooms as they take the final step in their own professional preparation, practicing what they have learned. Preservice teachers most often come to our classrooms with a good understanding of content knowledge but many times with less understanding of how to build caring teaching–learning student relationships or CTLSRs (Goldstein & Lake, 2003). Therefore, it becomes the role of the cooperating teachers (CT) to model these relationships through conversation and reflection, allowing the PSTs to accomplish the same when they teach (Hawkey, 1998).

During the student teaching experience, PSTs may have the opportunity to create CTLSRs with which they can build a positive classroom culture (Goldstein, 1999). This process is especially important in required courses, which may not be the favorite of all students. In addition to being important to student success, the process of building CTLSRs during the student teaching experience is also important for PSTs to see how they might develop the same type of relationships when they are teaching in their own classrooms.

Every time a PST walks into a science classroom, the cooperating teacher has the opportunity to partner with him or her, in order to build strong working relationships that allow both parties to learn from one another (Montgomery, 2000). This partnership allows for meaningful communication that can lead the PST and the cooperating teacher to become better at what they do in the classroom. This will likely occur through the

cooperating teachers modeling strategies, conversation, direct instruction, and dialogue as they guide the PST.

### **Background for the Problem of Practice**

There are approximately 200,000 PSTs each year in the United States looking to complete their semester long student teaching experiences (NCTQ, 2011). During this time, PSTs “must synthesize everything they have learned about collecting or developing instructional materials, teaching a lesson, guiding small-group activities, establishing and maintaining order, and interacting with faculty and parents” as they partner with a CT to practice their skills (NCTQ, 2011, p. 1).

PSTs come from a variety of backgrounds with multiple perspectives of how classrooms should look and function (Goldstein & Lake, 2003; Flores & Day, 2006; Tyler, Boykin & Walton, 2006). Based on these perspectives, each PST may have specific expectations for the interactions that will occur during the student teaching experience (Goldstein, 2005). The expectations PSTs have are likely derived from their own educational experiences (Goldstein & Lake, 2003). PSTs, who in the past connected with caring instructors, may desire to become caring instructors themselves. Conversely, if PSTs come from an educational background in which caring teaching-learning relationships were not built, they may not know how to build them with their own students or see the relevance of such relationships.

In addition to the perspectives that come from their own past classroom experiences, PSTs come from a variety of cultural backgrounds including rural, suburban, and urban areas (Gilbert, 1995). When the PSTs have perspectives stemming from personal experiences in smaller classes common to rural areas, they may be



uncomfortable with larger class sizes, which may lead to uncertainty in their ability to teach in this setting (Pate-Bain, Achilles, Boyd-Zaharias & McKenna, 1992). This might be especially true when PSTs come from rural areas to urban areas, where they are more likely to have participated in smaller class sizes that had little, if any, student diversity (Gilbert, 1995). If this has occurred, the PST may lack the direct experience needed to teach diverse students (Gilbert, 1995). Generally, PSTs also notice the amount of diversity being significantly higher in urban areas (Marxen & Rudney, 1999). When these factors are a part of the student's teaching experience, and are different than the experiences of the rural PST, there can be a steeper learning curve than for an urban PST who has already participated in similar classes (Gilbert, 1995).

Once PSTs have settled into the classroom routine and begin to teach for an entire day, which generally occurs later in the school year, other issues can present themselves (UNL Student Teaching Handbook, 2008). One of these issues is that high school students take both required courses and elective courses. Currently, high school graduation requirements in the State of Nebraska include 30 credits of science (Nebraska Dept. of Education, 2013). To put this in perspective, each semester, a one period course is equal to five credits. Therefore, most sophomores will have had science classes for a total of six semesters by the end of their junior year. Within the same 30 credits, students will take one semester of geoscience, one semester of physical science, two semesters of life science, and two semesters of chemistry. At the end of the third year, they may take a variety of additional science courses, if they so choose. In addition, students who really enjoy science or those wanting to make their transcripts more competitive, may take more than one science course at a time, allowing for even more science courses within their

four years of high school. Students who take the course out of necessity rather than love of the subject can create a challenge for teachers, especially when there is a lack of motivation on the part of the student to be successful. In order to increase student motivation in required courses, such as biology, it is important to create caring teaching-learning relationships between the teacher or PST and the students (Goldstein, 2003; Wentzel, 1997).

### **Statement of the Problem of Practice**

The National Science Teachers Association (NSTA) preamble for the learning conditions for high school science states, “Science educators face many challenges—including national standards, state standards, district goals, and public demands—as they attempt to provide safe and effective science learning. Science students and educators require adequate working conditions to meet these challenges” (Tweed & Nelson, 2002, Declarations, paragraph. 1). The NSTA then outlines eight standards, “for creating and maintaining science learning conditions” (Tweed & Nelson, 2002, declarations, para. 1). Within this declaration, there are eight specific descriptors to meet the standards that focus on science teachers, their students, the physical classroom or lab space, and safety. NSTA also strongly suggests that new teachers should have mentors, master science teachers that they can learn from. One piece missing from the NSTA declaration is the need that PSTs continue to come to my biology classroom each year, knowing how to build caring teaching-learning student relationships, CTLSRs. “Effective science learning” begins with a teacher’s ability to connect with youth on a personal level, rather than simply to the science content. The understanding needed to create these relationships begins with PSTs.

PSTs come to the classroom with the content knowledge and teaching pedagogy related to how they should teach (Goldstein, 2003). They have often been through coursework to understand teaching pedagogy as required by universities across the U.S.; however, they may not have the information or skills to develop CTLSRs within a classroom to ensure the success of students (Goldstein, 2005). If this is the case, it becomes the role of the cooperating teacher to act as a guide, leading the PST through the development of these relationships.

### **Definitions related to the Problem of Practice**

As previously mentioned, there are several key factors related to the success of a PST. These include: (a) positive classroom culture; (b) caring teaching-learning student relationships and (c) cooperating teachers as guides. Each of these ideas are strongly linked to one another in a good classroom model. For example, where there is a positive classroom culture, relationships can be made.

A positive classroom culture is established when students have good attitudes towards learning and are respectful to themselves, other students, and teachers. Researchers have shown that a positive school culture or “school climate” is part of all good schools and important for student success (Cohen, 2008; Fraser, 1994.).

CTLSRs are defined as the relationships that happen within the classroom between teachers and students, and they include strong feelings of commitment and responsibility that result in teachers investing time and energy into their students (Goldstein, 1999). These relationships are not haphazard and must be built carefully from the beginning of the semester or school year. One benefit of yearlong student teaching programs may be that the PST is allowed to be a part of the classroom from the beginning

of the school year, rather than being placed in the middle of a semester or school year. This creates a situation where the PST is able to observe the CT in action from the start and then be able to build on those relationships as they begin to teach in the classroom.

### ***Cooperating Teacher as Guide***

Cooperating teachers often act as guides. The role of the guide is to be a companion for the entire student teaching experience. This role is to help navigate the PST through pathways to success (Ganser, 2002). As a guide, the CT should always be available to the PST in order to answer questions, help determine the best route to take when things become difficult, or offer advice and allow the PST to decide how to use it in situations they are not familiar with. Allowing the PST to learn from all types of situations is key to the PSTs professional development and long-term success. This can be achieved when there is a certain measure of trust between both the CT and the PST (Stanulis & Russell, 2000).

### **Research Questions**

As PSTs enter classrooms to complete their student teaching experiences, they come with a myriad of their own experiences and ideas about what teaching is, what it should look like, and how they will actually teach children. They have completed their coursework in their respective content areas, and they have begun to develop an understanding of their own personal educational pedagogy. In addition, all PSTs must navigate their ways through the student teaching experience, with the help of CTs as guides, whose classrooms they are now a part of. Roads to successful student teaching experiences are not always easy, and the learning curves can be steep, which presents interesting challenges for the PST. However, as they continue to develop in their teaching

skills, understand who is in their classes, and learn how to develop caring teaching-learning relationships with their students as they teach, they will likely find success in the experience and move on to classrooms and students of their own.

The central research question that this study aims to answer is the following: In what ways, if at all, will a preservice teacher implement caring teaching-learning student relationships in his or her own teaching after observing a cooperating teacher model these relationships? This study will also address these sub-questions:

1. What qualities does a preservice teacher prioritize concerning caring teaching-learning student relationships?
2. What do previous preservice teachers see as key elements of being caring teachers?
3. What do previous preservice teachers do to show they care?

## CHAPTER 2

### **Review of the Literature**

In the relatively short period of time that PSTs have during the student teaching experience, specific choices must be made about what content, pedagogy, and strategies will be most likely to prepare them for their own practices (Hammerness et al., 2005). In the university course, the instructor is making these choices; in the student teaching experience, this responsibility may fall solely to the CT. Hammerness et al. (2005) argued, “that learning experiences that support understanding and effective action are different from those that simply support the ability to remember facts or perform rote sets of skills” (p. 370). In other words, the student teaching experience is more than memorization of facts; it is the place in which PSTs put their understanding into practice (Schmidt, 2010).

Addressing the specific needs of individual preservice teachers in the education system is both important and complex (Hammerness, 2005; Goldstein, 1999; Ball & Forzani, 2010). In order to address this complexity, this chapter is divided into five sections. The first section describes the need for teacher-student relationships in our schools. The different pieces that help to build these relationships are examined as they relate to the needs of all learners. The second section defines what a caring classroom may look like. The third section examines the role that cooperating teachers have with preservice teachers as they model teacher-student relationships as well as the teaching of content. In this section, cooperating teachers are defined as guides and take a PST through the student teaching experience. In the fourth section, the literature will be

examined to show the need for PSTs to practice caring. Finally, the last section describes which research-based relationship building strategies were used in this study.

### **A Learner-centered Environment**

As several studies have found, there is a need for teacher-student relationship building in classrooms (Cornelius-White, 2007; Goldstein & Lake, 2003; Goldstein, 1999; Rogers & Webb, 1991). These relationships, defined as caring teaching-learning relationships by Goldstein (1999) are described in the following section as they impact positive classroom culture. Cornelius-White (2007) argued, “Overall, learner-centered teacher variables have above average associations with positive student outcomes (p. 134). Learner-centered variables, such as caring teaching-learning relationships are worth pursuing as they may benefit students in the classroom (Cornelius-White, 2007; Goldstein Lake, 2003). In his 2007 meta-analysis, Cornelius-White argues that these benefits included higher critical and creative thinking, increase in classroom participation (more engaged students), student satisfaction, math achievement, drop-out prevention, self-esteem, verbal achievement, positive motivation, social connection, IQ, grades, reduction in disruptive behavior, attendance, and perceived achievement (p. 134). Taken separately, each benefit in this list may warrant the need for teacher – student relationships. In the case of student-teacher relationships, however, where the benefits are seen to impact learner-centered variables, the need for these relationships is clear (Cornelius-White, 2007).

Goldstein & Lake (2003) argued, “caring is often taken for granted and under-discussed within teacher education” (p. 129). Since caring is important for the development of CTLSRs, it is also important that the building of these relationships be

taught to PSTs. Teacher educators, including university supervisors and CTs need to teach, explain, and model this process for PST understanding of how to build teacher - student relationships (Goldstein & Lake, 2003).

### **Caring in Education**

In education it is generally accepted that an “ethic of caring,” which refers to the acts of people out of love and natural inclination, is an important aspect of any classroom (Noddings, 1988). Noddings (1988) also states, “A relational ethic is rooted in and dependent on natural caring,” which is the form of caring that is not motivated by ethical effort to motivate it (p.219). And perhaps more importantly, caring is a part of any “good” classroom (Goldstein & Lake, 2003). In these classrooms, teachers cultivate caring relationships with students to foster engagement in school and promote learning (Garza, Alejandro, Blythe & Fite, 2014). Teachers, like parents, may also help fulfill the basic needs of students by providing security and caring relationships (Rogers & Webb, 1991). These relationships, built by teachers with their students can have an influence on their motivation in school (Wentzel, 1997; Cornelius-White, 2007). When students are actively engaged and motivated in the classroom, they often have increased participation and achievement (Erwin, 2003; Gillies, 2004). This behavior is due to students who perceive teachers as caring and are more willing to pay attention in class (Gelbach, Brinkworth & Harris, 2012).

These researchers also agree that an attitude of caring is not necessarily a part of every preservice student (PST) development program (Rogers & Webb, 1991; Goldstein & Lake, 2003). In fact, teaching a PST to build CTLSRs is often a part of the role of cooperating teachers as they model these relationships in their own classrooms (Wentzel,



1997; Goldstein & Freedman, 2003). This may raise questions as to the importance given to teaching how to create caring environments in teacher education programs. I do not believe that the argument is one of need, as most research shows that caring is important to the success of a student, rather it feels that we expect PSTs to come to use with this knowledge, from observing the same relationships in their own educational history (Goldstein & Lake, 2000). And, if the creation of content-knowledge rich teachers is a primary goal to meet the goals of programs like No Child Left Behind (NCLB), I wonder if the caring piece will be left out altogether.

As stated in another article by Goldstein & Lake, 2000, “caring is widely believed to be a central facet of teaching” (p. 1). Society also has placed these same expectations on schools where the development of caring environments is expected (Goldstein & Lake, 2000; Wentzel, 1997). Based on those same expectations, what questions would be raised if teachers did not care? Rather than focus on the loss of a caring teacher, the authors believe that the ethic of caring is important to teaching and that as cooperating teachers, it is partially their role to help PSTs to develop this same mentality as they model it for them (Rogers & Webb, 1991).

### **Building The Relationship**

The following quote, by a middle school student, may bring to light some of the perceived needs from the students themselves. “Teachers do not always have to teach, they can also be great friends” (Anonymous Student, 2003). This quote may show the need for teacher-student relationships as described by Cornelius-White (2007), that while content is necessary, there is need for relationships as well.

At the very core of many educators are the caring teaching-learning relationships that they have with each of the young people that come to their classes every day (Goldstein, 2003; Rogers & Webb, 1991). These students have a choice to make, whether or not they will allow the relationships to be built. This choice is evident by factors such as tardiness, truancies, the number of times a student is “removed” from a classroom, whether or not they participate in class, and their overall motivation (Cornelius-White, 2007). Students also have a large amount of individual control within the classroom that can have an impact on the relationships being built (Maguire, Ball & Braun, 2010). Without positive and meaningful relationships, this control may be overwhelming and reduce the amount of learning that would otherwise be possible for individual students. It is the relationships between the teacher and student that are the key to being effective and able to provide meaningful learning experiences for our youth (Cornelius-White, 2007 & Poplin & Weeres, 1993). Many times, these relationships may be far more important than even the learning that takes place, especially when it is a part of student motivation (Wentzel, 1997).

Teachers are committed to really knowing their students by building relationships with them. This means that teachers will help students to live and learn even when they may not want to. It means that teachers take the necessary time to ensure student success, regardless of the burden that is placed on the teachers (Day, 2004; Stronge, 2007). The relationships that teachers strive to build with their students are about more than teaching biology for a test or even just to get them to learn; these relationships are to ensure that all be learning and growing together (Darling-Hammond, 2000).

From the first day of the student teaching experience, it is imperative that the PST is present in the classroom and able to observe how the building of relationships begins. This idea is supported by previous findings that PSTs “learn about practice *in*[sic] practice (Darling-Hammond, Hammerness, Grossman, Rust & Shulman, 2005). As previously mentioned, the caring-teaching learning relationships that are developed by a teacher begin on the first day of class and then continue throughout the school year. As the CT welcomes new students into his or her classes, the PST should be there to witness the connections that are made. As this is occurring with the CT, the PST can also be involved in any activity that builds relationships in the class. By involving the PST from the first day as well, students may see how they are also an important part of the class.

### **Living the Relationship**

Each school year the building of caring teaching–learning relationships begins as new students enter our schools and classrooms. The relationship building must occur fairly quickly in order to maximize the opportunity for learning and development in our schools. Although not all relationships can be built immediately, it is important for students to realize that teachers are attempting to bridge this gap from day one (Day, 2004). Once these relationships are built, the next step is just as difficult, to live the relationship. Living the relationship occurs once teacher and student have established a sense of trust found through listening, integrity, joy, and caring between the two (Stanulis & Russell, 2000; Day, 2004; Kim & Schallert, 2011). These relationship pieces are a part of the practical wisdom or phronesis of education (Kinsella & Pitman, 2012). Practical wisdom and phronesis of education are not new ideas; each term has much history and belief behind their meaning. In an attempt to show how they are a part of my own

theoretical perspectives, each idea is linked to individual readings that define their importance in education. In living the relationships with students, each of the following ideas must be given considerable effort and time to allow the development of the relationship. When the teacher-student relationship is built on these ideals, the opportunity for success in learning and growing will present itself daily.

At the beginning of a new semester, cooperating teachers will often meet with their PSTs and the university supervisors, to ensure that everyone is on the same page and that expectations are clear. In the spring of 2012, a university supervisor made an interesting and important statement about living the relationships throughout the school year. He stated that at the beginning of each and every school year, it is key that teachers make the decision to like every student regardless of what happens during the school year (personal conversation with Bob Curtright, 2012). This idea draws attention to how teachers should look at their classes, so that they start a semester committed to their students. PSTs who have not experienced the need for this decision in their practicums may need to hear these words as they tackle the student teaching experience.

### ***Listening***

The teacher in a classroom sets the tone of the class and is always “there to listen, respond, and add a dab of glue to the important words that burst forth” (Paley, 1986, p.127). Teachers know that in light of the many things that go on around us in everyday situations, it is easy to become distracted with the mundane or the crazy, the dull, and the exciting. They must be able to focus not solely on the curriculum, but the learner as well, if they desire to see students succeed (Goldstein, 2002). This is partially accomplished through their ability to listen to their students (Paley, 1986). It is also clear that caring

teachers must listen to be able to determine the specific needs of classes and individuals (Day, 2004). If teachers become distracted with course content and curriculum, it becomes difficult to truly listen to the needs of individuals in the classroom. Listening requires that teachers be in tune with the class, its occupants, regardless of who they are. It also means that the teacher is aware of problems that may be affecting a student's performance even when that student has not spoken to the teacher directly about an issue (Paley, 1986). In his ability to listen, the focus of a teacher cannot be on himself, which may take away from the needs of his students.

The teacher, as leader, and guide, must be aware of changes in the room's climate, the attitudes of students, and even the backgrounds that they bring to us when they enter our rooms (Kearney, Plax, Richmond & McCroskey, 1985). Listening is a tool of utmost importance that can bring this awareness and help develop meaningful relationships with the students (Kim & Schallert, 2011; Stronge, 2007). When teachers listen to their students, they are seen as caring (Stronge, 2007).

Often in an educational setting, the CTs model how to listen to their students for their PSTs. After this occurs, CTs have the opportunity to dialogue with the PSTs and explain what they were able to learn from listening and the need to continue doing so (Goldstein, 1999). Noddings (2005) states that teachers must first listen to students so that they are able to gain their trust making it more likely that they will accept what teachers are teaching.

## *Integrity*

The ability of teachers to do well in their positions come from their identity and integrity (Palmer, 1998). The identity of teachers comes first from their professional training and their experiences as students, later the identities are built on their experiences as teachers (Goldstein & Lake, 2003; Palmer, 1998). As the teacher identity is being created, so is integrity. Integrity in teaching can be found in two forms (Nillsen, 2005;Sizer, n.d.). The first was well defined by Ted Sizer (n.d.) when he stated, “First there is probity: characteristics of honesty, principle and decent candor. These qualities are fundamental, of course, to the good life for anyone, but they play a special role in the behavior of those of us who inevitably, as we live together, influence younger people by our example.” Teachers are responsible for influencing the youth they interact with, and when there is integrity through honesty, there is trust (Hamilton & Pinnegar, 2000).

The second form of integrity in teaching is found in the wholeness of the individual teacher (Nillsen, 2005; Palmer, 1998; Sizer, n.d.). It comes from a melding of life experiences that converge in the completeness of a person leading to an increased self-confidence and personal identity (Nillsen, 2005; Sizer, n.d.). Building integrity may be more difficult than it seems, requiring teachers to develop unity of character where they support their words with action (Sizer, n.d.). Students also depend on teachers to be rocks, the firm foundations on which they can rely (Hamilton & Pinnegar, 2000). Teachers with integrity can maintain a higher level of respect and this allows for a stronger relationship in the class (Sizer, n.d.). When there is no cause for concern, both parents and students can rely on teachers and the curriculum they teach. These morals

might also transcend the gap between student and teacher when trust has been established. If this can occur, the relationship will grow stronger (Palmer, 1998).

The importance of integrity may not belong to the teacher as an individual, but more as teacher-in-relation, where “the caring teacher strives first to establish and maintain caring relations, and these relations exhibit an integrity that provides a foundation for everything teacher and student do together” (Noddings, 2005). This may be seen through the honesty that CTs have with their students and peers. Integrity can also be seen in how teachers live their lives outside of the classroom. For example, rather than allow personal issues to fester and build, CTs might speak with people directly, not behind their backs. This helps build trust and respect as they can be seen as individuals with high principles.

Through their integrity, CTs are demonstrating to PSTs their abilities to establish and maintain the caring teaching-learning relationships within the classroom. The modeling of integrity may have the greatest impact on PSTs when they are able to see the use of caring throughout an entire school semester. If this demonstration of relationship building is key to student success, it is even more important that the relationship is enduring.

### ***Passionate Teaching***

Wolk (2008) stated, “teachers must strive in whatever ways they can to own their teaching so that each morning they can enter their classrooms knowing there will be golden opportunities for them—as well as for their students—to experience the joy in school” (p. 15). Teachers that care for their students, student learning, and a life of

teaching, are passionate (Day, 2004; Wiseheart, 2004). This passion transcends through all of their actions within the classes they teach.

In the documentary *Paths of the Displaced*, Natalia Ledford goes on a personal journey as a senior in Lincoln, Nebraska. The original concept of this journey was to reach out to the community of Sudanese students that she did not know and yet were a part of her school. The documentary is of her reaching out, in order to understand what it was like to be a refugee, how his family ended up in Nebraska, and how they continue on in life. Her story is inspirational and touching. It was a sincere attempt to understand how the Sudanese had fit into American Society (Ledford, 2009). Throughout her story, it was clear that caring/passionate teachers played a key role in the success of these Sudanese students. Many had gone above and beyond the expected role of an educator to help these students. In this sense, passionate teachers are defined as teachers who are enthusiastic towards the subjects they teach and have a willingness to reach beyond the curriculum to connect with their students. Their enthusiasm for life and learning comes out in the portrayal of course curriculum as interesting and fun, as their teaching exudes a desire to continue learning (Smith & Schmidt, 2012).

Educators hope to be filled with a strong regard, or passion, towards the subject, throughout their careers. Real passion is the enthusiasm teachers have for teaching that is not based on how they feel at the moment, how the day is going, or even the actions of the students (Day, 2004). This passion for teaching is much more than the happiness educators feel when things are going well: it is the underlying commitment or dedication to students and the subject being taught. If they allow life to get in the way of living, an educator's true passion may not be present in the very relationships that require it: in



teaching, in curriculum, in content, and in relationships with faculty and students (Day, 2004; Brewer, 2005; Wolk, 2008).

The passion for teaching that is needed to develop these relationships is tied to each of the many aspects of teaching (Day, 2004). Without passion, students can become acutely aware of its absence in teachers' lives, this can lead to a breaking down of the relationships they have built. If teachers become bored with their own subjects, students will pick up on this attitude and can develop negative feeling towards the subject as well (Isenbarger & Zemylas, 2006) In order to avoid this, passionate teachers often reach out to other educators, share questions and inquiries, and try to keep the professional conversation on teaching and learning (Wiseheart, 2004, p. 51). A true passion for teaching must be lived out in the classroom by encouraging students to experience the learning that can be accomplished when they choose to live life in the fullest.

When PSTs and students are able to see and hear the passion that CTs have for teaching, it may give them hope when associated with positive experiences. Hope for success by the students, and hope for PSTs that they too may find the joy and passion in teaching.

### ***Caring***

If teachers are to get away from thinking only about test scores, meetings, and daily business, they must be caring and compassionate towards their students and passionate about teaching (Day, 2004; Wiseheart, 2004). Students can easily identify when teachers are selfish. The focus of teachers who no longer care about their students may become the job, the pay, or something worse. In each example, the attention of the teacher becomes displaced and students lose trust in any relationship that may have

developed. As teachers live out the idea of caring in the classroom, teachers must focus their energies on others. In fact, each of the caring pieces mentioned in regard to what teacher can be, lends itself to the idea and importance of caring. From *building the relationship* to *passionate teaching*, each piece of caring, conveyed by CTs may become a part of how PSTs see themselves in their own classroom.

Noddings (1998) pointed out that “From the perspective of caring, the growth of those cared for is a matter of central importance” (p. 175). Educators have a very real goal of increasing the learning and growth of their students. While this might be done in a variety of ways, teachers living out caring relationships with their students, will see their learning as greatly significant. To show that teachers care for their students, they must listen, have integrity, and be filled with passion. When this is accomplished, teachers may find the learning and growing that they strive for.

The idea of the ethics of care, is closely associated with the work of Noddings in her argument that caring should be part of the foundation for ethical decision making (Smith, 2004; Schmidt, 2010). This same idea is behind what can drive CTs to work with PSTs in their student teaching experiences. The CTs are making moral decisions to take on apprentices and guide them through unique experiences. As CTs build relationships with their students, they are, at the same time, potentially doing the same thing with their PSTs. When each relationship is built, the care and trust that develops may promote the learning of course material for students, and a better ability of PSTs to teach and connect to the lives of their students.

## **The Fruits of Relationship Building**

In the summer of 2010, Dr. Elizabeth Johnson spoke at a school improvement meeting for a large midwestern school district. The conference titled “We've Gotta Reach Em' to Teach Em': Where Teaching Intersects the Human Condition” provided information to teachers and administrators about how to create classrooms in which students actively engaged themselves with the teacher and the curriculum through the creation of teacher-student relationships (Johnson & Walsh, 2006). Dr. Johnson was an energetic presenter, who had been born with fetal alcohol syndrome. Needless to say, Johnson carried an excessive amount of baggage with her to school, which had a significant impact on her ability to learn. Fortunately, her kindergarten teacher was very caring and reached out to meet her needs. The big idea from that conference was that teachers must build relationships and live them out to truly have high levels of learning and growth in their classrooms. The relationships that teachers develop are not always perfect. They must be cultivated and watched; they must be filled with hope and the desire for students to succeed.

Dr. Johnson shared many different ideas from her own teaching that can help to reach students when relationships are built on listening, integrity, joy, and caring. From acting to puppets, to toys of all sorts, by growing personal connections to students, teachers can ensure they learn (Johnson & Walsh, 2006). Dr. Johnson took ordinary objects, such as rubber chickens, empty popcorn containers, and various Halloween decorations, and then demonstrated how to use them to help make a classroom come to life. Another example, shared by a science teacher, was to dress up like Gregor Mendel, the Father of Genetics, when he began a unit on genetics. Dr. Johnson's (2006) point was

that with a little creativity, teachers can make the classroom come to life, and in doing so, connect to their students in caring-teaching learning relationships.

Using the ideas from Dr. Johnson and others, many teachers have molded their own educational creed and passion for teaching into a story of success through relationships in the classroom. The fruits of these relationships come in various shapes and designs, but the outcome is usually the same: a positive moment between teacher and student. A quiet word, a look of hope, a hug, or a letter, are all done to show that the time building and living the relationship is worth the effort and perhaps pain that teachers go through for someone other than themselves. One perspective of this type of relationship is in shown the following note from a student to his teacher at a midwestern high school.

I guess I would just like to take some time to say thank you to every single one of you. I transferred from (one high school) to (another high school) last semester and the reason I transferred was because I wasn't working to my full potential, I was getting suspended frequently and my grades were at an all time low. I think that since I switched to (a new highschool) I have learned from a lot of my mistakes and I have found new and better ways of dealing with things. Most of my life I haven't had a whole lot of people to advocate for me and you know just be in my corner but here at east I have become comfortable with everyone and I just like being in class and enjoy school, my attendance is very good, and my grades I couldn't be more pleased with. But I don't think I would be where I'm at now if it wasn't for all of you, you all pushed me to excel and well you didn't give up on me and that is what I want to thank you for not just being good teachers but also being great friends. (email sent from a student, 2010)

The young man that sent this note came from a home life that most teachers can hardly imagine. Each day that he came to school was counted as a success. He did not always get along with teachers; he often butted heads with them, but also they worked together. He was bright, yet he struggled, and without CTLSRs, he may have been lost to the outside pressures that were always coming his way. His note is one of the fruits of the relationships that, as caring teachers, must hope for in every relationship that develops with every student, if teachers hope that they succeed (Goldstein, 1999).

At the beginning of each semester, teachers often take several days to develop classroom norms in the form of a caring teaching-learning environment that allows the building of relationships (Wong & Wong, 2009). While it may not be possible to do this effectively with all students, it is important to establish this environment on day one. This can be accomplished by using images of an educators life and family that students may be able to relate to, sharing different experiences, and teacher expectations of students during this time (Goldstein, 2002; Stronge, 2007; Wong & Wong, 2009). In addition to personal relationships, teachers may also attempt to help students connect to science courses, without the use of a textbook, by incorporating a variety of artifacts they collected over the years. After describing their “treasures,” some teachers may allow their students to do the same. They could ask a series of “getting to know you” questions for students to respond to and also ask each class to come up with their own questions so that student input is given value (Wong, 2009). This information can then be shared with the rest of a class to encourage relationships within, and between, members of the entire class including the teacher. In required courses, these activities seem to lend themselves to

trust and a great start to the year. The next piece of creating a caring teaching-learning environment is to continue connecting with students through the course content.

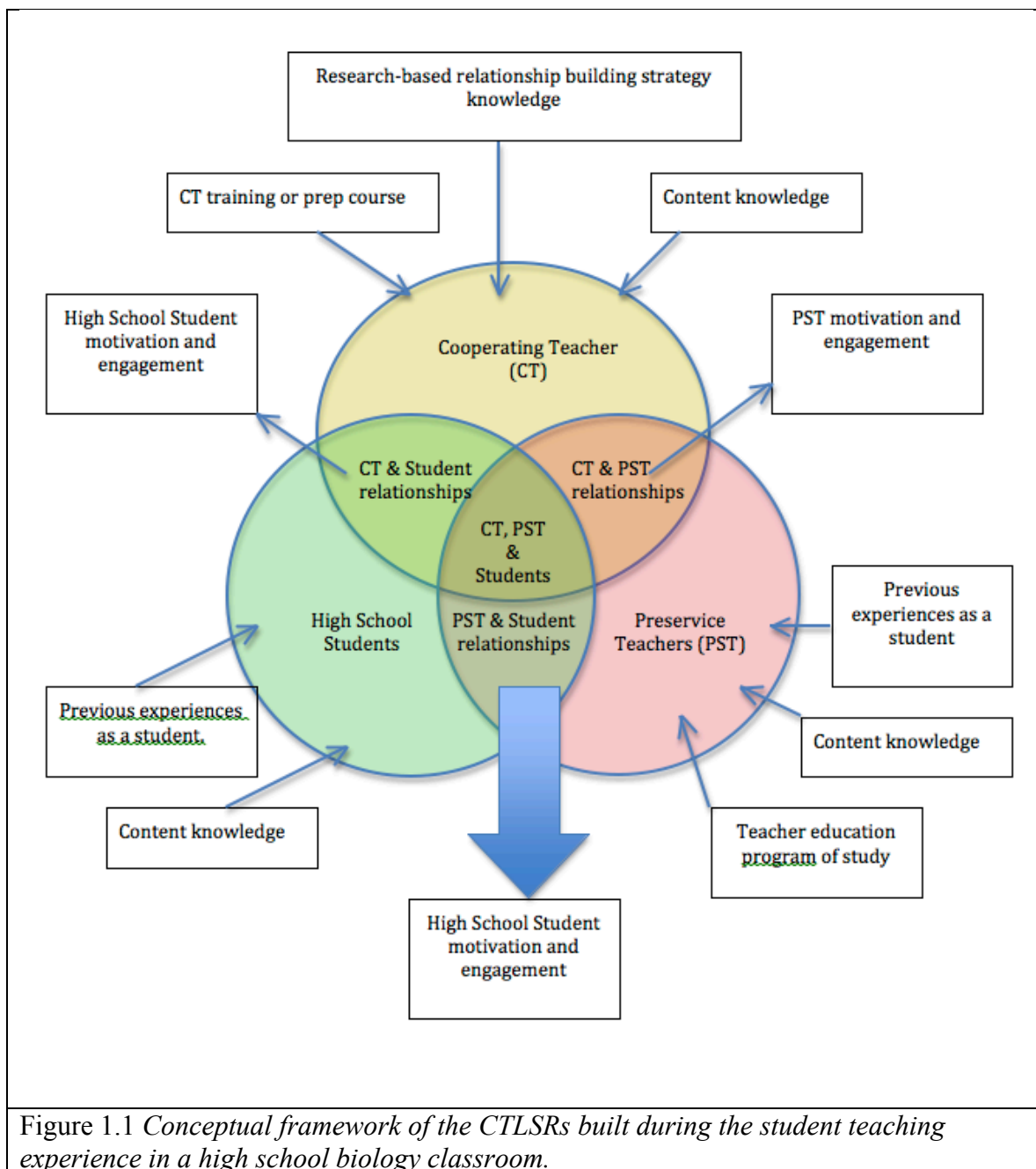
If educators are on the right track with the development of positive classroom culture and CTLSRs in our own classrooms, it seems fairly straight forward that PSTs would want to be able to do something similar when they start their student teaching experience, and when they eventually teach on their own. However, not all CTs connect with their students in a similar fashion, and it is also be important for PSTs to develop their own caring identities in the classroom by using research-based relationship building strategies. How they perceive CT modeling in the creation of a caring environment could play out in their development of becoming a teacher (Graham, 2006; Rogers & Webb, 1991).

### ***Student Motivation***

An important reason for working to build or improve CTLSRs is to positively impact student motivation. For the purposes of this study, motivation is defined as something that leads or influences a person to do something, or the mental state that causes a student to act (Korb, 2014). While there may be many potential teaching strategies that could lead to increasing student motivation, researchers have found that building positive relationships with teachers has helped students “enjoy school more and have more motivation for learning” (Marsh, 2012, p. 162). Researchers have also found many specific relationship-building strategies that help to improve student motivation (Table 2.1). Since the importance of motivation has been clearly established, it is likely that the need for PSTs to implement CTLSRs is equally important.

## Conceptual Framework

The diagram in Figure 1.1 shows a perspective that teachers may have while acting as CTs. This point of view illustrates the different relationship possibilities during the student teaching experience. It also shows how the CT, PST, and students may interact within a classroom.



Each of the three entities has a role to fill, within the classroom, and yet they also constantly interact with each other. Ganser (2002) defined the role of the CT as a mentor; however, this role is not that of the individual; rather, it is dependent on interactions that will occur with a PST. Most of the available research focuses on the relationships between two of the three entities, due to interactions that occur consistently in a classroom.

Within this framework, there are four relationships that are apparent. They are:

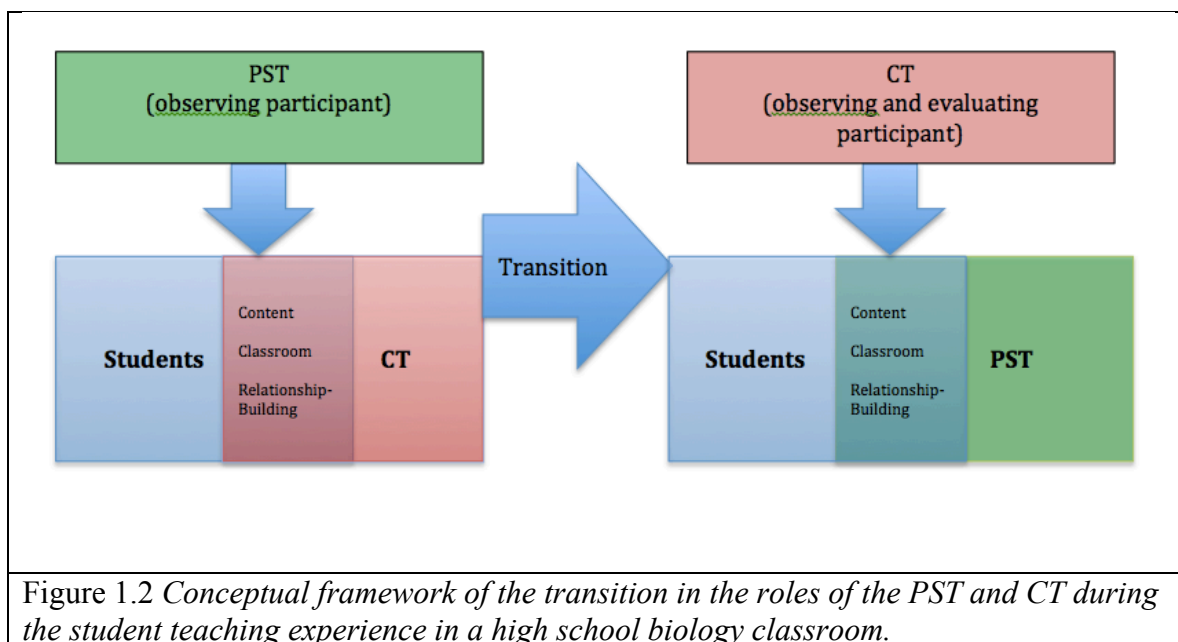
1. CT and PST
2. CT and Students
3. PST and Students
4. CT, PST, and Students

First, the relationships that are formed between PST and CT within the classroom may have an impact on student learning (Ganser, 2002; Borko & Mayfield, 1995; Stanulis, 2000). This relationship, defined as guide or mentor for the CT in this paper, is one that, when built on mutual respect and trust, may impact the learning of the PST.

Secondly, the relationship between the CT and students is multifaceted. It is both being created, as in the beginning of the year with a CT and his or her class. It is being lived and furthered, and at the same time each of these pieces is being modeled to the PST (Graham, 2006; Rogers & Webb, 1991). This modeling may happen throughout the class and lead to an influence on the third relationship, that of the PST and students. This third relationship is the true focus of my research. While working as the CT, creating relationships with students, and modeling a caring behavior, the goal of the teacher is to



look at what then happens in the classrooms when the CT reduces his or her role and the PST is the main adult/student caring teaching-learning relationship (See Figure 1.2).



While the focus of this research is the PST and student relationships, it may be impacted by the relationships that are formed between the PST and CT (Goldstein, 1999; Goldstein, 2002; Goldstein & Freedman, 2003; Goldstein & Lake, 2000; Goldstein & Lake, 2003).

The final relationship, in the middle of the framework (see Figure 1), is that of the CT, PST, and student. This relationship shows the connection that occurs between most of the participants, with the exception of the university supervisor (not included in this framework), that interact during the student teaching experience.

### **Teacher Preparation**

From the first day of the student teaching experience, it is imperative that the PST is present in the classroom and able to observe how the building of relationships begins.

As previously mentioned, the caring-teaching learning relationships that are developed by a teacher begin on the first day of class and then continue throughout a school year (Easton, 2008). As the CT welcomes new students into their classes, the PST should be there to witness the connections that are made. As this is occurring with the CT, the PST can also be involved in any activity that builds relationships in the class. By involving PSTs from the first day as well, students may see how PSTs are also an important part of the class.

Each piece discussed, - relationship, listening, integrity, passion and caring - are found in effective teachers and should be included in teacher preparation programs currently in the U. S. (Day, 2004; Goldstein & Lake, 2003; Stronge, 2007). However, there are many different requirements for teachers which may result in differing teacher programs throughout the country (Stanulis & Russell, 2000; UNL Student Teaching Handbook, 2008). These programs vary for undergraduates and graduates, but, in the end, they will result in a student teaching experience or internship. With each different program, there are likely different expectations for the CTs that work with them.

### **Specific Relationship-building Strategies**

Since the enactment of NCLB in 2001, researchers have continued to analyze the need for caring in education as the result of content driven education (Easton, 2008; Goodwin & Hubbell, 2014). While the content itself is of utmost importance, building CTLSRs can impact how students engage with the curriculum (Erwin, 2003). Regardless of the teacher preparation programs available, much of what PSTs will eventually take to their classrooms, comes from interactions with their CTs (Rozelle & Wilson, 2012). In

the most current research, several relationship strategies have been connected to an increase in student engagement and motivation (Table 2.1). Marzano (2003) stated

Table 2.1 *Research-based Relationship Building Strategies*

<b>Relationship Building Strategy</b>	<b>Supportive Research</b>
Begin the year with a focus on relationships	Easton 2008; Mainhard, Brekelmans, den Brok & Wubbels, 2011
Greet students as they enter the room	Wong & Wong, 1991; Erwin, 2003; Daniels, 2011; Goodwin & Hubbell 2013
Call on all students in class (students want to be heard)	Cook-Sather, 2009; Lemov, 2010; Dallimore, Hertenstein & Platt, 2013
Make time for personal interactions	Frymier & Houser, 2000; Marsh, 2012; Goodwin & Hubbell, 2013
Nonverbal Communication (smile, wink, high five)	Worthy & Patterson, 2001; Erwin, 2003; Marzano, 2003; Marsh, 2012; Goodwin & Hubbell 2013; Garza, Alejandro, Blythe & Fite, 2014
Learn students' names	Erwin, 2003; Goodwin & Hubbell 2013
Get to know your students: Create opportunities for students to share their interests and talents	Marzano 2003; Easton, 2008; Hopkins, 2008; Goodwin & Hubbell 2013; Garza, Alejandro, Blythe & Fite, 2014
Listen	Cook-Sather, 2009; Goodwin & Hubbell 2013; Garza, Alejandro, Blythe & Fite, 2014; Porath, 2014; Benton 2015
Reveal some of yourself to students	Wong & Wong, 1991; Erwin 2003; Marsh, 2012; Goodwin & Hubbell, 2013
Don't be overly serious (humor)	Erwin, 2003; Streat, 2011
Model enthusiasm for learning (be passionate)	Palmer, 1998; Easton 2008; Marsh, 2012; Smith & Schmidt, 2012

that teachers should not leave student relationships to chance; they should be built using research-based strategies to influence the classroom to support student learning. For the purposes of this study, the behaviors included in Table 2.1 will be model by the CT when showing a PST how to develop CTLSRs in the classroom.

***Begin the year with a focus on relationships***

In the book, *Engaging the Disengaged: How Schools Can Help Struggling Students Succeed*, L.B. Easton (2008) described the need to start the relationships building process as soon as the school year starts. This allows norms to be developed, students to have an understanding of the class expectations, and engagement to occur in learning. It may also give teachers an opportunity to share a portion of their lives with their students, allowing their ethic of care to become visible to students.

***Greet students as they enter the room***

As students move between classrooms at the end of each class period, teachers have the ability to position themselves in the doorway allowing them to quickly greet and interact with many students each day (Wong, 1994; Pigford, 2001; Erwin, 2003; Adams, 2008; Goodwin & Hubbell 2013). This welcoming attitude provides an opportunity for teachers to gauge their students as they enter the room. These interactions can also result in additional personal conversations that show students that their teachers care for them (Pigford, 2001).

***Call on all students in class***

In a technique dubbed “no opt out” by Lemov (2010), teachers included every student as they called on them for answers to questions and then followed up with those that answered incorrectly. When used correctly, calling on every student contributed to

an increase in student participation during class discussions and overall student engagement (Dallimore, Hertenstein & Platt, 2013).

***Make time for personal interactions***

Communication between teachers and students can be relational as well as content driven (Frymier & Houser, 2000). However, not all types of communication will result during a normal class period unless teachers plan to include them in their lessons. By creating time for personal interaction through questioning and one-on-one conversations, teachers show they care and students do not feel ignored (Goodwin & Hubbell, 2013).

***Nonverbal Communication: Smile, wink, high five***

Nonverbal communication influences how students perceive classroom climate and can be a powerful tool for teachers (Finn & Schrodt, 2012). This can be done by making eye contact (Marzano, 2003), smiling at students (Worthy & Patterson, 2001; Goodwin & Hubbell, 2013) and simple touch such as high-fives or a pat on the back (Goodwin & Hubbell, 2013). When nonverbal communication is used properly, it can have an impact on student motivation (Frymier, 1994).

***Learn student names***

In an era where student diversity is ever increasing, and students of different cultures are entering our classes, it has become increasingly important to learn their names. Erwin (2003) suggests that by learning student names and providing opportunities for students to learn each other's names, students will feel comfortable and have a sense of belonging. Goodwin & Hubbell (2013) suggested that teachers should "learn the names of all their students by the end of the first week of school, if not by the second day" (p. 83).

***Get to know your students personally: Create opportunities for students to share their interests and talents***

While this strategy is connected to knowing the names of your students, knowing your student is more than simply recognizing who each student is. Teachers can get to know the “students’ academic, socioeconomic, and social backgrounds” and “students’ strengths and limitations” so that they have a deeper understanding of their students (Garza, Alejandro, Blythe & Fite, 2014, p. 4). When this occurs in a classroom, students will feel that their teachers have invested in their lives, not only in their grades (Goodwin & Hubbell, 2013).

***Listen***

As previously described, listening helps teachers determine the specific needs of classes and individuals (Day, 2004). Listening activities can be done by creating moments in the lesson for class dialogue which provide students the opportunity to share their perspectives as they relate to lesson format, topics of interest or goals for learning (Cook-Sather, 2009). In addition to classroom activities, teachers can “listen” during their greetings and to personal conversations that occur between classes as well (Goodwin & Hubbell, 2013).

***Reveal some of yourself to students***

As teachers share parts of their own lives in the classroom, students recognize that they can talk to them (Marsh, 2012). Teachers can build CTLSRs by connecting personal stories to the curriculum in order to show they have a life outside of school (Goodwin & Hubbell, 2013). However, there are limits to what teachers should share, and they should also be cognizant of making stories relevant to the content. For example, a teacher might

share about a recent fishing trip that relates to the curriculum, while talking about his or her alcohol consumption while camping, may not.

***Don't be overly serious: Using humor and having fun***

There are many different ways in which teachers can have “fun” with their students to develop relationships. In their 2008 study, Baumgartner & Morris found that by using humor in American Government, “teaching is clearly more engaging and interesting for the students” (p. 169). Using review games and brainteasers are another way to incorporate fun and increase student motivation in the classroom (Erwin, 2003).

***Model enthusiasm for learning: Being passionate***

There are many different ways in which teachers are passionate about the subjects they teach and their own learning. When they have enthusiasm for their curriculum and subject, students often recognize this passion and are more likely to connect with them in building relationships (Smith & Schmidt, 2012). Regardless of student interest in different subject areas, those that have teachers who explain the importance of the content and were themselves interested in the subject, may help develop “students’ love for learning” (Goodwin & Hubbell, 2013).

## CHAPTER 3

### **Research Methods**

This research utilized a single case study design. A qualitative case study within my biology class was necessary to develop an understanding of a "real-life" phenomenon, since there was a need for an in-depth description of the student teaching experience (Yin, 2009). Since I had a PST in the fall who had already participated in a practicum the previous year, I was able to closely observe the transitions that took place in her understanding of caring. This availability provided the interactions I chose to study.

As a practitioner researcher and a natural participant, a case study methodology that was ethnographic in nature, allowed me to complete multiple observations, and interviews, along with student surveys to triangulate data related to the problem of a PST's capabilities to take information from her CT and then build CTLSRs and a positive classroom culture. As a classroom teacher, I was able to observe a PST in action to see if the modeling and guiding that I have done as the CT, was understood by the PST and put to use as she built CTLSRs with her students.

Case studies have been used in many school settings to closely observe and describe the situation of PSTs (Goodman 1983, Aguire, Harrety & Linder 1990; Shapiro, 1998; Goodman, 1983). In this study, as the CT, a case study design worked well with observing a PST in action, which allowed for input during the study. Kim & Schallert (2011) pointed out that while there have been many research studies completed on preservice teaching, there has been very little empirical research done. Goldstein & Lake (2000) also confirmed that while "caring is a term widely used by educators and educational theorists and researchers, the range of meanings attached to "caring" is



frequently underexplored and under-discussed.” As the CT and practitioner researcher, I was in the position to see things that outside researchers might not see. In addition, since the study occurred in my own classroom, I added credibility through continuous observation during an entire school semester (Kim & Schallert, 2011).

The central research question that this study aimed to answer was the following: In what ways, if at all, will a preservice teacher implement caring teaching-learning student relationships in his or her own teaching after observing a cooperating teacher model these relationships? This study will also address these sub-questions:

1. What qualities does a preservice teacher prioritize concerning caring teaching-learning student relationships?
2. What do previous preservice teachers see as key elements of being caring teachers?
3. What do previous preservice teachers do to show they care?

### **Case Selection**

For the past eight years I have taught 9<sup>th</sup> and 10<sup>th</sup> grade biology in a high SES high school located in Lincoln, Nebraska, a capital city in the Great Plains of the United States. During this time, I have had the opportunity to work with many high school students, as well as observe and guide several PSTs from a local university. I have used all of the relationship-building strategies described in this study, during this time period. This study is a case of a cooperating teacher modeling strategies to build positive relationships with students. In my natural setting as a high school educator, I will observe the phenomenon that occur firsthand, during the course a single semester in biology.

In the 2013-2014 school year, there were 2,686 practicum and preservice teachers placed in various schools across the Midwestern district (Umholtz, personal communication, April 24, 2015). Compared to the number of practicum and student teachers over the past six years, this is close to the yearly average. Of those 2,686 college students, one was placed in my biology classroom. One student, among thousands, and I guided her through the student teaching experience during the fall of the 2013-2014 school year.

This scenario has repeated itself six times in the past eight years, since I moved to my current position teaching biology. I anticipate that due to the steady supply of college students from local colleges and universities, this will continue to happen in the coming years. These teacher education schools will need placement for their students, and my room, along with the rooms of many other CTs, will be utilized. In this event, I will be able to continue guiding preservice teachers to develop caring relationships with my, and their, students.

## **Research Sample**

### ***Preservice Teacher***

I included one PST, a 24 year-old female from a rural setting in Nebraska, who was assigned to complete her student teaching experience in my biology classes. No other selection process was used. To obtain consent from the PST a graduate student not associated with the study read the consent narrative and collected the form (Appendix A). The PST was asked to participate voluntarily. The PST was not encouraged, coaxed or coerced to participate. She was allowed to opt out at any time.

### ***Previous Preservice Teachers***

All of the five PPSTs who had completed their student teaching experience in my biology classroom since I began teaching biology in 2007 were included in this study. PPSTs were asked to participate voluntarily (Appendix B). Of the surveys that were mailed, three were returned (Table 3.1). PPSTs were not encouraged, coaxed or coerced to participate. By returning the mailed survey, participants were agreeing to participate in the study.

Table 3.1 *Previous preservice teacher participants*

Participant	PPST A	PPST B	PPST C
Gender	Male	Female	Male
Grades taught	6-8	9-12	9-12
Course	Middle Grades Science	Biology, Anatomy & Physiology,	Science
Region	Eastern CO	Southeastern NE	Western NE
City pop. estimate	60,000	7,300	1,500
School type, student pop.	Middle School, 600	K-12, 330	High School, 183

### ***High School Students***

I involved all of my biology classes (n=3) consisting of 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> grade students, in collecting student perceptions. Student perception data were collected from only 76, 9<sup>th</sup> and 10<sup>th</sup> grade students that chose and were given permission to participate in the research. The high school student participants consisted of ## male students and ## female students. The school is a suburban, high SES high school located in Lincoln, Nebraska, a capital city in the Great Plains of the United States. These students were selected by returning their parental consent forms requested by the institutional review board (Appendix C). Students that participated also had to sign an assent form (Appendix

D). Those involved were asked to participate voluntarily. No other selection process was used. To obtain assent from the students a graduate student not associated with the study read the assent narrative and collected the forms. At no time during the research data collection did I know which students were a part of the study. No student was encouraged, coaxed, or coerced to participate. Students were allowed to opt out at any time.

## **Data Collection**

### ***Observations***

A unique feature that I had as a practitioner researcher, different from that of the university supervisor, is that I had a greater amount of time with the PST in my classroom. This allowed me to complete both formal and informal observations as needed, with few restrictions. As the CT, observations of the PST were already an expected piece of my role (Borko & Mayfield, 1995). The ability to complete informal observations, on a daily basis, throughout the student teaching experience, added to my depth of understanding. These observations also provided a more complete picture of the PST's ethic of caring that develop during her experience. As the CT, I was able to respond to situations that arose much faster than a university supervisor, who is not always in the classroom (Borko & Mayfield, 1995). And, by being a constant and consistent part of the classroom, I developed trust with the students, and PST, which helped her to transition into her role as instructor (Stanulis & Russell, 2000).

Observations were embedded into the regular settings of the biology classes that I teach. These are to be considered "naturalistic observations" (Dohn, 2011) in that the observations were not intended to change any aspect of the classroom, where I was an

active participant and observer. The observations were recorded as field notes during each of the 5 formal observations. After completing the observation, I reviewed, and expanded upon the field notes the same day for the best possible analysis of the classroom.

### *Interviews*

As I began to think about who would be helpful in determining whether or not the PST was developing caring teaching-learning relationships, I immediately thought of using the students that are part of the classes they will be teaching. It seemed appropriate that a voice from both sides of the relationship should be included in the study. However, the more I thought about my problem of practice and the understanding of the PST, I realized that the interview would best be done solely with the PST. The problem of practice is more about the perceptions and apparent understanding of the PST, not the actual relationships that develop.

Since there will be a relationship that develops between the PST and myself, it was important to set a rules and expectations for the interviews that I conducted (Horsdal, 2012). I used specific and semi-structured questions that allowed the PST to describe her life as it related to the student teaching experience (Horsdal, 2012; Appendix E, F, G). This strategy allows the interviewee to see the interviewer as a good listener, which I intended to be. By listening closely, I gathered as much information as possible to explain the thinking and understanding of the PST in the classroom as she built relationships (Kim & Schallert, 2011). In addition to careful listening, all interviews were recorded and transcribed, and the PST was allowed to read through them for another accuracy check or further clarification as needed.

### ***Journaling***

Both the CT and PST used journaling to add understanding in this research. As a research tool, personal journaling provided me with a picture of the implementation of the CTLSRs that the PST built in the classroom. The PST was required to journal her thoughts about the lessons that had been observed, and the interviews that followed. These were guided journals as she responded to specific prompts (Appendix H). Journaling allowed the addition of information to clarify responses, explain previous statements, process the relationship-building strategies that had been modeled, and provide the opportunity to continue processing how to develop CTLSRs.

Observation, journaling, and self-reflection were completed on the same days as PST interviews to allow for triangulation of the data (Hancock & Algozzine, 2011). Through the use of journaling, I was able to better process the events that I observed and reflect on what I had seen. This also provided consistency throughout the research, as I was able to compare my own thoughts and observations to the thoughts of the PST.

### ***Measuring Student Perceptions***

In addition to the observations of a preservice teacher in action, I took the views of the students into account as a piece of triangulation to provide additional validity to the case study. This was completed by using the “What is Happening in this Class” (WIHIC) (Appendix I), a survey tool that has been used nationwide to take a snapshot of a classroom environment at a moment in time. I also used a modified version of the Test of Science Related Attitudes (TOSRA) (Appendix J) to see the view of students towards science as they relate to caring (Dorman, 2003; Fraser, 1981; Holding, 2006).

The version of the TOSRA used in this study had been previously modified by Holding (2006) to focus on “science learning experiences at school or in the classroom and the adoption of scientific attitudes” (p. 9). In addition to this, the five-point response scale had been reduced to a three-point scale using the response alternatives of Disagree, Not Sure, and Agree, and all negatively phrased items were reworded in a positive manner (Holding, 2006). The more focused version of the TOSRA captured a student perspective that the WIHIC did not have while being completed in a limited amount of time.

The WIHIC was changed from its original form to meet the needs of classroom teachers (Dorman, 2003; Holding, 2006). The survey is divided into several sections that analyze the different aspects for the classroom including; Student Cohesiveness, Teacher Support, Involvement, Investigation, Task Orientation, Cooperation, and Equity (Fraser, 1981; Holding, 2006). Dorman, 2003, also argued "the findings of this validation exercise substantiate the WIHIC's structure, suggesting that the WIHIC can be used with a high degree of confidence by researchers and teachers" (p. 190). It was easy to look at my own work and to discuss with my preservice teacher how a class was going, in terms of the “feel.” However, to analyze the capabilities of the preservice teacher, it was important to include the viewpoint of the students with whom they are working. This was accomplished by using the WIHIC survey (Dorman, 2003).

### ***Previous Preservice Teacher Surveys***

In addition to the data that was collected within the classroom setting from working with a PST, another layer of information was added through the use of surveys for previous preservice teachers (PPST) that I had worked with prior to this research

(Appendix K). This survey tool allowed me to compare the responses of PPSTs to those of the current PST. The survey allowed PPSTs to describe their understanding of caring, if and how they showed caring in their own classrooms, and describe how they had seen caring strategies modeled by their CT.

### **Research Timeline**

The research timeline was divided into three phases (Table 3.2), based on the UNL student teaching handbook (2009). Each phase consisted of observations, student surveys, journaling, and a semi-structured interview protocol (Thompson, 2010). The first phase was orientation and observation for the PST while the CT modeled caring teaching-learning relationship building, teaching pedagogy, and content teaching. This phase, which lasted three weeks, at the beginning of the student teaching experience, included the first and second interviews with the PST. It also included the WIHIC and TOSRA student perception surveys.

During the second phase, the PST assumed the instructional role as the teacher. She also continued to develop relationships with students, used her teaching pedagogy, and taught the course content. In this phase, the CT journaled, completed formal and informal observations and personal reflections, and conducted a third interview with the PST. The WIHIC and TOSRA student surveys were administered for a second time.

In the last phase, the PST transitioned out of the instructional role as she reflected on the student teaching experience. During this phase, I conducted a final interview with the PST, continued my observations, and reflected through journaling. The WIHIC and TOSRA student surveys were administered for a third time.



Table 3.2 *Research Timeline*

	Preservice teacher role	Cooperating teacher role	Research tool
Phase 1: Weeks 1-3	1. Orientation and observation	1. Modeling caring teaching-learning relationship building  2. Teaching pedagogy  3. Content teaching  4. Journaling	Semi-structured interview with PST  WIHIC & modified TOSRA with students
Phase 2: Week 4 - 10	1. Assuming the instructional role  2. Developing relationships with students  3. Developing teaching pedagogy.  4. Content teaching  5. Journaling	1. Observation and journaling (reflection)	WIHIC & modified TOSRA with students
Phase 3: Week 11 – 13	Transition and final reflection	1. Observation and journaling (reflection)	Semi-structured interview with PST  WIHIC & modified TOSRA with students

### Data Analysis

I created documents from the notes for formal and informal observations, notes from each interview, transcripts from the interviews, reactions to interviews, personal reflection through journaling, PST journaling, and a survey sent to PPSTs. I also measured high school students' perceptions using the WIHIC and a modified version of the TOSRA. All personal notes and journals were completed as soon after the event as was possible.

Consistent with case study research as defined by Yin (2003), data were collected to investigate a phenomenon with the natural setting of a classroom using multiple sources of input. Data were analyzed individually, as they were collected, and then holistically. The latter was completed through the use of the QSR\*NVIVO software. This software program allowed me to analyze large amounts of information to be processed and examined for themes related to the research questions (Welsh, 2002). However, NVIVO was limited in its ability to compare the quantitative piece from student perceptions. This analysis was done separately and then compared with the emerged themes that were established.

### **Research Bias**

This study was ethnographic in nature since much of the data relied on extended interactions with the PST and students in the classes in a day-to-day basis (Hancock & Algozzine, 2011). As a practitioner researcher, the interactions that occurred within the classroom were designed to impact the understanding of the PST in building CTLSRs. Each of the relationship-building strategies that were selected for this study were determined by what I have had success with in previous years. While I do recognize that there are other relationship-building strategies that teachers may use (Goodwin & Hubbell, 2012), it was difficult to separate myself from the strategies that I felt were the most successful in my own teaching. To address this issue, I continually added to my own understanding of relationship-building strategies that PSTs used naturally. Through PST observations and PPST surveys, I also looked for additional strategies that each research participant described. Triangulation of data collected through multiple sources

—observations, interviews, student perception questions and surveys— also provided credibility to the research (Hancock & Algozzine, 2011).

## CHAPTER 4

### Results

This qualitative study focused on one PST who completed her student teaching experience with me during the fall semester of 2013. Data, in the form of surveys, was also collected from two other sources. First, biology students were surveyed using the WIHIC (Appendix I) and a modified version of the TOSRA (Appendix J) to capture the student view of the classroom and their attitudes towards science during the three phases of building relationships with a PST. Second, surveys were sent to the five PPSTs, who had completed their student teaching experience in biology with myself as the cooperating teacher in the past eight years of teaching high school biology. Of the five surveys sent out, three were returned, a return rate of 60%.

The following narrative — based on the observations, interviews, and journaling — contain stories about building CTLSRs during the student teaching experience. Participants' names have been changed, although gender identification has been preserved. Many of the other descriptive details have been generalized to provide as much anonymity as possible for participants, their students, and their school.

The purpose of this study was to answer the question: “Will a preservice teacher implement CTLSRs in her own teaching after observing a cooperating teacher model these relationships?”

## Becky

### Phase I: Orientation and Observation

Many of the preservice teachers (PSTs) that I have had the opportunity to work with are excited and nervous. They often appear unsure of themselves and this can lead to PSTs sitting in the back of the room and watching me, their cooperating teacher, from a distance, a safe distance where they can take it all in. Often, if they are not prompted to interact with students, they will have to be pushed into doing what they came to do, that is, teach. Becky was not that way. Becky came to my class three days before she was required to report to school. She had taken the past year off, away from her own studies, to work in a preschool and save money to continue her education at the university. Now, after working through her university undergraduate-program that included 60 hours of natural sciences, 30 hours of achievement-centered education, and 28 hours of professional education, Becky was down to her last 10 hours – student teaching. She was back to school for her final semester, extremely excited, and ready to use the many ideas she had about teaching.

Becky described herself as “23 [year old], female, a white girl from [a small town in the Midwest], small school, turning 24 in less than a month and ready to teach.” She shared her love of country music and country singers, lighting up as she described “Jason Aldean” and the concert that she would be attending soon. When I asked about her own high school experience, she immediately described two teachers that she had a connection with. Becky then went on to describe why she saw herself as someone who could connect with students, in her willingness to “do whatever it takes to bond with the kids.”

The excitement I saw in Becky at the beginning of her student teaching experience came out clearly in her voice and facial expressions. She wore a beaming smile, and she spoke confidently in her abilities to teach. The time she had taken off from school for work appeared to have helped rejuvenate and refresh her, and although she sounded anxious, Becky was ready to begin. She admitted that after taking time off to work, she wanted “to finish her schooling and find a teaching job of her own.”

### ***Role as the Cooperating Teacher and Guide***

At the beginning of the semester, as Becky joined my biology classes, she was able to take part in the first several days of school that I devote to welcoming the freshmen and sophomore high school students. The first week also serves to motivate students and get them excited about science. During this time, I use a presentation to introduce myself and my family to the class. Since Becky had come to school three days earlier than expected, she had the opportunity to sit down with me and discuss my first week’s lesson plans before school even started. I was able to share with her the ideas I had about how to start building relationships with students through the use of personal stories and my introductory presentation. After this brief conversation, she asked if she could show several slides about herself in the introduction as well. I immediately agreed to add several of her slides, so that we could introduce ourselves together when our students first started the year in biology.

The following week, on the first day of school, Becky and I stood in the hallway just outside of the room to welcome students as they came in. As we welcomed each student coming into the room, I was smiling with excitement at all of them. Together, we began the process of getting to know who our students were, using simple and friendly

greetings. When the bell finally rang, I introduced myself as “Mr. Biology” with as much true enthusiasm as I could muster, and then I started to describe some of the things we would be experiencing in the course. I shared pictures of the things I enjoyed outside of school including; pets, hobbies, adventures (which usually means fishing), summer work, summer research as it relates to biology, and old photos from my past. At the end of my introduction, Becky took some time to introduce herself as well. She showed the class the pictures of her husky, Salem, and talked about her love of animals. Next was a slide with her anticipated graduation date, the sports she enjoyed playing, and a story about her current job in a daycare. Becky then described her “Czech” background and life growing up on a farm. Lastly, she showed pictures of her family, including a favorite niece and nephew and told how she spoiled them. I was encouraged to see that when she spoke to the class, she was not timid; she spoke clearly, caught the attention of all our students, and did not stay behind the front desk.

At the end of our introductions, we gave our students the opportunity to share the same type of information about themselves as we continued to build CTLSRs in biology. I had students first write their name (and nickname), period for their science class, and something that helps them find success in their classes on the front side of a 3x5 card. On the backside of the card, I asked students the following “get to know you” questions that Becky and I had agreed on:

1. When I grow up, I want to...
2. I would never want to be a/an...
3. I want to learn about \_\_\_\_\_ in Biology.
4. What pets do you have?

5. Write any five things that are interesting about YOU. (This can be anything! including hobbies, interests, likes/dislikes...)

After giving the class ample time to think through what information they wanted to share, I collected the cards, so that Becky and I could use them during the first few days of school to learn about the students in biology. For the next four days, I started class by pulling out several student information cards to read them aloud, allowing each class to guess whom the mystery student was. This provided Becky and me the opportunity to learn about the interests of each of our students, their likes or dislikes, and especially their names. By reading the cards aloud, the students were able to connect to each other as well. During this time, Becky commented that using the cards and looking at the seating chart to put names with faces, “really helped her to understand who each of her students were.”

The next strategy that I use each year to develop strong CTLSRs is to pull out three different “scientific” objects and encouraged the class to play “What Is It?” In essence, this game helps high school students become excited about exploring biology. Each of the items I show is something that I have collected during the past 38 years of my life as a student, traveler, explorer, tourist, or teacher. At this point, Becky was at a disadvantage, since this was not a part of her own life or her teaching education. So, as I introduced each item, Becky observed how I was using the different objects to pique the curiosity of students, draw them into the class, and build excitement for learning the science of biology. While she did not bring in her own objects to discuss, she was able to observe students making connections to the class through their own background knowledge of the objects.



A favorite item is the tail from a stingray that is similar to the one that killed Steve Irwin, the Crocodile Hunter. As I showed the “scientific object” this year, the class was not immediately excited, as the tail itself is nothing much to look at. It is only about 6” long, 1/2” wide, and looks something like a long fingernail with a pointed tip and small barbs along both sides of it. However, as soon as an unassuming boy in the middle of the room guessed what it was, there was an explosion of interest and excitement that led to several stories by students who knew something about, or had an experience with, a stingray. I have enjoyed watching the connections that students make to the different “scientific” objects, and I was pleased to see that Becky appeared to be intrigued by the interest shown by students as well. Later, when Becky and I discussed the how I played “What Is It?” she made the statement about students feeling safe to participate during the game. “Students learn better when they’re in a safer environment. Where they are more comfortable, they’re more willing to express themselves and participate.”

As I continued to model relationship building techniques in the first few weeks, I found myself watching a student teacher that wanted to connect with her students as quickly as possible. After teaching a lesson on biomes and having students move to work in groups, I was able to quietly move to the edge of the room and watch as Becky began to interact with the 9<sup>th</sup> and 10<sup>th</sup> grade biology class on her own without being prompted to do so.

### ***Classroom Setting: Our Room***

The room in which we teach is much longer than wide and on the south side of the room there are two large windows that allow the room to be filled with sunlight. The outside street was busy, but it did not appear to distract the students in the class. At the

front of the room, a teacher lab and demonstration table sit directly in front of a large white board, projector, and screen (Figure 4.1). The table itself holds a computer and

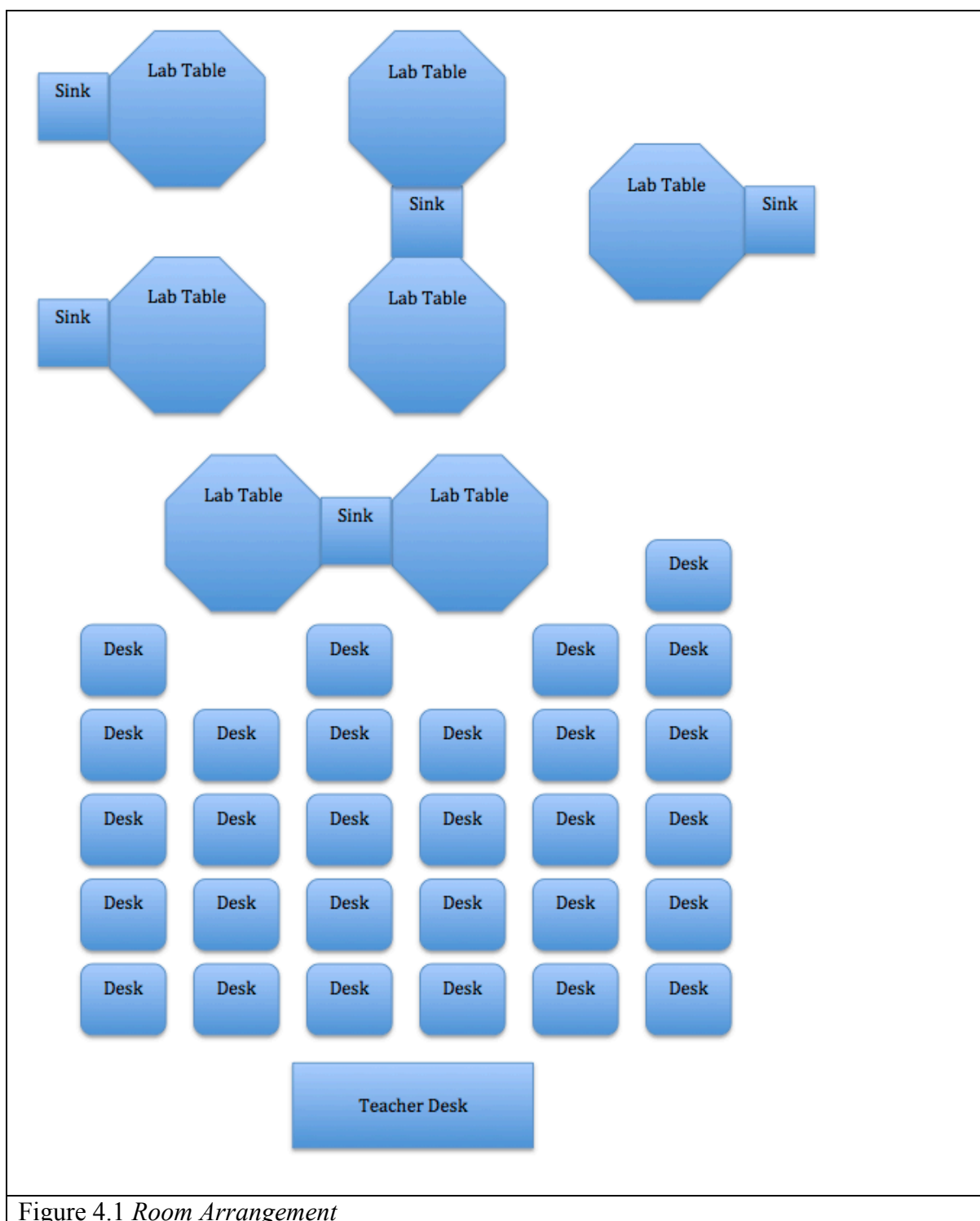


Figure 4.1 *Room Arrangement*

complicated series of wires and connection that allow the teacher to use several different multimedia tools. In the middle of the room, there are six rows of five or six desks, and there is not an empty seat in the room. Behind the desks, seven lab tables, shaped like hexagons, can accommodate 28 students easily, although there are not more than eight lab stools. It was at these tables that the groups of students worked on a review sheet that covered the various biomes that the class had been learning about.

After discussing group expectations with the class, they created a “biome chart, a map and description” to include on their poster. Students were dismissed to work on the large lab tables at the back of the room. It took only a few moments of looking around the room before Becky began to systematically move to each of the groups, weaving her way around and through the lab tables without being prompted or asked to do so. She was inquisitive as she approached each group, asking questions in her effort to connect with each student. I noted that “the students responded well to Becky as she moved from group to group. They were comfortable enough to answer Becky’s questions and even ask questions of their own when she reached their table.” As for her responses, I noticed that Becky was fairly comfortable with the material we were covering in class, and she was able to answer student questions as she continued to move around the room for the next 15 minutes. When she would reach a student group, they would pause and look at her, paying close attention to what advice or direction she had for them. I saw that “almost all of the students in the class appeared willingly to engage with Becky when she would join a group”:

B: Does anyone know how climate affects your biomes?

Student 1: No. Um. did we cover that already?

B: This is what Mr. \_\_\_\_\_ was just talking about.

Student 2: Oh, Yeah! Mr. \_\_\_\_\_ was saying that we needed to look at things like temperature and rainfall.

B: That's right, did you consider how they would affect the biome?

B: Or, Do you think that would be something to consider when deciding how biomes are different?

Student 1: Probably, but we haven't talked about it yet.

B: I bet that would be a good starting point for your conversation... (At this point, Becky walked away for the group to another, allowing them to continue answering the review questions together.)

During our plan period later that same day, we sat down in the back of the room together, so that I could interview Becky to better understand her views of the classroom interactions that I had observed. The conversation was very fluid, and Becky was eager to discuss how she planned to show her students that she cared for them: "I don't think it has to be anything big, just like asking how their day was, or how they feel about the lesson. You know, just asking them questions." She discussed how she had seen me moving around the room during a previous lesson and so she had felt comfortable doing the same thing. She described this as caring: "I tried to ask questions of each group about their biome, but I also wanted them to see that I was interested in what they were doing." Becky also described how she had experienced other teachers doing the same thing for her when she was in school, asking questions about her work and also about her life. This helped her to feel that the teachers actually cared for her and not just in teaching their curriculum. Becky also felt that she should connect with students as she first became

a part of the class, “I don’t want them (students) to be afraid of me, *cause*’ [sic] if they are, they won’t ask questions. I want them to see that I will listen to them so that the know it is safe to ask me questions later on.”

### ***Student Perceptions***

During each of the three phases, student perception was measured with two tools, the “What Is Happening In this Class” or WIHC, and a modified version of The Test of Science Related attitudes or TOSRA. During the preservice teacher orientation and observation phase, the goal was to provide a snapshot of the students in my biology classes at the beginning of a new school year.

In order to focus the data collected in the WIHC, and provide a snapshot of the classroom environment during each phase of the study, I looked at the average student scores in three areas that were the mostly closely related to CTLSRs: teacher support, involvement, and equity. Each area consisted of eight questions that provided a view of the student perceptions at that point in the school year. Each question was answered on a 5-point scale, 1 being “almost never” and 5 being “almost always.” In the area of “teacher support,” the average score was 3.84 (Table 4.1), with the highest scores for the questions, “The teacher helps me when I have trouble with the work,” and, “The teacher’s questions help me to understand.” In the “involvement” section, the overall average was 3.28, with the highest scores for the following questions: “I discuss ideas in class.” and, “The teacher asks me questions.” In the last section on “equity,” the average score was 4.34, with high scores for the questions, “I am treated the same as other students in this class,” “I get the same opportunity to contribute to class discussions as other students,” and, “I get the same opportunity to answer questions as other students.”

Table 4.1 *WIHIC Student Response Table for Phase I*

WIHIC Category	Student Response averages
	Phase I: Orientations and Observation (n=76)
<b>TEACHER SUPPORT</b>	
9. The teacher takes a personal interest in me.	3.40
10. The teacher goes out of his/her way to help me.	3.39
11. The teacher considers my feelings.	3.53
12. The teacher helps me when I have trouble with the work.	4.11
13. The teacher talks to me.	3.69
14. The teacher is interested in my problems.	3.26
15. The teacher moves about the class to talk with me.	3.23
16. The teachers' questions help me to understand.	3.84
<b>INVOLVEMENT</b>	
17. I discuss ideas in class.	3.53
18. I give my opinions during class discussions.	3.19
19. The teacher asks me questions.	3.4
20. My ideas and suggestions are used during classroom discussions.	3.1
21. I ask the teacher questions.	3.27
22. I explain my ideas to other students.	3.35
23. Students discuss with me how to go about solving problems.	3.27
24. I am asked to explain how I solve problems.	3.15
<b>EQUITY</b>	
49. The teacher gives as much attention to my questions as to other students' questions.	4.33
50. I get the same amount of help from the teacher, as do other students.	4.26
51. I have the same amount of say in the class as other students.	4.36
52. I am treated the same as other students in this class.	4.38
53. I receive the same encouragement from the teacher as other students do.	4.33
54. I get the same opportunity to contribute to class	

discussions as other students.	4.47
55. My work receives as much praise as other students' work.	4.25
56. I get the same opportunity to answer questions as other students.	4.42

In the modified TOSRA survey, which measured student enjoyment of science lessons, students were presented with ten questions that were answered with one of three choices: agree, disagree, and not sure (Table 4.2). The majority of students, (86.7%), agreed that “finding out about new things was important.” Students also agreed that they “look forward to science lessons” (67.8%) and that “science lessons are fun” (63.3%). The highest areas of disagreement were to the question, “we should have more science lessons each week” (46.7%), and to “I like talking to my friends about what we do in science” (25.6%). Students were the most unsure when asked if they were satisfied after a science lesson, (37.8%), and if they “like talking to friends about what we do in science” (35.6%).

Table 4.2 *Modified TOSRA Results for Phase I*

Modified TOSRA Individual Item Results for “Student Enjoyment of Science Lessons”	Phase I: Orientations and Observation		
	Agree %	Disagree %	Not Sure %
1. I look forward to science lessons	67.8	16.7	15.6
2. Science Lessons are fun.	63.3	22.2	14.4
3. I enjoy the activities we do in science	70	8.9	21.1
4. Science is one of the most interesting school subjects	53.3	24.4	22.2
5. I want to find out more about the world in which we live.	73.3	8.9	17.8
6. Finding out about new things is important.	86.7	5.6	7.8
7. I enjoy science lessons in this class.	66.7	16.7	16.7
8. I like talking to my friends about what we do in science.	38.9	25.6	35.6
9. We should have more science lessons each week.	22.2	46.7	31.1
10. I feel satisfied after a science lesson.	42.2	20	37.8

## **Phase II: Assuming the Instructional Role**

The second phase of the student teaching experience is for the PST to assume full instructional responsibility in the classroom. During this time, Becky had complete control of the classroom. She was responsible for planning the daily lesson based on district objectives, being aware of the unit curriculum, taking student attendance, managing student behavior, creating and grading assignments, and any other challenges or expectations placed on a full-time teacher.

For Becky, this appeared to be a smooth transition. From the beginning of the semester and with very little prompting from myself, she had worked on taking as much responsibility as possible, so that she would be able to feel like the classroom was her own. She had created her own routine, was using her plan time wisely, and interacted with students as often as possible by being prepared for each lesson. She was generally caught up on grading and provided feedback to students when necessary. Becky had assumed the role of educator and was now teaching four Biology classes, each with 25 to 28, 9th and 10th grade students.

### ***Role as the Cooperating Teacher and Guide***

My role as the cooperating teacher was also changing as I removed myself from the front of the room to allow Becky to continue creating her own space. During this phase, I continued to observe all lessons and offer feedback on her use of strategies, as well as reinforce what she was doing well. During this time, I would often stay at a small desk in the back of the room and exclude myself from entire class periods. Later, we would discuss how she felt teaching the curriculum, what content was a struggle, and how she felt about her success in creating CTLSRs.



On a daily basis, we continued to talk through each of her ideas for lessons and how they would meet the curriculum objectives in biology. I offered ideas when asked, and I also pushed Becky to look for new ways to teach and build relationships. I constantly pushed her to try different strategies, with the idea that if her lesson went horribly wrong, I would be there to help the class get back on track. This never happened for Becky, as her lessons were carefully thought out, and she prepared well in advance. She learned to write out questions for each level of Blooms' Taxonomy to help students fully understand the biology objectives she was teaching, so that we could discuss them before she taught the class.

During this phase, a university supervisor also came several times to observe and discuss her progress. These conversations provided the opportunity for the three of us to reflect on how well things were going, ideas for change, and support for continued progress. Becky was open to our thoughts and ideas, and this helped to create an atmosphere of trust as I handed her control of my classes.

### ***Classroom Setting: Becky's Room***

When I entered the classroom to observe her lesson, Becky was already greeting students at the door upon arrival. She would later tell me that this is how she cared for students. "I care for my students. I ask them how their day or weekend was. I greet them. I listen and adjust to them. I am considerate and have them in mind always." As students came into the class, they would make eye contact with her and exchange the greeting, some additional information, and some simply smiled as they came in. Becky also directed them to pick up a worksheet on a cart at the front of the room as they continued to their seats. When she moved from greeting to starting her lesson, it appeared

that she was very comfortable with teaching the class, since it was a smooth transition. She then began her introduction on using microscopes to an attentive class. The students were engaged and ready to go, and I saw that most were prepared, having picked up the single sheet of paper with a picture of a compound light microscope as they came in. The assignment required students to write the different parts of the microscope as they identified them on the actual scope in the lab. She explained: "In order for everyone to find living things in the pond water this Friday, we each need to know how to use the microscope. Today's letter 'e' lab will help prepare you for just that." There was no groaning in the class, and they appeared to be willing to work with her to understand the components of the microscope to prepare for the upcoming lab.

At two different times, while Becky was working with different table groups, the noise level increased to a point where she was no longer comfortable with it and she addressed the class firmly by saying, "Let's keep the conversations focused on the assignment and lower our voices a little, so that other groups can get their work done." Although the reaction did not occur instantaneously, the class responded well to her direction, and the noise level decreased to where she felt that the students were focused on the task at hand. Then she continued to move around the room to address more of the students' questions. Later, as I interviewed Becky about what had happened in class that day, I asked "What do you think will hurt relationships with students the most?" She responded by stating, "I know sometimes when you are really firm with them (students), like when there's a deadline and they don't meet it, you might have to give them a zero. They get turned off by that and they don't like it." She realized that there was a line that

she struggled with: in that she had to hold students accountable for their education while also developing CTLSRs.

That afternoon, as we sat and talked about how the lesson had gone, it struck me that I, as the cooperating teacher, had the responsibility of taking all of the book knowledge that a PST comes to my class with and guide them towards what would actually work in the classroom. Most of Becky's responses were brief and to the point, based on what she had learned in a university course somewhere. She knew that "Students learn better when they're in a safer environment where they're more comfortable. They're more willing to express themselves and participate." I noticed that she appeared nervous, in an excited way, and seemed to think about what the "right" answer was before she would speak, rather than describe what she would do or had done already. As she continued to answer the questions I had about relationships, she began to build confidence in how she spoke and what she said. It also seemed that Becky had thought through who she was as a teacher as she described the important qualities of CTLSRs: trust and safety. She was not hesitant when she stated, "That [students] trust you and they are able to come, ask you any questions that they have, feel safe with you, and things like that."

### ***Building the Relationships***

As Becky assumed the instructional role and the biology classes became hers, I observed the CTLSRs that she continued to build. During this phase, I was encouraged to see that she did not stop using the relationship building strategies that had been modeled in Phase I of her student teaching experience. The following stories include student examples where Becky found success in building relationships with her students.

*Ethan*

When Ethan entered the room, he ignored Becky's greeting, obviously angry at something and went straight to a lab table near the back of the room. Ethan was autistic, prone to angry outbursts, and he would often explode towards other students when he was having a bad day. The seat in the back was usually a safe place, since the special education co-teacher would also sit at the back of the room to encourage Ethan to calm down, but today she was gone. Knowing this and knowing how Ethan might respond to the co-teacher's absence, Becky made a point to catch him again before the class started to try and determine if he would be okay to stay in the room. She asked him if "today will be a good day" to which he responded with a firm, "I'm fine." This response often meant that he wanted to be left alone for a little bit. Becky backed off at this point, relieved that he acknowledged and spoke to her, and she went back to the front of the room where she could begin the class. Though the next 50 minutes was filled with lots of fidgeting and mumbling at different times, Ethan made it through the entire period without being removed from the class, something of a rarity when he was having an off-day.

As Becky later described, the relationship she was working to build with Ethan was to "try to make him feel good, you know, like when I ask him how his day is. I can tell especially since, unlike in the beginning of the school year, he will usually come up to me and ask me questions." Having worked to create a relationship with Ethan, she had immediately noticed that he was having an off-day, and that it would require a little more effort on her part to connect as he brushed past her. Still, having been able to connect with Ethan on some level, Becky was happy that he stayed for the entire class. "And that

makes me feel good because in the beginning, I remember that he did not like me, and I could tell because he would do his little stuff where he would say things behind your back and even though he doesn't like when other people do it to him. I'm just trying to make an effort so that way he knows I care about him and I'm concerned for him, his overall well-being, whether he does well (in Biology) or not."

Becky had recognized the change in Ethan's attitude toward her had taken place one day in the absence of the co-teacher when the class had gone outside to work on a project. "I think it helped when Ms. Mardel (Sped teacher) wasn't always there to work with him because he was spending a lot of time with her but not anybody else in the classroom and so I think it helped. I worked with him all period that day. We talked about his pet rats and other things... that was the Ah-ha moment that (the relationship) really started to build." Becky had made a connection with Ethan that day, and it appeared that he now trusted her enough to come for help or ask questions.

### *Katie*

Several times throughout the day, I observed girls talking to Becky privately between classes. Katie was one of these girls. As she entered the room, Becky noticed that something was not quite right and asked how her day was going. It was clear in the conversation that followed that Katie had developed a trust in Becky that allowed her to confide when there was a problem outside of school that was impacting her day. Becky later described the moment as an example of the successful relationships she was building. She described the moment excitedly as she processed what had happened.

"Like today with Katie. Well, her mom talked about divorce or something and today her dad had court. So she talked to me a little bit about that and then her

mom was supposed to be calling. Well, she didn't know if her mom was going to be calling her, or calling the school to talk to her and figure out what was going on about that. And so she was just letting me know what was going on, and I was like 'yeah, you know, if she calls that's fine.' I would rather have her know now (so she can focus). Anyways, the office called, so I just had her step out and talk to her mom and then she was fine. I thought that was good that she had told me about what was bothering her. Since before, remember, she hasn't talked, like, anything about it to us, and so I mean, I thought that was good that she had today."

Becky went on to describe some of the problems Katie's family had been having at home and how working with her after school to improve on several make-up tests had led to Katie coming to trust her more and more, to the point that she was letting Becky know some of the intimate details about how her home life was affecting her in school. "I mean, her and Shelley actually have been talking to me a lot about other things, and they were showing me a lot of photos. I think the project has helped, because they were showing me funny pictures that they had been making for the project."

### ***Building Walls***

*Tara*

"Some of them, they just have this wall built up, that they don't want anybody in." Becky was describing some of the frustrations that she was feeling about the relationships she was struggling to build. She would argue that most of the kids in her class were fairly easy to connect with in some way. Students would usually respond to her positively, but there were a few examples of students "building walls" which created

more difficult situations in which to connect with them. These students were often reluctant to interact with teachers and other classmates in positive ways. They might sit quietly with little or no interaction in class, ignore instruction, fall behind in class, and usually have no motivation to be successful in school. When this happened in our biology classes, Becky had to rethink how to build CTLSRs. With Tara, she had worked consistently to always interact with the student, even without a response. She was able to joke with Tara and to get her to laugh; this happened rarely. But in the end, Becky felt that she was making some progress, from the initial cold feeling she had felt from Tara. “I feel that Tara has a huge wall built up. She doesn't like school, doesn't want to be here, doesn't really care, she's just doing what she has to do to get by.” Becky understood that some relationships might take more to build than others. “I think sometimes it [the wall] crumbles. You know, it has its moments. Like when you can get her to laugh that helps her too. I mean she's [talked to me] a couple times, you know about her grades and stuff that she is missing. I guess sometimes you can tell she's..., she's paying better attention, you know, she's more focused, sometimes...”

### *Quentin*

When Quentin walked into the room, he brushed by Becky without saying hello. She kindly turned and said, “Good morning, Quentin; how is your day going?” The look on his face was one of frustration as he continued to his seat after a brief, “Hey,” in response. Undaunted, Becky went back to greeting students as they came into the room. “Good morning, Lara. How's it going?” Lara replied with something about it being a “great day” and also continued into the classroom. The greetings and responses continued

for the next two minutes of the five-minute passing period, before the minute bell sounded, and Becky walked back to begin instruction.

Most of the students had seemed to respond well to Becky as she welcomed them to the morning biology class, returning her greeting and smiling at her as they came in. Later, when I interviewed her about how the day had gone, I asked if she had “any other frustrations with relationship building?” After pausing for a moment to contemplate this, Becky responded by saying, “I mean, some of them you can tell you just can't crack them.” But then she went on to talk about Quentin, “You know, like finally, I think we're starting to get something more with Quentin. Like now, I think that it's helping that he's having problems, since I started to help him a little bit more.” Becky had realized that not all relationships would come easily and as Quentin struggled with school and other issues at home, the simple “Hey” was more of a response that she had seen in the past. He was finally responding to her daily greetings, and his trust was beginning to build through working with him outside of the class period. It was no secret that Quentin did not like school, teachers, parents, or the administration. He had previously commented on some consequence for lack of attendance as being “bogus,” but he now appeared to be warming up to Becky enough to return the greetings.

### ***Student Perceptions***

After my PST assumed the instructional role in the classroom, the WIHIC and TOSRA were again administered to measure the perceptions of students. My focus on the WIHIC data was again placed on the three areas that were the most closely related to CTLSRs; teacher support, involvement, and equity (Table 4.3). The average score of “teacher support” was 3.94, with the highest scores for the questions, “The teacher helps



me when I have trouble with the work” and “The teacher talks to me.” The average score in the area of “involvement” was 3.78, with the highest scores for the questions, “I discuss ideas in class,” “I ask the teacher questions,” and “I am asked to explain how I solve problems.” In the area of “equity,” the average was 4.40, with the highest scores for the questions, “My work receives as much praise as other students’ work,” “The teacher gives as much attention to my questions as to other students’ questions,” and “I get the same opportunity to answer questions as other students.”

Table 4.3 *WIHIC Student Response Table for Phases I & II*

WIHIC Category	Student Response averages	
	Phase I: Orientations and Observation (n=76)	Phase II: Assuming the Instructional Role (n=71)
<b>TEACHER SUPPORT</b>		
9. The teacher takes a personal interest in me.	3.40	3.84
10. The teacher goes out of his/her way to help me.	3.39	3.87
11. The teacher considers my feelings.	3.53	4.01
12. The teacher helps me when I have trouble with the work.	4.11	4.24
13. The teacher talks to me.	3.69	4.11
14. The teacher is interested in my problems.	3.26	3.68
15. The teacher moves about the class to talk with me.	3.23	3.76
16. The teachers’ questions help me to understand.	3.84	4.06
<b>INVOLVEMENT</b>		
17. I discuss ideas in class.	3.53	3.84
18. I give my opinions during class discussions.	3.19	3.79
19. The teacher asks me questions.	3.4	3.73
20. My ideas and suggestions are used during classroom	3.1	3.7

discussions.		
21. I ask the teacher questions.	3.27	3.99
22. I explain my ideas to other students.	3.35	3.7
23. Students discuss with me how to go about solving problems.	3.27	3.72
24. I am asked to explain how I solve problems.	3.15	3.84
<b>EQUITY</b>		
49. The teacher gives as much attention to my questions as to other students' questions.	4.33	4.43
50. I get the same amount of help from the teacher, as do other students.	4.26	4.37
51. I have the same amount of say in the class as other students.	4.36	4.34
52. I am treated the same as other students in this class.	4.38	4.39
53. I receive the same encouragement from the teacher as other students do.	4.33	4.41
54. I get the same opportunity to contribute to class discussions as other students.	4.47	4.37
55. My work receives as much praise as other students' work.	4.25	4.46
56. I get the same opportunity to answer questions as other students.	4.42	4.43

In the modified TOSRA survey, which measured student enjoyment of science lessons, the majority of students, (85%), again agreed that, “finding out about new things was important.” Students also agreed that they “look forward to science lessons” (81.7%), an increase of 13.9% (Table 4.4). There was a decrease of 5% that felt “science lessons are fun.” The highest areas of disagreement were to the question, “we should

have more science lessons each week” (45%), and to “Science is one of the most interesting school subjects” (26.7%). Students were the most unsure when asked if they were satisfied after a science lesson, (40%), which was a slight increase of 2.2% from the first phase. The other area of highest uncertainty was for the statement “I like talking to friends about what we do in science” (41.6%)

Table 4.4 *Modified TOSRA Results for Phase II*

Modified TOSRA Individual Item Results for “Student Enjoyment of Science Lessons”	Phase II: Assuming the Instructional Role		
	Agree %	Disagree %	Not Sure %
1. I look forward to science lessons	81.7	8.33	10
2. Science Lessons are fun.	58.3	16.7	25
3. I enjoy the activities we do in science	76.7	8.3	15
4. Science is one of the most interesting school subjects	55	26.7	18.3
5. I want to find out more about the world in which we live.	68.3	11.7	20
6. Finding out about new things is important.	85	3.3	11.7
7. I enjoy science lessons in this class.	73.3	8.3	18.3
8. I like talking to my friends about what we do in science.	35	23.3	41.6
9. We should have more science lessons each week.	23.3	45	33.3
10. I feel satisfied after a science lesson.	48.3	11.7	40

### Phase III: Transition and Final Reflections

In the final phase of the student teaching experience, the PST is transitioning out of the classroom and the CT is resuming more responsibility once again. During this time, Becky decided to continue teaching each of her biology classes as she had become very attached to them. She was also excited to graduate and find her own school to work in and her own class to teach. Some days, Becky spent time in other classes within the science department. There were 10 other teachers for her to observe, and she was especially interested in watching a chemistry class in action, since this was another area that she aspired to teach.

Usually the end of the semester for the local university occurs about a week before the end of the high school semester, and this was the case this year. As Becky transitioned out, she had finished teaching the unit on “Cells” and had prepared her students for the transition to genetics, as well as her own leaving. For several students, this was an especially sad time, since they had connected so well. Katie was one of these students, and she had written an especially nice note to Becky, thanking her for all of the extra time that they had spent together outside of class. Other students felt the same way; they were excited to see their PST as she was searching for her own job; and they were sad to see her go.

### ***Role as the Cooperating Teacher and Guide***

At the end of the student teaching experience, it usually becomes very clear if the PST was able to build CTLSRs during her time in my class. As I begin to resume the teaching responsibilities and the classroom becomes mine again, the overall climate of the class shows if the PST connected with the students. In classes where few student relationships are built, students will often ask throughout the semester, when the PST will be leaving, or when I will be teaching again. This can happen with any PST, but it occurs much more frequently when CTLSRs are not established with many students in my classes. With Becky, not a single female student had asked these questions, and only two males had. For the most part, the students were sad to see her go. This student attitude showed the success she had in creating CTLSRs.

During the transition period, I still taught very little, since Becky wanted to be experience the classroom as much as possible. We had worked well together, so it was an easy transition for me. She had constantly spoken with me about her lesson plans and

strategies, so we were usually on the same page with her instruction. The last two weeks of our time together felt natural, as we continued to co-teach in the classroom, and when she did finally finish, it felt smooth and appropriate.

***Classroom Setting: Becky's Room***

In my final observation of Becky, it was clear that she had developed the skills necessary to teach on her own. The students were responding to her well, and she was comfortable in leading them through investigating biology. She had also developed a weekly routine that students looked forward to. Each Thursday, Becky encouraged her classes to bring in “science in the news,” which could be anything science related that had piqued their curiosity with the added incentive or grade points to keep them searching. This time a young lady, named Isabella, had watched an episode of *Stan Lee's Superhumans* and wanted to share this with the class. Isabella painted a vivid picture of a man frying an egg on a metal skillet by wrapping his body in electrical cable that was plugged into an electrical outlet. As she did this, the class was almost immediately in an uproar, begging Becky to show the clip, so that everyone could see what Isabella was describing. As the clip began playing on the projector screen, the announcer described his journey to India in search of a man who had tried to electrocute himself. He found, in the process, that electricity did something different when it passed through his body. The excitement in the class grew as the Indian man powered different kitchen appliances with the electrical current passing through his body.

By allowing students to bring many different articles/videos/stories into the class for “science in the news,” they appeared motivated and excited about connecting content to their lives. While the news did not always connect to directly to the lesson, Becky was

able to use the opener to grab the attention of the class as she continued on with her own video on cellular respiration. This video was not as exciting as “Superhumans,” but the class was motivated and they worked together on the viewing guide that they had been given. During the video, Becky stopped frequently to capture the ideas being presented, so that her students would understand her notes. At one point, as she stopped the video, several students started to laugh out loud and when questioned about what was going on, they giggled, saying something about the video being older than their teacher. Becky laughed with them, and it was apparent that they had referred to me.

### ***Building the Relationships***

#### *Zane*

In the beginning of the semester, Zane was one of the students “building walls.” When it came to relationships, it had been difficult for Becky to gauge where they stood with one another. Often times, Zane did not know when his joking around was too much. He was often able to catch the attention of the entire class with his humor and derail a lesson. When this occurred and Becky confronted him, he would shut down, get angry, and leave the room if he was too upset. This had gone on for most of the time that Becky had been teaching, and she often discussed with me the frustrations she had. It was especially frustrating, since she wanted him to do well in the class. She knew that he struggled with school in general, so she was working really hard to build a CTLSR with him; it seemed that whenever a relationship might be close, Zane would back off and the cycle would start again. Most of the time, the grade was not of a huge concern, since he would easily pull a “B,” but he appeared to be disengaged most the time and Becky wanted more for him.

When the class started watching the “Stan Lee’s Superhumans” clips, something changed. While Becky was never able to put a finger on exactly what had happened in Zane, it was clear that things were different. Rather than little to no positive participation in class, Zane’s interest appeared to grow and so did his attitude towards biology. During the cellular respiration video, he was in a particularly good mood. Becky laughed as she described a positive experience she had with him that day, “Zane was just being, like completely, you know, Zane. He was like messing around and then he came and sat in the computer chair up front ...and like paused the movie, you know, messing around and everyone just thought it so hilarious, it was so funny.” Rather than reacting to the behavior of Zane’s, Becky laughed with him and was able to use the moment to laugh with the class as well. By responding in this way, less time was lost in the lesson, and she was able to move forward instead of working through a greater disruption.

Much of the way in which Becky responded to the negative behavior by Zane came from working with him throughout the semester, and it had not been easy. There had been many days when Zane had to leave the room, when tempers flared and it was easier to separate him from the class. At this point, near the end of the semester, Zane had come to see Becky as a safe teacher. He was not yet ready or able to discuss some of the things outside school that were affecting him, but he had been able to stay in class most days with simple redirecting and making light of the situation instead of pushing his buttons. As we talked about how this had changed, Becky described how Zane has calmed down quite a bit from the beginning of the year. She acknowledged that there were probably many different variables that had impacted this change that were outside

of her control. She also acknowledged her own attitude towards building a relationship with him through small interactions. She felt like they had made a difference as well.

### *Liz*

Throughout the semester, Becky used the flashcards that students had created at the beginning of the semester in a few different ways. She would use them to form groups, call on students randomly for answers, and remember some of the interesting facts they had described themselves with. Near the end of her student teaching, Becky pulled Liz's card to have her answer a question, and found that she had written her favorite food as "Jalapeno Popcorn." Becky had never heard of "Jalapeno Popcorn" and her curiosity was piqued.

When we came to class the next day, Becky started with a story. "Last night I went to the grocery store on the way home, and I saw the Jalapeno popcorn that Elise had told us about, and I just had to try it!" When she went on to describe how good the popcorn had been, Liz sat there in her desk smiling and finally said, "I told you it was good!"

These types of interactions are key to building CTLSRs, since they allow PSTs to see how they can acknowledge students as individuals. This also builds trust between the PSTs and their students when they see the caring attitude come out. While it would have been easy for Becky to forget reading the card and move on, she instead made a point of connecting with a student and, in turn, to solidify another relationship.

### ***Student Perceptions***

In the last phase of the study, transition and reflection, the WIHIC and TOSRA were administered for a final time after the PST had concluded her experience and left



the classroom. My focus on the WIHIC data was again placed on the three areas that were the mostly closely related to CTLSRs: teacher support, involvement, and equity (Table 4.5). The average score of “teacher support” was 3.83, with the highest scores for the questions, “The teacher helps me when I have trouble with the work” and “The teachers’ questions help me understand.” The average score in the area of “involvement” was 3.72, with the highest scores for the questions, “The teacher asks me questions” and “I am asked to explain how I solve problems.” In the area of “equity,” the average was 4.17, with the highest scores for the questions, “I get the same opportunity to contribute to class discussions as other students”; “I am treated the same as other students in this class”; and “I receive the same encouragement from the teacher as other students do.”

Table 4.5 *WIHIC Student Response Table for Phases I, II & III*

WIHIC Category	Student Response averages		
	Phase I: Orientations and Observation (n=76)	Phase II: Assuming the Instructional Role (n=71)	Phase III: Transition and Reflection (n=59)
<b>TEACHER SUPPORT</b>			
9. The teacher takes a personal interest in me.	3.40	3.84	3.72
10. The teacher goes out of his/her way to help me.	3.39	3.87	3.77
11. The teacher considers my feelings.	3.53	4.01	3.82
12. The teacher helps me when I have trouble with the work.	4.11	4.24	4.05
13. The teacher talks to me.	3.69	4.11	3.91
14. The teacher is interested in my problems.	3.26	3.68	3.66
15. The teacher moves about the class to talk with me.	3.23	3.76	3.78
16. The teachers’ questions help me to understand.	3.84	4.06	4
<b>INVOLVEMENT</b>			

17. I discuss ideas in class.	3.53	3.84	3.75
18. I give my opinions during class discussions.	3.19	3.79	3.63
19. The teacher asks me questions.	3.4	3.73	3.86
20. My ideas and suggestions are used during classroom discussions.	3.1	3.7	3.70
21. I ask the teacher questions.	3.27	3.99	3.55
22. I explain my ideas to other students.	3.35	3.7	3.72
23. Students discuss with me how to go about solving problems.	3.27	3.72	3.61
24. I am asked to explain how I solve problems.	3.15	3.84	3.94
<b>EQUITY</b>			
49. The teacher gives as much attention to my questions as to other students' questions.	4.33	4.43	4.07
50. I get the same amount of help from the teacher, as do other students.	4.26	4.37	4.14
51. I have the same amount of say in the class as other students.	4.36	4.34	4.02
52. I am treated the same as other students in this class.	4.38	4.39	4.28
53. I receive the same encouragement from the teacher as other students do.	4.33	4.41	4.28
54. I get the same opportunity to contribute to class discussions as other students.	4.47	4.37	4.33
55. My work receives as much praise as other students' work.	4.25	4.46	4.26
56. I get the same opportunity to answer questions as other students.	4.42	4.43	4.25

In the modified TOSRA survey, which measured student enjoyment of science lessons, the majority of students, (88.7%), again agreed that “finding out about new things was important” (Table 4.6). Students also agreed that they “enjoy science lessons in this class” (74.2%). The highest areas of disagreement were to the question, “we

should have more science lessons each week” (37.1%) and to “Science is one of the most interesting school subjects” (21%). Students were the most unsure about the statement, “I like talking to friends about what we do in science” (37%); although, there was an overall increase in the number of students that now agreed with this at 41.9%. The other area of highest uncertainty was for the statement “I feel satisfied after a science lesson” (32.3%); however, this statement also had an increase of 12.6% from the first phase of this study.

Table 4.6 *Modified TOSRA Results for Phase III*

Modified TOSRA Individual Item Results for “Student Enjoyment of Science Lessons”	Phase III: Transition and Reflection		
	Agree %	Disagree %	Not Sure %
1. I look forward to science lessons	67.7	19.4	12.9
2. Science Lessons are fun.	62.9	21	16.1
3. I enjoy the activities we do in science	72.6	11.3	16.1
4. Science is one of the most interesting school subjects	59.7	21	19.3
5. I want to find out more about the world in which we live.	79	8.1	12.9
6. Finding out about new things is important.	88.7	6.5	4.8
7. I enjoy science lessons in this class.	74.2	16.1	9.7
8. I like talking to my friends about what we do in science.	41.9	21	37
9. We should have more science lessons each week.	32.3	37.1	30.6
10. I feel satisfied after a science lesson.	54.8	12.9	32.3

### ***PPST Surveys***

As a teacher in a large public school that works well with the local university, there are many opportunities to have PSTs in my classroom each year. In the past eight years, I have had five PSTs come to work with me in biology and learn how to build CTLSRs. In order to determine if there were commonalities in what they had learned to do with their own students, it was necessary to include their responses in my data collection. Three of the five surveys sent to PPSTs who had worked with me in the past eight years were returned. I used their responses to look for the same levels of

engagement in CTLSRs and determine if my PPSTs had transitioned to independent teaching with these strategies in their own classrooms. Throughout their responses, there were similarities to what I found in the interviews, journals, and observations of Becky, as well as connections to the student perceptions in each phase of the student teaching experience.

### **Emergent Themes**

#### **Caring is important to the success of high school students in science courses.**

By recognizing the importance of caring in our teaching, we allow ourselves as teachers to place a focus on building CTLSR in our classes. When teachers acknowledge the importance of relationship building, as it relates to success in the classroom, they look for ways in which to make connections (Table 4.7).

From the beginning of our conversations together, Becky made it clear that being a caring teacher was important to her own educational thinking. She described caring as “wanting the best for (students), to learn the material you know and the life lessons that go along with it.” In her own words, Becky showed that she wanted to connect with students at a deeper level than content knowledge, she wanted to impact their lives as well. Later, as Becky journaled about her initial experiences, she also wrote that caring meant to “take an interest in students’ lives, and activities by asking them questions to understand who they really are.” She had recognized the importance of taking personal interest in the lives of students was also a part of caring. “I have always been caring, now I am realizing how to use it...” Since Becky already saw herself as a caring individual, it was important that she also realized how she was doing this on a daily basis with her

students. When this happened, she was more deliberate in how she encouraged and fostered the CTLSRs she was building.

In addition to my observations of Becky, each of my PPSTs also wrote about the need to be caring. Their responses included a connection between CTSLRs and deeper academic understanding, motivation, and a positive classroom environment, thus recognizing that caring relationships are greater than the relationships themselves. These connections also pointed towards high student productivity that can develop due to the teacher actively engaging students.

Table 4.7 *Caring is important to the success of high school students in science courses.*

Data Source	Evidence supporting the theme
PST	<p>Studies have shown that students learn better from teachers that they have made a connection with. And, my overall goal is for my students to learn what I am teaching them.</p> <p>[Caring is important] because I want to build relationships with my students in order for them to be better people, like in the community and in my classroom.</p>
PPSTs	<p>A: It is important for me to be a caring teacher because I feel that deeper academic understanding is the result of the trust built in a caring relationship.</p> <p>B: Building positive relationships with students is an extrinsic motivator for pushing them to apply themselves and to strive to succeed in the classroom.</p> <p>C: Of course! If the students see that each and every one of them matter to you then they are more likely to be motivated to do well for you because you care. This is conducive to a positive classroom environment.</p>
Student perceptions (mean score by phase)	<p>The teacher considers my feelings. (3.52, 4, 3.81)</p> <p>The teacher takes a personal interest in me. (3.39, 3.81, 3.68)</p>
CT	<p>As we discussed what a caring teacher looked like after her lesson, Becky described how even though she was a caring person, after talking about it with me, she had come to realize that it was more important than she thought previously.</p>

### **We show we care by using strategies to develop relationships**

It is often difficult to show that we care for every student. Teachers do not always relate with each student, and it takes an active attitude to build CTLSRs from the ground up. This can be a difficult proposition, especially when students are “building walls.” Becky described her own style as, “trying to be more lenient and kind, instead of being that mean teacher that nobody likes. Because I want to build relationships with my students, in order for them to be better people, like in the community and in my classroom.” In her realization that caring had an impact in the life of a student beyond her own classroom, she acknowledged the idea that some students may respond better to certain attitudes from teachers than others.

The PPSTs also described how they cared for students by showing interest in student lives, providing individual attention, encouraging students, and “checking-in” with students on a daily basis (Table 4.8). In addition to recognizing what they did specifically to show that they cared for students, other responses were laced with additional research-based relationship-building strategies such as greeting students, using humor, engaging all students in class.

Table 4.8 *We show we care by using strategies to develop relationships.*

Data Source	Evidence supporting the theme
PST	<p>I ask them how their day or weekend was. I greet them. I listen and adjust to them. I am considerate and have them in mind always.</p> <p>I know their names.</p> <p>I try to be more lenient and kind you know, instead of being that mean teacher that nobody likes, because I want to build relationships with my students in order for them to be better people, like in the community and in my classroom.</p>

PPSTs	<p>A: I show that I care for students by respecting them as individuals and taking care to never admonish them in front of the class for things that can be addressed privately. Also, showing interest and concern for each student as an individual.</p> <p>In addition to learning about the student, a caring relationship stems from a teacher giving a student frequent, and individualized attention and encouragement during class</p> <p>B: I stand outside of the classroom in-between classes and greet students as they walk in.</p> <p>Asking them about their personal lives and sharing stories about myself. Additionally, by sympathizing with them.</p> <p>C: I get to know their interests, show interest in how they do in the course work, check-in on them as they work individually or in groups. Be open-minded to student ideas. I also feel that contacting students' parents is a way to show you care about them because it helps the parent know what is going on the classroom.</p>
Student perceptions (mean score by phase)	<p>The teacher helps me when I have trouble with the work. (4.08, 4.24, 4.05)</p> <p>The teacher gives as much attention to my questions as to other students' questions. (4.29, 4.42, 4.05)</p>
CT	<p>Becky does a great job greeting students at the door when they arrive at class. I feel like she thinks this is important enough that she is always ready for a class so that she can use this time to work on her relationships.</p> <p>As Becky went from group to group, I saw that most of them (students) responded positively to her asking questions and checking for understanding.</p>

### **The students that see I care trust me**

Each PST acknowledged that building trust contributed to the interactions that they had with students. One PPST felt, “that deeper academic understanding is the result of the trust built in a caring relationship.” Another stated that trust was connected to the

respect that was earned as well. When I asked Becky about the student interactions she was having during our conversation, she would excitedly describe how students in all of her classes would “come up to me” for help or advice that was “not just science related.” As she interacted with students, students trusted her enough to share information that they might not with someone else. By developing a CTLSR with Katie, Becky was able to earn her trust. Another PPST described a student with dyslexia that had come for help once his trust was earned. The encouragement that came about due to this trust resulted in an increase in the student’s academics.

Other ways that my PPSTs used to develop trust included creating a safe learning environment and listen to the needs of their students. As trust was gained, each PST felt that there was an impact in the student’s academics. Trust was built in different ways, but it stemmed from the CTLSRs that teachers build with their students (Table 4.9).

Table 4.9 *The students that see I care trust me.*

Data Source	Evidence supporting the theme
PST	<p>Where the student and teacher have created a bond, this bond is often based on trust. This relationship creates a good learning environment for the student, one of which success is associated with.</p> <p>Humor is an easy way to get students to trust you and feel comfortable around you (teachers).</p>
PPSTs	<p>B: It is important for me to be a caring teacher because I feel that deeper academic understanding is the result of the trust built in a caring relationship.</p> <p>After learning about a student’s dyslexia I was much more understanding of his desire and need to have tests read to him, I feel that this student could tell that I cared about and understood his disability which seemed to cause him to trust me more and as a result care more when I did offer encouragement and academic advice.</p>



	<p>C: Caring teaching-learning relationships are when the teacher and student form open lines of communication. There is a sense of trust and respect in both directions.</p> <p>Students trust and respect me by showing me their motivation and high performance in their course work.</p>
Student perceptions (mean score by phase)	<p>I give my opinions during class discussions. (3.19, 3.79, 3.61)</p> <p>I ask the teacher questions. (3.27, 3.94, 3.56)</p>
CT	<p>There are now several girls, I had not previously connected with, who have been coming to Becky for help with the coursework. After school, I overheard one of talking with Becky about a personal issue, and although I am not certain about what they spoke about, it appeared that they trusted her with the info.</p>

### **Teachers who care make themselves available to help students**

All PPSTs surveyed acknowledged the need to be available to students outside of the classroom (Table 4.10). As the second respondent wrote, “You have to adjust your schedule for some students, because of outside factors sometimes. And in doing so, you have to be available for that student.” Teachers may often find that students need additional time to understand concepts, especially when they are pulled away from class due to illness, sports, or other school-related opportunities. When students are absent, or in need of additional instruction, the time that is required often falls outside of the school day. This time lends itself to students seeing themselves as valuable, when teachers show they care.

Becky made herself available to students before and after school, even when it was difficult with her own work schedule outside of student teaching. As a result of her own busy schedule and the need to instruct students who wanted or needed additional help, Becky developed a program that provided set times to meet. Any student who

scored less than 70% on a test had to schedule a time to come in and talk through the problems that they were having with the material. During this time, students would come in and work one-on-one with Becky before scheduling a time to complete the retake.

When she first started the retake program, it was met with some resistance, but as students became more comfortable with the structure and additional support, the number of willing students increased, as did their motivation, when they felt successful on the retakes.

The time that teachers spend with students outside of the regular class-time is also an opportunity to show personal interest in the lives of students. Becky wanted to “take an interest in (student) lives” which fell beyond the curriculum she was teaching. The interactions that she had due to the time spent out of class helping students, allowed her to show this interest and that she genuinely cared for each person in her classes. She felt that by building CTLSR in this way, she was trying to do “what’s best for them to be successful within and out of the classroom.” The PPSTs felt the same as Becky in their desire to connect with students and thus make themselves available to them. Each PPST respondent described how they made themselves available as a necessity for student success. They had each seen that their time outside of class was valuable and needed by a variety of students.

Table 4.10 *Teachers who care make themselves available to help students*

Data Source	Evidence supporting the theme
PST	<p>When you start (the student teaching experience) you are mostly doing observing and you are walking around and helping students, so I just was going around making myself available to them.</p> <p>I make myself available to my students, that way I am always here for them, and want them to succeed. I find it’s a lot of the</p>

	<p>simple things that end up building those relationships, and students really appreciate them.</p> <p>I take an interest in their lives. I try to make sure I'm available to all my students.</p>
PPSTs	<p>A: I remind students of work that needs to be completed to improve their grades. I was available to help them outside of class.</p> <p>B: You have to adjust your schedule for some students, because of outside factors sometimes. And in doing so, you have to be available for that student.</p> <p>C: I make myself available before and after school for students who may need extra assistance.</p> <p>Another aspect of caring teaching-learning relationships is for the teacher to make contact outside of the classroom. This can be done through attending school activities.</p>
Student perceptions (mean score by phase)	The teacher goes out of his/her way to help me. (3.39, 3.86, 3.75)
CT	<p>Even though Becky has described how important it is to be available to students outside of class time, I am worried that with her work schedule, she will not be as accessible as I hope.</p> <p>Becky has been very accommodating to all of her class before and after school. I am so happy to see that she has really made her schedule work to help students when they have questions.</p>

### **Humor: Being funny and having fun**

Becky and two other PPSTs recognized that one way to engage students was to keep the classroom atmosphere somewhat light by using humor (Table 4.11). They realized the need for humor as a way to “break the ice” and to show students that they were relaxed and approachable. One of the areas of growth that Becky discussed was the idea of being “funny” in the class. After observing how I would joke around with the

students to get them to laugh, she mentioned how this could help them be more successful in class. “Because you’re so funny, it’s easier for you. I think it’s easier to build relationships with students, because you’re making them laugh, so they are feeling more comfortable with you.” Becky also saw that this strategy was difficult for some people to master. “I mean that's (making students laugh) hard, harder for other people, but when you make people laugh, generally they are happy and excited so it's easier to build relationships I think.”

In the *Transition and Reflection* phase, I was able to see that as Becky became more and more comfortable with her students, she was laughing with them more and more. Rather than being a full time comedian, Becky was able to use the laughable and funny moments that can occur naturally in a group of 28 kids. In the previous example of Zane and the older video clip, Becky was able to laugh with him, and the rest of the class, as they poked fun at the video and yet were able to still come back to focus and learn from what the message was. While Becky did not view herself as humorous as myself, she was coming to see that by being intentional she could use those moments to build CTLSRs with her students.

Table 4.11 *Humor: Being funny and having fun*

Data Source	Evidence supporting the theme
PST	<p>Humor is an easy way to get students to trust you and feel comfortable around you (teachers). Which allows students to be open when asking questions and participating in class.</p> <p>I think the humor thing, that you do, that defiantly helps and like, I can see a way to crack those kids that have that hard wall built up.</p> <p>You can use humor, to relate to students, and get them laughing and get their attention easily.</p>

	<p>I don't think I'm naturally funny, but I want to use humor to build connections with students.</p> <p>I just take interest with them, we laugh and joke around about different things.</p> <p>Maybe, I'll have a joke of the day, everyday, you know, something to get them started or laugh, to get their attention.</p>
PPSTs	<p>B: He (CT) showed me how important it was to use humor to break the ice in a classroom.</p> <p>C: I try to be funny, to show my students that I am relaxed and that I am approachable.</p>
CT	<p>I like to joke around with students, making the classroom atmosphere light. After talking with (Becky) I realized that she was picking up on this and attempting to use humor as she taught also.</p> <p>She doesn't seem to see how she uses humor.</p> <p>During the video, Becky joked with the class about how old it was and they all laughed with her about how it was probably around when I was a kid.</p>

### **Teachers provide students with individual attention to build relationships**

Another way to encourage students is to be more involved in their lives, outside of the classroom (Table 4.12). In a high school with 1,500 students, there are many different ways for this to occur. Due to the large number of sports and clubs that are offered each year, there are many opportunities for students to get plugged into a group. These opportunities also provide teachers and PSTs a way to connect with their students outside of the classroom. As Becky and I discussed her plans for building CTLSR, she acknowledged that she had not yet spent any time going to events outside of the school day, although she was regularly available immediately before and after school for students that needed help. However, she did recognize the need for this type of

connection in order to reach even more of her students. “I think it would be easier for me to do that once I am actually in a school, in a job position. I remember when I was playing sports, it meant a lot when other teachers were there to support you.” Becky could easily describe the teachers who had gone out of their way to watch her at different sporting events and how she had connected at a deeper level with those teachers. It was clear that she wanted the same for her own students, but that having a job on top of student teaching, her time was limited to how much she could do this. Her hope was for the future when she would not be quite as busy and would have the more time outside of the classroom to build CTLSRs.

Table 4.12 *Teachers provide students with individual attention to build relationships*

Data Source	Evidence supporting the theme
PST	<p>When you start (student teaching) you are mostly doing observing and you are walking around and helping students, so I was going around making myself available to them... so that they would already start to be comfortable with me.</p> <p>(I) Take interest in their lives, activities and ask them questions.</p> <p>I greeted them (students), also had nice farewells each day. I asked them about their personal lives and took an interest in them. Also I think helping students after school really helped me make better connections with them.</p> <p>... and I took an interest in some of the things they had to say.</p> <p>Also, showing interest and concern for each student as an individual is another way I show care.</p>
PPSTs	<p>A: ...attempting to know each student as an individual so that the teacher can have some level of understanding of not only the student’s academic world but also their struggles as a student of life.</p> <p>B: Also, showing interest and concern for each student as an individual is another way I show care. And by asking them</p>

	<p>about their personal interests, sharing my personal stories and by taking the time to give them individualized attention.</p> <p>I learned the importance of getting personal information from the students at the beginning and revisiting this throughout the school year. I use the name card with information at the beginning of each semester as a way to decipher more connections to a student. I additionally revisit these cards to find more ways to connect to students throughout the year.</p> <p>C: I get to know their interests, show interest in how they do in the course work, check-in on them as they work individually or in groups. I also talk to the student about their interests and hobbies outside of the classroom.</p> <p>Make lessons so they spark student interest.</p>
Student perceptions (mean score by phase)	<p>The teacher takes a personal interest in me. (3.39, 3.81, 3.68)</p> <p>The teachers in interested in my problems. (3.27, 3.67, 3.65)</p>
CT	<p>Becky likes to ask questions when she greets her students in the hallway and after class. Questions that are not necessarily related to the curriculum. Questions more about the relationships than the content.</p>

### Finding success building CTSLRs in science courses

During each of the three phases, *orientation and observation*, *assuming the instructional role*, and *transition and reflection*, Becky felt that she made CTSLRs with her students. The stories of Ethan, Katie, Tara, Quentin, and Zane illustrate a few of the many relationships that she built within her classes as she taught biology, a required course that many students do not necessarily want to take. Becky recognized that these relationships did not come easily, and that she needed to be deliberate in the actions that she took to develop them. In our final interview, we discussed this change:

Becky: “Okay, Well in the beginning, I know I basically just did caring, you know, being kind. Now, there is a lot more that goes into it that you don't really think about, some things you just kind of do automatically, too. Still, you're being flexible, you're working with them, you're taking time out of your day, still kind, you're friendly and all that stuff, but there is a lot of other things that you don't think about.

Mr. S: I heard you say "automatically," what do you do automatically now that you didn't do before?

Becky: I guess I was doing it automatically. I just didn't think of it as caring. For them, I guess is more what I mean, I am more conscious of if now.

Mr. S: In terms of things you say or body language? Can you elaborate on that?

Becky: I'm trying to be, you know, more open, and more willing to make time for them (students). So, you're kind, friendly, flexible, willing to adapt and change.

Mr. S. How are you flexible?

Becky: if students are having conflicts you're willing to work with them in order to get things done in a timely fashion, but still being concerned about what's going on in their lives.

Another form of success was that the PST realized the importance of the relationships that they had built. When they were able to see this, the PPST made additional connections to other student behaviors including; a willingness to ask for help, students seeking teacher interaction, students asking questions, grades, and the desire to have the same teacher again (Table 4.13).



Table 4.13 *Finding success building CTSLRs in science courses*

Data Source	Evidence supporting the theme
PST	<p>They talk about their lives outside of the classroom and have shared some information that they wouldn't generally share with just anyone.</p> <p>Students interact with you, and tend to have better grades.</p> <p>They (students) come up to me and ask me questions, and it's not just science questions.</p> <p>There are a couple of things you can look at to determine if you are connected with you students. One is grades. Another way is how they respond to you in general. Do they respect you or do they not care? Another is to see how many times they choose to take your class for other courses, or if they want to be your TA (teacher assistant).</p>
PPSTs	<p>A: I know I'm successful when students feel comfortable acknowledging that they don't know something and are willing to ask for help. That level of trust shows me that a relationship is forming.</p> <p>B: Success is when students seek me outside of normal class time whether it be for issues or just to talk.</p> <p>C: I know that I have developed successful relationships in the classroom when the students feel comfortable asking me questions, are excited to see me at their school activities. I have had a few write me a thank-you for attending. And when the students trust and respect me by showing me their motivation and high performance in their course work.</p>
Student perceptions (mean score by phase)	<p>The teacher goes out of his/her way to help me. (3.39, 3.86, 3.75)</p> <p>The teacher talks to me. (3.67, 4.11, 3.91)</p>
CT	<p>I have been impressed with the number of students that come in for additional help after school. It appears all the work building CTLSRs has paid off.</p> <p>Each time I have observed Becky, I have seen that students respond well to her. Although there are a few students who have not connected with her and are ready to have me teaching again, the number of students that she has built CTLSRs with is growing and I feel like that would rather have her stay than allow me to teach again.</p>

## CHAPTER 5

### **Discussion**

The purpose of this study was to determine if a PST would implement CTLSRs after observing a CT model relationship-building strategies. The implementation of CTLSRs in classrooms continues to be a problem for PSTs in the United States. Previous research has shown the need for teacher education programs to have a focus on modeling caring for PSTs (Goldstein & Lake, 2003). This qualitative single case study explored the relationship building strategies that PSTs could implement in their own teaching after observing the CT model them in the classroom.

Since 2000, research has been completed to show the many different ways that effective teachers can help students improve in school (Stronge, 2007). Additional literature has supported the idea that improving teacher-student interactions might influence better student outcomes, including higher test scores (Gehlbach, Brinkworth & Harris, 2011). As student assessment in science has been required since 2007 under the No Child Left Behind Act of 2001, it is important that teachers consider the many different ways in which they can impact student learning, including caring. It has also been argued that positive relationships may be the single most important factor in promoting youth development (Pianta & Allen, 2008). One specific way this may be accomplished is through the development of CTLSRs. If we acknowledge the need for improving teacher-student interactions by building relationships, then we must also recognize that CT training is needed in the area of caring, so that our PSTs are prepared to build CTLSRs as well.

The underlying conceptual framework that guided this study shows four different relationships that could be created within a classroom during the student teaching experience (page 24). For my purposes, the four relationships are: 1) CT and PST, 2) CT and students, 3) PST and students, and 4) CT, PST and students. As the practitioner-researcher in this study, my role as the CT was to guide the PST to a better understanding of relationship-building strategies, by modeling, observation, personal interactions, and discussion. While this relationship helped form the foundation for a successful student teaching experience with the PST, this was a secondary piece to the study. The focus of this research was on the relationships created between the PST and students after the PST observed the CTLSRs that the CT built with students during the *observation and orientation* phase of the study.

During the *observation and orientation* phase of the research, the PST acknowledged the importance of CTLSRs in her own educational experience and the need to create them with her students. While her initial understanding of caring was more focused on being “liked” by students, by the end of her student teaching experience, the PST acknowledged that CTLSRs were connected to student engagement and motivation. Her realization that these relationships helped to increase student engagement and motivation was consistent with the research that shows the need for using researched-based relationship building strategies to engage students (Erwin, 2003; Garza, Alejandro, Blythe & Fete, 2014; Goldstein & Lake, 2003).

The need for PSTs to learn how to build CTLSRs with each student in their classes has already been recognized, as has the idea that PSTs will learn this as they watch their CTs teach (Goldstein & Freedman, 2003). However, less is known about the

use of relationship-building strategies that PSTs include in their own teaching after observing and discussing them being modeled. This was the area that the research questions of this study sought to address. The purpose of this qualitative single case study was to increase the understanding of what is known about PST implementation of CTLSR during the student teaching experience. In order to accomplish this, a PST randomly assigned to the CT, and primary researcher, was recruited to participate in this study during her student teaching experience. The study consisted of multiple interviews, observations, and personal journals from the PST and CT. Additionally, PPSTs were surveyed who had completed their student teaching experience with the same CT in the past eight years. The subsequent data was then analyzed for the case study and cross analysis with surveys was done. As a result of the single case study and PPST surveys, seven themes emerged: 1) Caring is important to the success of high school students in science courses, 2) We show we care by using strategies to develop relationships, 3) The students that see I care trust me, 4) Teachers make themselves available to help students, 5) Humor: being funny and having fun, 6) Teachers provide students with individual attention to build relationships, and 7) Finding success building CTLSRs in science courses. These themes help answer the research questions that guided this study. The research questions are as follows:

1. In what ways, if at all, will a preservice teacher implement caring teaching-learning student relationships in his or her own teaching after observing a cooperating teacher model these relationships?
2. What qualities does a preservice teacher prioritize concerning caring teaching-learning student relationships?

3. What do previous preservice teachers see as key elements of being caring teachers?
3. What do previous preservice teachers do to show they care?

This study contributes to the understanding of how PSTs develop CTLSRs with high school students, after observing relationship-building strategies by their CT. The PST and PPSTs that participated in this study described the different ways in which they developed CTLSR. This chapter will address the findings that arose from the single case study, participant surveys, and the relevant literature. Following that will be a discussion of the implications of this research. The chapter will conclude with an overview of the strengths and weaknesses of the study and final conclusions.

**Finding 1: Caring teachers go beyond the curriculum and develop caring teaching-learning student relationships.**

A prevailing finding in this research was the idea that being a caring teacher was important to all of the participants and education in general. This finding was a thread woven throughout each of the interviews, observations, journals and surveys, and reflects the underlying principle for the work that was done in this study. The PST and PPSTs in this study each stated that caring was important in their interactions with students. The participants also described caring as important to academic success and motivation for students in science courses (Table 5.1). Consistent with previous research, each participant also discussed the need for caring in relation to the motivation and engagement of students (Daniels, 2011; Strean, 2011; Garza, Alejandro, Blythe & Fite, 2014).

Participants in this study were able to articulate the ways in which caring was important to their own teaching. While each teacher recognized their own desire to build CTLSRs, they each described how this was done within the realm of their own classrooms, with their own strategies. The idea that not every caring teacher relates to students in the same way has been seen in previous research that supports the need for caring teachers (Noddings, 2006).

*Table 5.1 Participant response showing care related to student engagement*

Participant	Response showing the need for caring.
PST	This relationship creates a good learning environment for the student, one of which success is associated with.
PPST A	...studies have shown that students learn better from teachers that they have made a connection with. And my overall goal is for my students to learn what I am teaching them.
PPST B	...the teacher and student form open lines of communication. There is a sense of trust and respect in both directions. The teacher is able to spark motivation in the student while engaging them in course curriculum.
PPST C	Students will strive to give full effort and be their best selves.
PPST C	Additionally, building positive relationships with students is an extrinsic motivator for pushing them apply themselves and to strive to succeed in the classroom.

Numerous studies have shown the need for caring educators in our schools today (Erwin, 2003; Noddings, 2006; Smith & Schmidt, 2012). This need was not lost on the participants in this research as they consistently acknowledged the need to care, in their responses. Research has also highlighted the impact of caring teachers in the classroom through the use of various relationship-building strategies (Goldstein & Freedman, 2003). Many of the strategies used in this study had been previously modeled by the CT for each PPST as they completed his or her student teaching experience (Table 2.1). These strategies, addressed in the responses of the participants in this study, demonstrate the

caring attitudes they had towards their students and their willingness to build CTLSRs in their own teaching.

Another key realization of the PST that lends itself to this finding is the idea that building CTLSRs is not about whether or not teachers are “liked” by their students. Rather, importance of the relationship is about the students and their success in school. This realization did not come easily and it was not until the final interview that the PST discussed the change in her thinking about the importance of relationships. This idea is an important addition to what is needed in the education programs for PSTs as they learn to engage all students. As with any relationship, both parties can find meaning in the interactions that allow the bonds to build. However, in the case of CTLSRs, students are continuing to move through an educational track that gives each teacher a brief period of time to work with them. If this time is not focused on using a variety of strategies to increase student learning of content and engagement by caring, there is potential for a lack of student success (Frymier & Houser, 2000).

**Finding 2: Teachers with an ethic of caring take action to show they care.**

While each participant acknowledged that caring was important to the success of their students, it was the physical actions and relationship-building strategies they used, that showed how they cared. Without using specific actions and strategies in their teaching, the need to care is simply an ideal that teachers have. In this research, all participants affirmed their use of some relationship-building strategies to create CTLSRs. Although each participant response was different from the other, there was some continuity in how the PST and PPSTs showed that they cared for their students. This may show that although relationship-building strategies are being used in their

classrooms, the perception of how the teachers saw their own caring was not the same as the other responses. This idea adds to the research of Stronge (2007), which described, “caring” as a broad term that is shown with many different actions. If teachers perceive their own caring differently from each other, when using the same strategy, it may be necessary to provide additional education for PSTs, to clarify the use of relationship-building strategies. However, in this research, the following themes supported the need for action to show caring: 1) *The students that see I care trust me*, 2) *Teachers who care make themselves available to their students*, 3) *Humor: Being funny, and having fun*, and 4) *Teachers provide students with individual attention to build relationships*. Each of these supporting themes is addressed as it relates to the need for CTLSRs.

**Action means using the relationship building strategies that were modeled.**

### **Developing trust**

The PST and most PPSTs used the term “trust” in their responses to describe the relationships they had as caring teachers with their students. Trust, in this study, was characterized by the confidence that high school students placed in their teachers and the inclination to interact with them. The participants attributed this trust to student willingness to allow the creation of relationships. This theme supports previous research in which trust was found to be significant to developing caring relationships (Kim & Schallert, 2011).

When relationships were built from the beginning of the year, these teachers were demonstrating their own reliability as someone who cares. This idea complements the research of Noddings (2005) that described the need to persistently pursue ongoing relationships with students. By working to develop CTLSRs, the PST created a



classroom culture in which students went to her for help. WIHIC data for the “Teacher Support” section, (Table 4.5), showed there was some level of trust between the PST and her students. The PST and PPSTs also felt that trust was built by using several of the relationship-building strategies, which were modeled in this research. The strategies that they acknowledged contributing to trust included: using humor, having open lines of communication, getting to know their students, and listening. Using these strategies builds trust between PSTs and their students, which is consistent with the research findings on caring (Cook-Sather, 2009; Goodwin & Hubbell, 2013).

**Teachers who care make themselves available to their students.**

Becky utilized her time before and after school as well as during her planning period to meet with students that needed additional help with the biology curriculum. By allowing students to meet during these times, the PST created a classroom in which students knew her availability and were able to connect with her outside of the regular class time. Consistent with the research, she was able to build CTLSRs by providing this time to interact with students personally (Frymier & Houser, 2000; Goodwin & Hubbell, 2013). During the times that she met with students outside of class, she also found that students were willing to engage in conversations about themselves, allowing for time to connect beyond the curriculum. This finding adds to the work of Marsh (2012) who defined this interaction as “teacher approachability.” The PST, by allowing herself to be available to their students outside of class, was seen as approachable.

The time spent outside of class with students allowed Becky to work on building relationships. She was able to show students the interest she had in their lives as they worked on the course content. The finding of *teacher availability* corresponds to what

other researchers have found as a successful strategy in building CTLSRs (Garza, Alejandro, Blythe & Fite, 2014). By maintaining her availability as she assumed the instructional role and as she transitioned out of the classroom, students were familiar with her schedule and utilized this time often for additional help.

Each of the PPST participants also described ways in which they were available for their students outside of the regular class times as a way to show that they cared. In their responses, PPSTs showed this availability in their willingness to be flexible with student schedules before and after school. One respondent described this time as the way in which they built CTLSRs with their students. The accommodations of the teacher and readiness to spend time outside of the school day, contributed to the students awareness of how the teacher cared for them. This awareness may provide students an opportunity to strengthen their teacher relationships.

**Humor: Being funny, and having fun.**

The PST and some PPSTs described their attempts to make the learning atmosphere light, by using humor, or being funny, in the classroom (Table 5.2). Participants described different ways in which he or she felt this was accomplished. While Becky did not immediately recognize herself as naturally humorous, she did realize the need to keep the atmosphere light “to get students to trust you and feel comfortable around you”. Becky was also observed laughing with her students and creating a positive learning culture as she engaged with the class, evidence that she was able to connect on a meaningful level with students in keeping the learning atmosphere light. The realization that she could laugh with students without having to joke around all the time was important to her understanding of using humor in the classroom. Rather

than depending on her own abilities to joke around, she utilized the students in her classrooms and played on their strengths in using humor to lighten the mood. The use of student humor was not anticipated in the PST's ability to keep the mood light, but may have allowed her to create additional CTLSRs as she assumed the instructional role.

*Table 5.2 Example of coding used to produce theme*

Codes: Humor/Fun Number of quotes: 32	
Category	Sample quote
Humor	<p>He used humor to build these relationships with his students.</p> <p>Humor is an easy way to get students to trust you and feel comfortable around you [teachers].</p> <p>I can joke, we can joke about different things</p> <p>I think the humor thing, definitely helps. I can see a way to crack those kids that have that hard walls built up.</p> <p>Well humor is a good one [strategy] that I am comfortable with.</p> <p>Use humor to relate to students, and get them laughing and get their attention easily that way. It's an easy way to make connections</p> <p>I have a joke of the day, something to get them started or laugh, or I someone did a cool bulletin board with like a fact of the day thing, and like one of them was about like eyelashes, just like weird facts.</p> <p>He [CT] showed me how important it was to use humor to break the ice in a classroom.</p>
Fun (Having Fun)	<p>We had moments where we were obviously having fun and got to talk about our organelle wars.</p>
Being Funny	<p>Because you're so funny, it's easier, I think for you to build relationships with students because your making them laugh so they are feeling more comfortable with you.</p> <p>Even though they were joking around and thought it was funny, or...</p> <p>I think the project has helped because they [students] were showing me funny pictures that they had been making for the project.</p> <p>I try to be funny, try being the key word, to show my students that I am relaxed and that I am approachable.</p>

Additional data from the PPST surveys showed that they recognized humor as important, although it was unclear if regular attempts to use humor occurred. One of the two PPSTs who described how they had seen humor being modeled by their CT mentioned that, “I try to be funny, to show my students that I am relaxed and that I am approachable”. Data, showing the use of humor in the classroom in order to keep the atmosphere light, has also been recognized by Streat, (2011) as an action that supports student engagement.

### **Providing Individual Attention**

Individual attention is not in itself far removed from the other themes found in this research, it is important to address that each PPST and the PST provided attention to individual students differently. As the PST described near the end of her student teaching experience, giving students individual attention was a part of her role from the beginning of the semester. She described how making herself available during work-time in class, by moving from group to group, allowed students time to see that she was interested in how they were doing. By acknowledging the importance of making personal student connections to build CTLSR, the PST also recognized the need to provide individual attention from the start of the school year (Easton 2008; Mainhard, Brekelmans, den Brok & Wubbels, 2011). Additionally, the PST continued to provide individual attention throughout the semester by greeting students, asking questions, taking an interest in their student lives outside of school, and showing concern for each student as an individual. The use of these strategies to build CTLSR compliments previous research that has shown these actions to work (Erwin, 2003; Easton, 2008; Garza, Alejandro, Blythe & Fite, 2014).

PPST respondents also acknowledged the need for individual attention to build CTLSRs. The PPSTs described giving individual attention in ways that supported previous research, although each response corresponded to the ability of the individual PPST and responses differed. The research-based strategies that they used to provide individual attention included the following: getting to know their students, sharing personal stories, showing interest in the life of the student, and checking-in with students during work time (Erwin, 2003; Hopkins, 2008; Marsh, 2012; Goodwin & Hubbell, 2014).

Each participant described the strategies that they used to connect with students individually. They did this systematically, acknowledging several, though not all, of the strategies that had been modeled during their student teaching experiences. Similar to the findings of Goldstein & Freedman, 2003, it appears that each PPST and PST was paying attention to the strategies used to create CTLSRs and continues to use the same strategies in their own teaching.

**Finding 3: The end result for caring teachers is that they find success in relationship building.**

At the beginning of this study, CTLSRs were defined as the relationships that happen within the classroom between teachers and students and include strong feelings of commitment and responsibility that result in teachers investing time and energy into their students (Goldstein, 1999). Finding success in building CTLSRs is illustrated by the themes that emerged in this study. Since each respondent believed that *caring is important to the success of high school students in science courses*, they used strategies

to develop trust, make themselves available, used humor to connect, and provided individual attention to each student.

As described in their responses, each participant worked to create CTLSRs within their individual class settings through the use of the research-based relationship building strategies modeled by the CT. In support of this finding, the respondents described the interactions that occurred outside of the classroom as they made themselves available to student needs and questions, making time for personal interactions (Frymier & Houser, 2000; Marsh, 2012; Goodwin & Hubbell, 2013). These actions illustrate how CTLSRs can be created during many aspects of teacher-student interactions.

Additionally, the PST and one PPST also recognized that student grades improved when they had developed CTLSRs in the classroom. In the response of the PST, this realization was tied not only to the trust students had in her, but also to the developing respect they had for her as their teacher. Consistent with the research, the PST realized that student motivation to do well in class was related to the relationships she had formed during her student teaching experience (Garza, Alejandro, Blythe & Fite, 2014). The realization that success in building CTLSRs is related to student engagement and performance, rather than whether or not students will like their PST, is crucial to this study. In this sense, the formation of a caring identity within the PST led to an understanding of the need for students to develop CTLSRs to be successful (Kim & Schallert, 2011).

## Implications

### Implication for Practice

Since the initial implementation of this study, a change was put into action for the staff development of teachers in the school where the study was conducted. The current administration has begun to work with teachers in order to educate them about additional ways in which they can engage all students. This change has been, in part, directed by the work of Goodwin & Hubbell, 2014, who described methods of engagement in their book, *The 12 Touchstones of Good Teaching: A Checklist for Staying Focused Every Day*. In this book, the authors recognize several of the relationship-building strategies that were included in this research. The importance of the implementation of engagement training is two-fold as it relates to the present study: 1) Teachers need to develop a clear and concise understanding of what engaged students look like and which caring behaviors influence motivation, and 2) Since many of these teachers will likely have the opportunity to work with PSTs, they need training to be able to use and model these caring behaviors. The current focus of the school improvement team is to determine what engaged students look like and how to increase student engagement in the classroom. Similar to the findings of this study, the relationship-building strategies tied to the creation of CTLSRs are the same as those needed to engage all students (Garza, Alejandro, Blythe & Fite, 2014, Goodwin & Hubbell, 2014).

In connection with the findings of this study, in which PSTs were able to use relationship-building strategies modeled by their CT, the implications for this school district are much larger than a single case study. In this sense—a school district where over 2400 PSTs and practicum students find their home each year—there is likely

considerable need for district-wide implementation of student engagement strategy training for teachers who will be guiding PSTs through the student teaching experience.

### **Implications for Teacher Educators**

As 200,000 PSTs near the end of their teacher education programs each year in the United States, many will have had the opportunity to develop an excellent understanding in their content areas, while lacking the knowledge of how to build CTLSRs (Goldstein, 2005). This has the potential for setting PSTs up for failure if they are unable to connect with their students, facilitate student engagement, and motivate learning. This study has highlighted the need to develop caring PSTs through the student teaching experience, regardless of the information that they have obtained from their teacher education programs.

In the research done by Goldstein & Lake in 2003, they found that “the core of caring teacher education lies in the nature of the interactions between the teacher educator and her students” (p 441). The idea that teacher educators have a great impact on PSTs transcends each level and type of teacher education program across the United States as university students learn the different teaching strategies to reach their students with their course content. However, this study emphasizes the importance of the CT, rather than the teacher educator, in modeling the relationship-building strategies that research has shown successful. This does not mean that relationship building in methods courses is not essential and in fact done by methods instructors. However, as PSTs matriculate to the cooperating teachers classrooms, the CT’s influence and actions become the focus. Indeed, these strategies will likely vary by teacher and therefore cannot be duplicated completely for the CT in a methods class.



While I recognize the need for strong teacher education programs, this research has shown that additional information is needed to understand the importance of the CT as guide for PSTs. Since student teaching is a required piece of teacher education programs, great importance is placed on the shoulders of the CTs, as they may be the last chance for PSTs to learn how to build CTLSR in their classes (Rozelle & Wilson, 2012). With this importance in mind, there is a need for CTs to work closely together with university supervisors to ensure they are meeting the need of PSTs on a regular basis.

### **Implications for Future Research**

In the past several years, additional literature has supported the need to increase student engagement in schools to increase personal learning (Stipek, 2006; Goodwin & Hubbell, 2014). While this is promising, teachers may still feel the need to focus strictly on teaching content to reach the goals set forth by the NCLB act of 2001, instead of increasing engagement through relationships. However, the increased emphasis of the need to develop CTLSRs, in order to impact student engagement, is a promising light for the future. As the findings in this study suggest, the understanding of a PST to develop these relationships with their students, hinges on the CT modeling relationship-building strategies that the PST can use effectively on their own to do the same. Future research is needed in the area of CT modeling of caring behaviors, if we are to understand how they will be able to develop an ethic of caring in our PSTs. The ethic of caring in this study was attributed to previous relationships with teachers throughout the educational experience of the PST and through the relationship formed with the CT. While this supports the work of Noddings (1988), more research is needed to develop an

understanding of how personal identities might change if PSTs enter our classroom without an ethic of care.

Accepting that the outcome of this study was a positive view on the PSTs implementation of relationship -building strategies, several questions arose related to issue of caring. Specifically, will PSTs use relationship-building strategies to develop CTLSRs if their CTs do not model them during the student teaching experience? Does the creation of CTLSRs have different impacts at different grade levels? Could an understanding of the definition of CTLSRs impact the role CTs are willing to take on with their PSTs? These questions helped to guide my thinking as I looked through the developing themes. However, as I continued to process the data that came out of this study, there are three areas in which additional research could prove most beneficial: 1) the area of student perceptions, 2) PSTs that do not begin the student teaching experience with an ethic of care, and 3) How CTs use humor to create CTLSRs.

While the WIHIC and TOSRA were used in this study to capture a moment in time that allowed a glimpse of how the students viewed the class, student interviews could prove to be an invaluable asset to compliment this research. By interviewing students, researchers may be able to look for additional correlations between the research-based relationship building strategies used and the CTLSRs that are in the classroom. While this data will likely vary by region and school, it could potentially help to influence the direction that teacher education programs move towards in order equip new teachers with strategies that are successful.

When Becky first introduced herself, she clearly described herself as a caring individual who was willing to “do whatever it takes” to meet the needs of her students.

Her attitude in this sense helped her find success during the experience, since she was open to teaching strategies as well as relationship building strategies. This, in light of the focus of the study, played well with the hopes and expectations I had for the research. However, other researchers have found that this is not always the case, as some PSTs begin the student teaching experience with underdeveloped or partial views of caring (Goldstein & Lake, 2000). When this occurs, the PSTs may not develop an ethic of care within their own identities that will help them to develop CTLSRs with their students, should they be hired into the teaching profession. This legitimate concern should be included in future studies, so that teacher preparation programs might address the complex nature of building CTLSRs with the intent of creating more prepared teachers.

The last area that will benefit from future research is the use of humor to build CTLSRs. As I prepared to conduct a study in caring behaviors, I was aware that I used humor throughout my day and that it was a way in which I personally connected with my students. However, I was very apprehensive in modeling humor as a strategy that a PST would recognize and be able to use. After reading Strean's (2011) description of humor as being lighthearted in the classroom to improve teacher effectiveness, I decided to look into the use of humor more closely. This did not preclude me from the idea that the PST would use humor herself; however, I remained apprehensive and was surprised to see it as a theme with the PST and all PPSTs. While humor was recognized as important to the creation of CTLSRs, additional research could benefit our understanding of what types of humor are more effective than others. And since an audience, in this case different groups of students every 50 minutes, does not always understand humor, there is a need for PSTs to not only see humor being used by their CTs, but also time to practice using it

themselves. And while it is equally likely that not all PSTs view themselves as humorous, recognizing it is important through future research my help broaden our comprehension of its use.

### **Strengths and Limitations**

At the beginning of this study, one concern that I had was if the research would be compromised by the relationship between Becky and myself. As the practitioner researcher in the study, the impact of having a poor relationship with the PST could have had serious negative implications for the research. A negative relationship may have caused Becky to see relationships in teaching from a negative perspective and have less desire to use the strategies that were modeled during the student teaching experience. This, however, was not the case, and throughout the research, I found that I bonded well with Becky; together we had many conversations about the relationship building strategies I was using and how she could use them in her own teaching. I saw her willingness to try the strategies I was using on a daily basis, and this increased my trust in her to do well as a teacher. These fluid conversations also led to additional questions from Becky about various teaching strategies unrelated to CTLSRs. As these conversations occurred, I realized that our relationship was one of the strengths in the study. Becky allowed me to act as her guide through each stage of the student teaching experience and was willing to grow in her abilities.

Another strength of this study was Becky's desire to improve her skills as a teacher. In my estimation, Becky had no issues in her content knowledge, and I was comfortable in her teaching from the moment she was ready. Since I was unconcerned about her expertise in biology, I gave Becky full reign in the class early on in our time

together. This allowed additional time for her to practice the delivery of her lessons, as well as time working one-on-one with individual students as she developed CTLSRs. Unfortunately, this is not always the case with preservice teachers and while it was a strength in this research, additional opportunities to guide preservice teacher may have different results.

An additional strength of this study was that I have worked with several PSTs as the CT in biology over the past eight years, and I was able to connect with several of them to gather information through the PPST surveys. These surveys provide good insight into some of the strategies that PPSTs have used in their own classrooms upon finding their own teaching positions. Through these surveys, I was able to reflect on how I guide each PST to build CTLSRs with their students. However, these surveys were not without limitations, as they provided too brief a glimpse into how they were now connecting with their students. A positive supplement to this study would be to add additional interviews in which the researcher met one-on-one to ask more open-ended questions in which the PPSTs had more time to reflect on the experience that we shared. While the PST did recognize the change in her perception towards the idea of caring to be liked versus caring to increase student engagement, it was not clear in the PPST surveys that other teacher realized the difference during their student teaching experience. It could prove beneficial to ask more specifically how each of the relationship-building strategies modeled in this study were used by PPSTs, or what new strategies they found success with.

Aside from direct observation and interviews with the PST, the findings of this research are mostly limited to the self-assessments the PST and PPSTs did as they

responded to the questions posed to them in regard to their use of caring in their classrooms. In order to more fully develop a picture of the teaching strategies, and see how they are being used by PPSTs, it might prove beneficial to add to this research observation of each PPST in their own classroom settings to determine whether the strategies are being used or not.

Another strength of this study was the use of the WIHIC and TOSRA student data to support the idea of the PST understanding of caring and the use of CTLSRs in the classroom. I found that by focusing my attention on specific questions in these surveys that related to a caring teacher and positive classroom culture, I was able to see the benefits of building relationships in my biology classes. As anticipated, not all students felt the same connection with myself or with the PST in this study. In order to better understand the importance of CTLSRs, it may prove beneficial to further question students through the use of one-on-one interviews to understand more about this difference.

## **Conclusion**

The end of many teacher education programs culminates in student teaching experiences where PSTs “must synthesize everything they have learned about collecting or developing instructional materials, teaching a lesson, guiding small-group activities, establishing and maintaining order, and interacting with faculty and parents” as they partner with a CT to practice their skills (NCTQ, 2011, p. 1). In many situations, the focus is on the content knowledge of the PSTs and not on their understanding of how to build CTLSRs (Goldstein & Lake, 2003). In this research, my role as the CT and practitioner researcher was to model specific research-based relationship building

strategies that could later be used by the PST to develop her own CTLSRs. The purpose for developing these relationships is to encourage student engagement and motivation, which can lead to positive youth development and increases in standardized test scores (Gelbach, Brinkworth & Harris, 2012).

The PST who was studied for this research, and the PPSTs who were surveyed, each exhibited an ethic of caring and suggested the presence of several themes in their use of relationship-building strategies. In both specific and general ways, these teachers discussed the strategies they used which they had seen modeled in the classroom, portraying their understanding of how to build CTLSRs. Similarities in what the respondents described as key elements of caring teachers showed how they personally cared for their students.

## **Epilogue**

At the beginning of this research, I really had no idea where it would take me. I knew that I had an inner desire to continue my own education as I worked with students in science. I was still excited about teaching, but wanted to push to the next level and so I applied to join the Carnegie Project for the Education Doctorate. This led me to look more deeply at my own teaching than I had previously done. It was not easy. As I began to delve into the course readings and practice journaling, I found myself looking for themes in my own teaching that would guide me towards an area of research that I could focus on. Little did I realize at the time, that it would be the student teachers, and not my high school students, that would have such an impact on me that I completed my research with their understanding of caring at the forefront of my work.

This study has led to several changes in my own teaching career as I continue to work as a teacher and also as one of the continuous school improvement (CSI) team co-chairs. By demonstrating to my administration that I had the enthusiasm and determination to continue my own education with a focus on educating new teachers and CTs, they felt that it would be appropriate to help lead the school as we moved towards a new initiative, increasing student engagement. By selecting me to work with the CSI team, I have already been able to take my research to a different level. Specifically, the literature review that I completed prior to my research, led me to find works that supports many different relationship-building strategies we are implementing as a building to improve student engagement. As a teacher leader, I have been able to share what I have been learning with our entire staff at two different levels: one more intimately with the CSI team, and the other with the entire staff in our monthly meeting. Since there are already many teachers with a strong ethic of care, it is fitting that we practice the strategies that rely on our ability to build relationships with our students. Most importantly, the strategies are research-based with success in increasing student engagement, which allows teachers to show that they have an understanding of why they do what they do in their classes.

Another change that has taken place is my desire to continue working with practicum and PSTs in the future. It is necessary to explain that as I worked through my research, I found that although I enjoyed taking on the role of the CT, it was sometimes exhausting. Having looked closely at the work I do to influence the PSTs that come to my classes, I now have a reason to continue on that path, rather than look for another. I



encounter a certain joy in seeing a new teachers complete their student teaching experience successfully after all of their hard work and will likely continue to do so.

The last area that my research has had a strong influence in my own teaching career is at the district level. At each major step along the journey towards the completing of my doctorates, I have felt compelled to communicate some of the information I have found to people that work more closely with practicum students, PSTs, and would-be CTs than I do. That information included some of the findings I had in the literature review and also the preliminary stages preparing for my research that I shared as it related to what others were doing with PSTs and CT at the district level. This has also led to several additional conversations related to my research, which has helped me to realize how much bigger than my own class this study could become. And while I do not know where this will take me in the future, I am certain that I will continue to dedicate time and energy to helping prepare new and old teachers to become CTs.

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## **Appendices**

### **Appendix A**

#### **Informed Consent for Preservice Teacher**

#### ***Caring teaching-learning, teacher-student relationships in school.***

This is a mixed methods research study exploring the characteristics of caring teachers.

#### **Purpose of the Research**

The purpose of this study will be to research if preservice teacher implement caring teaching-learning student relationships after observing a cooperating teacher model these relationships. You have been invited to participate because you are over the age of 19, and are currently completing the student teaching experience.

#### **Procedures**

If you decide to participate in this study, you will participate in four one-on-one interviews with one member of the research team. The interview will take place at a time and location mutually agreed upon by you and the researcher. The first interview will take approximately 15 – 30 minutes, and you may take breaks during the interview as needed. The second and third interviews will take place after an observation and before you begin teaching the entire day and will be 15 – 30 minutes long. The fourth interview will take place after the observation and will be 15 – 30 minutes long. During the interviews, the researcher will ask you questions about issues that relate to your work as a caring teacher. The interviews will be audio recorded for later transcription and analysis. As part of the interviews, we will ask you to provide us with demographic and biographic information (e.g., age, employment). The researcher will also ask to observe you working with students for 4 – 5 hours on several different days.

#### **Risks and/or Discomforts**

There are no known risks to participants.

#### **Benefits**

There are no direct benefits to participants. Indirect benefits include insight for participants and readers of the study into what caring teachers do.

#### **Confidentiality**

All information collected from you will be kept confidential. Your name will appear only on this consent form and will not be associated with your demographic information form or with the audio recording made of interviews. Any identifying information will be

removed from your writing. Audio recordings will be transcribed by a member of the research team and then immediately destroyed. We will not use your name in any manuscripts or presentations resulting from this research. Instead, we will assign you a pseudonym. We may report the data in social science journals or talk about it at professional meetings or when teaching college classes, but we will not provide any identifying information about you. All research materials will be kept in a locked file cabinet, and we will destroy all research materials within three years of completing the analysis procedures. Given that this research is taking place in a public setting, there are limitations to confidentiality.

### **Compensation**

You will not be paid for this study.

### **Opportunity to Ask Questions**

Your participation in this study is voluntary. You have the right to ask questions and to have those questions answered. If you have any questions about your rights as a research participant that have not been answered by the investigator, or to report any concerns about this study, contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965.

### **Freedom to Withdraw From the Study**

You may decide not to participate in this study or withdraw at any time. Your decision not to participate or to withdraw will not harm your relationship with the researchers or the University of Nebraska – Lincoln. Your decision will not result in any loss of benefits to which you are otherwise entitled.

### **Documentation of Informed Consent**

You are voluntarily making a decision whether or not to participate in this 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.

\_\_\_\_\_ Check if you agree to be audio recorded during the interview.

Signature of Participant \_\_\_\_\_

Date \_\_\_\_\_

### **INVESTIGATORS**

Dan Shafer, Primary Investigator School (402) 436-1220

Jon Pedersen, Ph.D., Secondary Investigator Office (402) 472-4174

## Appendix B

### ***Participant Informed Consent Form***

#### ***Preservice teacher understanding and implementation of caring teaching-learning student relationships.***

##### **Purpose of the Research**

The purpose of this study will be to research if preservice teachers implement caring teaching-learning student relationships after observing a cooperating teacher model these relationships. You have been invited to participate because you are over the age of 19, and have completed the student teaching experience with Daniel J. Shafer.

##### **Procedures**

If you decide to participate in this study, you will participate in one survey that will take 20 – 30 minutes to complete.

##### **Risks and/or Discomforts**

There are no known risks or discomforts associated with this research

##### **Benefits**

There are no direct benefits to participants. Indirect benefits include insight for participants and readers of the study into what caring teachers do.

##### **Confidentiality**

Any information obtained during this study which could identify you will be kept strictly confidential. The data will be stored in a locked cabinet in the investigator's office and will only be seen by the investigator during the study and for 5 years after the study is complete. The information obtained in this study may be published in scientific journals or presented at scientific meetings but the data will be reported as aggregated data.

##### **Compensation**

You will not be paid for this study.

##### **Opportunity to Ask Questions**

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. Or you may contact the investigator(s) at the phone numbers below. Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965 to voice concerns about the research or if you have any questions about your rights as a research participant.

##### **Freedom to Withdraw From the Study**

Participation in this study is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the researchers or the University of

Nebraska-Lincoln, 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 participate in this research study. By returning the enclosed survey, you are agreeing to participate in this study.

**Name and Phone number of investigator(s):**

Daniel J. Shafer, Principal Investigator

Office: (402) 436-1302

Jon Pedersen, Ph.D., Secondary Investigator

Office: (402) 472-4124

## Appendix C

### Parent/Legal Guardian Informed Consent Form

#### *Preservice teacher understanding and implementation of caring teaching-learning student relationships.*

**Purpose of the Research:**

The purpose of this study will be to research if preservice teachers implement caring teaching-learning student relationships after observing a cooperating teacher model these relationships. Your child/legal ward is invited to participate in this study because they are currently enrolled in Differentiated Biology at Lincoln East high School.

**Procedures:**

They will be asked to participate in two surveys during three different sessions that will last 15-20 minutes each session. The first surveys will be administered during the first three weeks of school, the second during week eight, and the third during the 14<sup>th</sup> week of the semester. Surveys will be completed anonymously by students throughout the study. Students that do not participate will be allowed to read silently, study notes, or choose from a variety of course enhancing websites that will be accessible. Students will not miss any instruction time whether or not they choose to participate.

**Benefits:**

There are no direct benefits to participants. Indirect benefits include insight for participants and readers of the study into what caring teachers do.

**Risks and/or Discomforts:**

There are no known risks or discomforts associated with this research.

**Confidentiality:**

Any information obtained during this study which could identify them will be kept strictly confidential. The data will be stored in a locked cabinet in the investigator's office and will only be seen by the investigator during the study and for five years after the study is complete. The information obtained in this study may be published in scientific journals or presented at scientific meetings but the data will be reported as aggregated data.

**Compensation:**

You will not be paid for this study.

**Opportunity to Ask Questions:**

You and your child/legal ward may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. Or you may contact the investigator(s) at the phone numbers below. Please contact the University of Nebraska-Lincoln

Institutional Review Board at (402) 472-6965 to voice concerns about the research or if you have any questions about your child's/legal ward's rights as a research participant.

**Freedom to Withdraw:**

Participation in this study is voluntary. You and your child/legal ward can refuse to participate or withdraw at any time without harming your's and their relationship with the researchers, their teachers, the school in which has provided permission for the research to be conducted, the University of Nebraska-Lincoln, LPS, or in any other way receive a penalty or loss of benefits to which you or they are otherwise entitled. Also, their grades will not be affected by their participation or withdrawal from the research.

**Documentation of Informed Consent**

You are voluntarily making a decision whether or not to allow your child/legal ward participate in this research study. Your child/legal ward will also agree to be asked for his/her assent to participate in the study. Your signature certifies that you have decided to allow them to participate having read and understood the information presented. You will be given a copy of this parental/legal guardian consent form to keep.

**Name of Child to be Included:**

\_\_\_\_\_  
(Name of Child: Please print)

**Name & Signature of Parent/Legal Guardian:**

\_\_\_\_\_  
(Name of Parent/Legal Guardian: Please print)

\_\_\_\_\_  
(Signature of Parent/Legal Guardian)

Date

**Name and Phone number of investigator(s):**

Daniel J. Shafer, Principal Investigator	Office: (402) 436-1302
Jon Pedersen, Ph.D., Secondary Investigator	Office: (402) 472-4124

## Appendix D

### Student Assent Form

Mr. Shafer would like to invite you to take part in this semester long study. He is asking you because you are in his science class for the 2013-2014 school year.

**What the study is about:**

In this study Mr. Shafer will try to understand your attitudes and perceptions of a project-based, integrated approach to science education. This approach presents you with problems for you to solve. You will be given some background information and scientific content. You will then be guided through a process similar to what scientists and engineers go through when solving a problem. In the process you will build a project that solves the problem I give you.

**What he will ask you to do:**

He will collect data for this study in many different ways. You will be taking surveys so that he can find out your attitude towards certain things in the class. He will have you complete a questionnaire about how you feel about the class and the science course. Your parents have already been asked to give their permission for you to take part in this study.

**Risks and benefits**

There are no known risks to you. Your responses are confidential. Although Mr. Shafer may publish a summary of the results, your identity will be hidden. The information gained from this research will help Mr. Shafer better understand students' attitudes and perceptions towards science and the classroom environment when he is working with a student teacher. You do not have to be in this study if you do not want to. If you decide to not participate, you will still be expected to engage in all of the same learning tasks taking place in the classroom. Your instruction and expectations as a student will not be different from those students choosing to participate. No data will be collected from you, should you choose not to participate.

**Taking part is voluntary:**

If you decide to participate in this study, you can stop at any time. Choosing to participate or not to participate will not affect your relationship with your teacher or your grade in science class in any way. If you have questions at any time, please ask.

**IF YOU SIGN THIS FORM IT MEANS THAT YOU HAVE DECIDED TO PARTICIPATE AND HAVE READ EVERYTHING THAT IS ON THIS FORM. YOU AND YOUR PARENT WERE GIVEN A COPY TO KEEP.**

**YOUR NAME** \_\_\_\_\_

\_\_\_\_\_  
Your Signature (Subject)

\_\_\_\_\_  
Date

**INVESTIGATORS**

Dan Shafer, Primary Investigator School (402) 436-1220

Jon Pedersen, Ph.D., Secondary Investigator Office (402) 472-4174



## Appendix E

### 1<sup>st</sup> Interview Protocol

School:  
Teacher Code:  
Teacher's Subject:  
Date:

Introductions:

Informed Consent:

Demographics:

Age:

Ethnicity:

Gender:

How would you describe caring teaching-learning relationships between teacher and student?

What do you see as important qualities of caring teaching-learning student relationships?

What do you see as important qualities of being a caring teacher?

Why is it important to you to be a caring teacher?

How will you show that you care for your students?

How do you plan to build caring teaching-learning relationships with your students?

How do you know when you are successful in developing relationships in the classroom?

Thank you for your time!

## Appendix F

2<sup>nd</sup> & 3<sup>rd</sup> Interview Protocol

School:

Teacher Code:

Date:

Explain to me what I see when I observe your classroom.

Answer specific questions I have after observing.

Answer follow-up questions I have after reviewing transcript from first interview.

Any additional information you would like me to know?

Would you be willing to review my summary of the information I gathered? (member checking)

Thank you for your time!

## Appendix G

4<sup>th</sup> Interview Protocol

School:

Teacher Code:

Date:

Answer follow-up questions I have after reviewing transcript from first three interviews.

How would you describe caring teaching-learning relationships between teacher and student?

How did your cooperating teacher model the building of caring teaching-learning relationships?

What did you see as important qualities of caring teaching-learning student relationships?

What did you see as important qualities of being a caring teacher?

Why is it important to you to be a caring teacher?

How did you show that you care for your students?

How did build caring teaching-learning relationships with your students?

How did you know when you are successful in developing relationships in the classroom?

Thank you for your time!

## Appendix H

### Preservice Teacher Journal Protocols

#### **Preservice Teacher Journal #1:**

School:

Teacher Code:

Date:

What do you see as important qualities of caring teaching-learning student relationships?

What do you see as important qualities of being a caring teacher?

Is it important to you to be a caring teacher? Why or why not?

How will you show that you care for your students?

How do you know when you are successful in developing relationships in the classroom?

**Preservice Teacher Journal #2:**

School:

Teacher Code:

Date:

Is there any change in what you see as important qualities of being a caring teacher?

Describe any changes.

Have you shown that you care for your students? How have you done this?

Have you been successful in developing relationships in the classroom? How do you know?

**Preservice Teacher Journal #3: (Final Journal Entry)**

School:

Teacher Code:

Date:

Describe the importance of developing caring teaching-learning student relationships in your classroom. Has this changed from the beginning of your student teaching experience?

What did you see as important qualities of being a caring teacher?

Why is it important to you to be a caring teacher?

How did you show that you care for your students?

How did you build caring teaching-learning relationships with your students?

## Appendix I

### What Is Happening In this Class? (WIHIC)

#### Directions for Students

This survey contains statements about practices which could take place in this class. You will be asked how often each practice takes place. There are no 'right' or 'wrong' answers. Your opinion is what is wanted. Think about how well each statement describes what this class is like for you.

Draw a circle around:

- |   |                             |                      |
|---|-----------------------------|----------------------|
| 1 | if the practice takes place | <b>Almost Never</b>  |
| 2 | if the practice takes place | <b>Seldom</b>        |
| 3 | if the practice takes place | <b>Sometimes</b>     |
| 4 | if the practice takes place | <b>Often</b>         |
| 5 | if the practice takes place | <b>Almost Always</b> |

STUDENT COHESIVENESS		Almost Never	Seldom	Some- times	Often	Almost Always
1.	I make friendships easily among students in this class.	1	2	3	4	5
2.	I know other students in this class.	1	2	3	4	5
3.	I am friendly to members of this class.	1	2	3	4	5
4.	Members of the class are my friends.	1	2	3	4	5
5.	I work well with other class members.	1	2	3	4	5
6.	I help other class members who are having trouble with their work.	1	2	3	4	5
7.	Students in this class like me.	1	2	3	4	5
8.	In this class, I get help from other students.	1	2	3	4	5
TEACHER SUPPORT		Almost Never	Seldom	Some- times	Often	Almost Always
9.	The teacher takes a personal interest in me.	1	2	3	4	5
10.	The teacher goes out of his/her way to help me.	1	2	3	4	5
11.	The teacher considers my feelings.	1	2	3	4	5
12.	The teacher helps me when I have trouble with the work.	1	2	3	4	5
13.	The teacher talks with me.	1	2	3	4	5
14.	The teacher is interested in my problems.	1	2	3	4	5
15.	The teacher moves about the class to talk with me.	1	2	3	4	5
16.	The teacher's questions help me to understand.	1	2	3	4	5
INVOLVEMENT		Almost Never	Seldom	Some- times	Often	Almost Always
17.	I discuss ideas in class.	1	2	3	4	5
18.	I give my opinions during class discussions.	1	2	3	4	5
19.	The teacher asks me questions.	1	2	3	4	5
20.	My ideas and suggestions are used during classroom discussions.	1	2	3	4	5
21.	I ask the teacher questions.	1	2	3	4	5
22.	I explain my ideas to other students.	1	2	3	4	5
23.	Students discuss with me how to go about solving problems.	1	2	3	4	5
24.	I am asked to explain how I solve problems.	1	2	3	4	5



INVESTIGATION		Almost Never	Seldom	Sometimes	Often	Almost Always
25.	I carry out labs in class to test my ideas.	1	2	3	4	5
26.	I am asked to think about the evidence for statements.	1	2	3	4	5
27.	I carry out labs in class to answer questions coming from discussions.	1	2	3	4	5
28.	I explain the meaning of statements, diagrams and graphs.	1	2	3	4	5
29.	I carry out labs in class to answer questions, which puzzle me.	1	2	3	4	5
30.	I carry out labs in class to answer the teacher's questions.	1	2	3	4	5
31.	I find out answers to questions by doing labs in class.	1	2	3	4	5
32.	I solve problems by using information obtained from my own labs in class.	1	2	3	4	5
TASK ORIENTATION		Almost Never	Seldom	Sometimes	Often	Almost Always
33.	Getting a certain amount of work done is important to me.	1	2	3	4	5
34.	I do as much as I set out to.	1	2	3	4	5
35.	I know the goals for this class.	1	2	3	4	5
36.	I am ready to start this class on time.	1	2	3	4	5
37.	I know what I am trying to accomplish in this class.	1	2	3	4	5
38.	I pay attention during this class.	1	2	3	4	5
39.	I try to understand the work in this class.	1	2	3	4	5
40.	I know how much work I have to do.	1	2	3	4	5

COOPERATION		Almost Never	Seldom	Some- times	Often	Almost Always
41.	I cooperate with other students when doing assignment work.	1	2	3	4	5
42.	I share my books and resources with other students when doing assignments.	1	2	3	4	5
43.	When I work in groups in this class, there is teamwork.	1	2	3	4	5
44.	I work with other students on projects in this class.	1	2	3	4	5
45.	I learn from other students in this class.	1	2	3	4	5
46.	I work with other students in this class.	1	2	3	4	5
47.	I cooperate with other students on class activities.	1	2	3	4	5
48.	Students work with me to achieve class goals.	1	2	3	4	5
EQUITY		Almost Never	Seldom	Some-time	Often	Almost Always
49.	The teacher gives as much attention to my questions as to other students' questions.	1	2	3	4	5
50.	I get the same amount of help from the teacher, as do other students.	1	2	3	4	5
51.	I have the same amount of say in this class as other students.	1	2	3	4	5
52.	I am treated the same as other students in this class.	1	2	3	4	5
53.	I receive the same encouragement from the teacher as other students do.	1	2	3	4	5
54.	I get the same opportunity to contribute to class discussions as other students.	1	2	3	4	5
55.	My work receives as much praise as other students' work.	1	2	3	4	5
56.	I get the same opportunity to answer questions as other students.	1	2	3	4	5

Appendix J

Modified Attitude Scale

Modeled on

Test of Science-Related Attitudes (TOSRA)

Modified Attitude Scale Models on Test Of Science Related Attitudes  
(TOSRA)

Directions for Students:

This questionnaire contains statements about practices that take place in this class. You will be asked how often each practice takes place. There are no “right” or “wrong” answers. Your opinion is what is wanted.

Think about how well each statement describes what this class is like for you. For each statement draw a circle around:

**Disagree**      if you DISAGREE with the statement.

**Not Sure**      if you are NOT SURE about the statement.

**Agree**          if you AGREE with the statement.

Be sure to give an answer for all statements. If you change your mind about an answer, just cross it out and circle another.

1.	I look forward to science lessons.	Disagree	Not Sure	Agree
2.	Science lessons are fun.	Disagree	Not Sure	Agree
3.	I enjoy the activities we do in science.	Disagree	Not Sure	Agree
4.	Science is of of the most interesting school subjects.	Disagree	Not Sure	Agree
5.	I want to find out more about the world in which we live.	Disagree	Not Sure	Agree
6.	Finding out about new things is important.	Disagree	Not Sure	Agree
7.	I enjoy science lessons in this class.	Disagree	Not Sure	Agree
8.	I like talking to my friends about what we do in science.	Disagree	Not Sure	Agree
9.	We should have more science lessons each week.	Disagree	Not Sure	Agree
10.	I feel satisfied after a science lesson.	Disagree	Not Sure	Agree

## APPENDIX K

**Previous Preservice Teacher Survey**

School:

Teacher Code:

Date:

How would you describe caring teaching-learning relationships between teacher and student?

How did your cooperating teacher model the building of caring teaching-learning relationships?

What do you see as important qualities of caring teaching-learning student relationships?

What do you see as important qualities of being a caring teacher?

Is it important to you to be a caring teacher? Why or why not?

How do you show that you care for your students?

How do build caring teaching-learning relationships with your students?

How do you know when you are successful in developing relationships in the classroom?

Thank you for your time!

## APPENDIX L

## IRB APPROVAL



October 17, 2013

Daniel Shafer  
Teaching, Learning and Teacher Education  
6501 NW 105 St Malcolm, NE 68402

Jon Pedersen  
Teaching, Learning and Teacher Education  
105 HECO, UNL, 68583-0800

IRB Number: 20131012681

Project ID: 12681

Project Title: Preservice teacher understanding and implementation of caring teaching-learning student relationships.

Dear Daniel:

This letter is to officially notify you of the certification of exemption 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) and has been classified as Exempt Category 1 and 2.

You are authorized to implement this study as of the Date of Exemption Determination: 10/17/2013.

1. The stamped and approved informed consent documents have been uploaded to your form files (documents with Approved.pdf in the file name). Please use these documents to distribute to participants. If you need to make changes to the documents, please submit the revised documents to the IRB for review and approval prior to using them.

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.

This project should be conducted in full accordance with all applicable sections of the IRB Guidelines and you should notify the IRB immediately of any proposed changes that may affect the exempt status of your research project. You should report any unanticipated problems involving risks to the participants or others to the Board.

If you have any questions, please contact the IRB office at 472-6965.

Sincerely,

A handwritten signature in cursive script that reads "Becky R. Freeman".

Becky R. Freeman, CIP  
for the IRB

