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Certifies that this is the approved version of the following report:

Behaviors associated with Caring Teachers:

Student Perspectives and Classroom Observations

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**Behaviors associated with Caring Teachers:
Student Perspectives and Classroom Observations**

by

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Report

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Dedication

For God, who said to not worry about tomorrow, for tomorrow will worry about itself.

Each day has enough trouble of its own. Just pray!

For my loving family, who encouraged and helped me to follow my dreams. Your unconditional love pushes me forward to do great things.

For my supportive fiancé, Bryan, who endured all the struggles, sleepless nights, crazy moments, joyous victories and never gave up on me.

Without the love and support of my faithful students, colleagues, professors, and friends, this would never have been possible.

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Last but not least, the biggest thanks to the UTeach program and faculty for seeing the potential in me. It sounds corny, but this program changed my life. It was a privilege being a part of the new movement that UTeach is offering to the teaching realm.

Abstract

**Behaviors associated with Caring Teachers:
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by

Krystal Thiam McDaniel, M.A.

The University of Texas at Austin, 2013

Supervisor: Jill Marshall

The intent of this study was to determine what students perceive as caring behaviors in teachers, whether those views match teachers' perceptions, whether these vary depending on students' academic track, and whether teachers are observed to exhibit the behaviors identified by their students as indicative of caring. Eighty-two majority Hispanic high school students and eight teachers completed a four-section survey about caring behavior. These teachers and students were also observed four times in the classroom. The survey contained Likert scale and open-ended questions about teachers' caring behaviors. It also probed how the students' own teachers interacted with them daily in the classroom and their personal open-ended opinion about how teachers show that they care or do not care about them. Two groups were studied, specifically Advanced Placement (AP) and Regular students, to find out whether academic placement caused students' to categorize caring behaviors of teachers differently. Results of the study indicated a significant difference in AP and Regular students' attitudes about how

teachers treat them. Teachers' perceptions were also compared to students' perception and differences were found. Differences included how often teachers interact in one-on-one conversations about certain issues with students, such as the need to complete homework assignments. Within these conversations some issues were reported to occur more frequently by teachers than students. On other issues, like disrupting class, there was agreement, but only for specific teachers and subjects. In addition, STEM and non-STEM classes were investigated and it was discovered that these students responded differently about the frequency with which their teachers had conversations with them about specific issues. Differences included disrupting class, not completing assignments, interests and things that are important to students, and plans for college and work. Observations made by this researcher further support the idea that there is similarity in how students define caring behaviors, but what behaviors they experience, like assisting in homework or listening to personal needs, is different. Although trends observed in this study are suggestive, more research is required to support the idea that academic placement and subject make a difference in students' experiences of caring behaviors in teachers.

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Chapter 1: Introduction

When we think of caring, the first thoughts that form in our minds are usually about positive or supportive behavior. But, how do we define this caring perspective and why do we perceive it as “good”? Lisa Goldstein, who based her work of Vygotsky and Nel Noddings, claims that “meaningful interpersonal interaction could imply that affective factors play a central role in intellectual growth and development” (Goldstein, 1999, p.648). To be concise, our interactions with each other are essential in how a person develops and views certain issues. The nature of caring is “not something you are but, rather, something that you engage in, something you do” (Goldstein, 1999, p.656).

Caring can be viewed from two perspectives. The first view is defined as our human instinct to show kindness and sincere caring to another human being. Caring is a natural, human nature to cater to the needs of someone else, even if it does not benefit us. A person does a good deed for ‘just because’ reasons. They do not seek for rewards or compliments and care for the other person strictly to help them. This type of view is described as caring from the heart and not the mind. The care-giver ‘feels with’ the cared-for and interacts not out of duty (Noddings, 2012). Another perspective of caring is the interaction between people that is seen as moral because the person giving and the person receiving from the encounter both make an influential impression on each other that is noticeable and meaningful for both parties. Deep down humans long for attention and giving/receiving the right type of attention pleasures the mind and transitions the

conscience into a sanguine state. Ethical caring includes reasoning and purpose with emotions, like empathy and sympathy, which drives us to help someone. Basically, the care-giver responds to the needs of the cared-for because this type of view is accepted in society as good and ethical. Goldstein builds on the concept of interactions by stating that these natural and ethical caring communications are driven by two distinct motives: an effortless, authentic motive and a responsible, just motive. An example of natural caring is a mother's desire to help their child with no reward in return. Whereas, an example of ethical caring could be a soldier defending his country because of learned patriotism. Both interactions comfort the individual and are understood as beneficial to our growth and development.

In this study quantitative data has been obtained through surveys and questionnaires to assess mathematically the factors that influence the definition of caring. In addition to quantitative data collection, qualitative data, like observations and interviews, are analyzed through Grounded Theory (Corbin & Strauss, 1990; Mann, 1993), or the use of coding to identify themes that can characterize, the perspectives of both teachers and students about how caring is displayed in a classroom. In this study, students are asked to identify caring qualities in their high school teachers. Both types of data were used to determine what specific behaviors they identified in their teachers and how these behaviors might affect their opinion of what is caring and not caring. The goal of this research was to see what behaviors students associate with caring and whether those vary with class type and academic placement, i.e., between students in Regular and AP, or Advanced Placement, classes.

Background

Is the definition of caring generally held in society the same definition that high school students hold? Are students' views of caring being enacted by their teachers in the classroom every day? Most parents hope that their child is placed in a caring teacher's class that provides abundant knowledge in content, as well as caters to the needs of their child's learning ability. In many public schools, students are segregated based on their learning ability. A student is either placed in (1) an Advanced Placement (AP) or honors program, where there are higher academic expectations or (2) a Regular or general education route, where the requirements of the state are met and students are receiving a "normal" or "basic" education. All students in Texas are required to take classes in four core subjects in their secondary education career: English, Math, Science, and Social Studies. Math and science are collectively known by the acronym STEM (Science, Technology, Engineering, and Math); English and Social Studies are considered non-STEM classes. In Shaunessy and McHatton's research (2008), the authors discovered that students with different types of academic placements, gender, and ethnicity at the high school level were undergoing different experiences, based on how their teachers treated them. Students' attitudes towards teachers, the school system, and learning varied based on how the teacher-student interaction occurred in the classroom. In this study, Shaunessy and McHatton used various aspects of caring previously identified in other research to see whether students were being treated differently by teachers in AP vs. Regular classes.

Some of the aspects in other research include: credibility of a teacher in the classroom like competence in the subject, trustworthiness between student and teacher, and perceived caring (Teven, 2007), what was important to students based on ethnicity or minority groups and grade level (Garrett, Barr, & Rothman, 2009; Tosolt, 2009), and teachers' content and pedagogy expertise (Ferreira & Bosworth, 2001). In addition to these factors, in 1999 Murphy Elementary School in Chicago tested the idea of implementing a new environmental approach to create a physical caring atmosphere. They applied six simple steps of converting the classroom from the traditional classroom-management approaches to a responsive classroom approach. The implemented steps were: greet the students at the beginning of class, set rules and abide with positive reinforcement and logical consequences, let students discover learning but guide occasionally, arrange the classroom with specific areas defined for certain activities with student input, allow students to make their own choices in their academic path, and contact parents frequently. All factors were those that researchers who studied this school believed to define caring (Horsch, Chen, & Nelson, 1999). In all of the studies mentioned, these factors, when added to the collection of caring behaviors, can deepen the students' appreciation of teacher behavior.

Purpose

In addition to finding what behaviors are associated with caring teachers, the current study also considers if AP students report higher levels of those caring behaviors than Regular students do or vice versa. This can lead to the problem that students in one

academic placement are benefiting from having caring teachers and perceive school in a more positive way while those in other academic placements that have more perceptions of “un-caring” teachers, which could result in negative views towards school in general. Along with comparing AP and Regular students, STEM and non-STEM classes will be investigated to discover if Math and Science students perceive and are experiencing different caring behaviors than English and Social Studies students in the classroom. Students in a particular class, regardless of whether it is AP or Regular, may perceive more or less caring behaviors based on the subject being presented to the students. The type of class or subject can be regarded as a factor of influencing caring behaviors. Overall, the purpose of this study is to detect whether AP and Regular students agree or disagree on what defines a caring teacher, and then compare the behaviors described in their definitions with observations of their teachers’ practices. Do the teachers identified by students as caring display the identified behaviors in classroom observations? Furthermore, teachers’ perspectives of caring behaviors were investigated to compare what was actually observed by the researcher and what behaviors teachers think they display as caring and non-caring. The hope of this particular project is to discover whether students in AP or Regular classes associate more caring behaviors with teachers, whether STEM and non-STEM classes can be a factor in caring behaviors, and what characteristics teachers, no matter what academic level taught, can develop that their students perceive as caring.

Research Questions

The questions that will be assessed in the study are:

1. How do high school students define caring behaviors on the part of their teachers?
 - a) Does it vary between AP and Regular students?
 - b) Does it vary between STEM and non-STEM students?
2. How do high school teachers describe their own caring behaviors toward students?
 - a) Do they report different caring behaviors for AP and Regular students?
 - b) How do their descriptions compare with the student's descriptions of caring behaviors?
3. In classroom observations, do teachers exhibit the caring behavior identified by students?
 - a) Does it vary for AP and Regular classes?
 - b) Does it vary between STEM and non-STEM classes?

Hypothesis

The following hypotheses were accepted or rejected based on statistical analysis performed with ANOVA tests of Likert scale data from surveys and observational data from classroom observations to answer the research questions:

Null Hypothesis (H_0): My hypothesis is that there is no difference in the kinds of behaviors associated with caring between students in AP classes versus students in Regular classes.

Alternative Hypothesis (H_1): My hypothesis is that there is a difference in the kinds of behaviors associated with caring between students in AP classes versus students in Regular classes.

Organization of the Report

Chapter 2 summarizes the supporting literature and how the study evolved into the current investigation. Chapter 3 explains the methods, which includes the analysis and statistical calculations, of the procedures implemented in the study. Chapter 4 goes into detail about the results and what the researcher found. This section also includes the discussion that compares the study with other studies on certain issues like organizing the categories of caring and factors that influenced the study. Chapter 5 contains the conclusions and future research that can be applied after the study. Chapter 6, the final chapter, explains how this study can be applied to practice for teachers and enhance teacher development and mentoring skills.

Chapter 2: Review of Literature

Defining “Care”

The works of N. Noddings, A. Valenzuela, K. Wentzel, L.S. Goldstein, E. Shaunessy and P. McHatton provide plausible evidence that caring can be described as either aesthetic (intended to maintain an appearance) or authentic (motivated by actual concern) and that students can detect the difference in how they are treated by a teacher at school. In Dr. Valenzuela’s ‘Subtractive Schooling’ research, she discovered that at an ‘at-risk’ high school “Regarding caring, teachers expect students to *care about* school in a technical fashion before they *care for* them, while students expect teachers to *care for* them before they *care about* school” (Valenzuela, 1999, p.123). She references Dr. Nel Noddings, as do the other authors, on the idea of caring.

Noddings states that caring is a ‘responsibility’ of the cared-for and one-caring to respond with a choice of giving and/or receiving. According to Goldstein, this exchange of interactions builds a relationship that becomes an obligation of both parties and becomes receptivity, “the experience of fully receiving the other is the catalyst for the caring encounter” (Goldstein, 1999, p. 656). After they encounter each other, a decision is made by the care giver to go out of his or her way to help. Basically this means to place oneself in the other person’s shoes and address their needs. Noddings defines the two encounters as aesthetic and authentic caring. However, Goldstein divides caring into natural and ethical caring, which is described as a “I must” to “I want” and “I must” to “I ought.” Both researchers have the same definition but different terms to classify caring.

This study will reference to Goldstein's terminology and definitions. "Natural caring is driven by deep feelings for the cared-for; ethical caring is driven by the one-caring's desire to enhance their own ethical ideal, and their appearance as a moral person (Goldstein, 1999, p. 659)." In other words, natural caring is basic and purely helping to look out for the needs of the other without a second thought. Ethical caring is the desire to be 'good' and be seen as a person who is looked upon as a helpful citizen. They both are equal in giving but are driven by different motives. Ethical and natural are different terms proposed by Goldstein but correlated with Noddings's aesthetic and authentic caring, respectively.

Students' describe a caring, supportive teacher with characteristic words or phrases like "talks to me," "listens," and "informs me of my grades," that consistently appear in their responses and Wentzel (1997) analyzes these descriptions. Wentzel categorizes them into "five dimensions of effective caregiving as suggested by Noddings (1992) and the family socialization literature: modeling, democratic communication styles, expectations for behavior, rule setting, and nurturance" (Wentzel, 1997, p. 412). Wentzel supports the idea that students are motivated by how their teachers behave towards them. Students relate motivation to whether a teacher cares about them or not. However, can there be differences in the behaviors associated with caring based on a student's academic placement? Shaunessy and McHatton (2009) found through surveys and interviews, that there is a difference in how the students are treated between regular and honors placements, but what the students expect in a 'good teacher,' or caring teacher, is the same across the board between honors and regular students.

Garrett, Barr, and Rothman (2009) take it a step further from academic placement by investigating whether ethnicity and grade level make a difference in caring. Their discoveries found that the three major ethnicities: White, Latino, and African-Americans, and two grade levels, sixth and ninth grades, classified caring using similar categories and themes. However, the students responded differently to each category based on certain ethnicities and grade level. The five categories: academic support, teacher's personality, taking a personal interest in the student, equity, and uses of rewards were agreed upon by all ethnicities and grade levels. The authors compared ethnicity with grade level, grade levels only, and ethnicities only. Amongst the five categories, academic support was strongly mentioned by White, 9th graders (55.6%), Latino, 9th graders (87.0%), and African-American, 9th graders (90.9%). When compared only between grade levels, 9th graders (68.4%) had a higher frequency of mentioning academic support than 6th graders (48.3%). The authors believe that 9th graders, who are attending high school for the first time and developing into adolescents, become dependent on teachers helping them succeed in their work. 9th graders undergo more responsibility academically than 6th graders and strive for support from teachers. When comparing academic support between only ethnicity, Latinos (72.5%) and African Americans (71.2%) showed higher frequency than Whites (52.5%) of acknowledging the importance of teacher support. Similar to the 9th graders, these two ethnic groups identify with teachers helping them succeed in school by academic support based on lower skills in the English language, less support at home, or the desire to thrive in school; while Caucasians may be receiving more academic support at home and seek other qualities in

teachers. The 6th graders (60.0%; 33.3%) and Caucasians (55.0%; 40.0%) gave higher ratings in the ‘teacher’s personality’ and ‘taking a personal interest in the student’ categories than 9th graders (35.8%; 21.1%), Latinos (37.7%; 17.4%), and African Americans (47.8%; 26.1%). A potential reason is, again, Caucasians and 6th graders may be encountering support at home and developing a relationship with their teachers is more important to them than receiving support from the teacher. Basically, the support or other factors the students do not receive elsewhere are what they long for or search for in a teacher. Interestingly, African Americans (8.7%) responded lower than Latinos (18.8%) and Caucasians (22.5%) on the term equity, meaning that they felt that equitable behavior, or fairness, was a less important indicator of caring. Garrett, Barr, and Rothman have yet to understand why this is the case but can assume students feel differently on how teachers contribute to equity. Overall, the research is important to this study because it shows that culture can influence what factors are important when defining caring. Certain ethnicities value more support, trust, and respect to feel that teachers care (Tosolt, 2009). Valenzuela and Tosolt support the idea that minority groups, like Hispanics, may have a different point of view on caring, like views on helping students with work or guiding the lives of students outside of school. In particular, this study is observing a high population of Hispanic students with teachers who may or may not relate to their culture.

Although he did not consider ethnicity, Teven (2007) also found in his studies that college students perceive credibility based on teacher competence and trustworthiness. According to Teven, credibility is defined as a variable that teachers must have. It is the delivery of information from sources that support the person’s effectiveness as a teacher.

Basically, does the teacher know his/her subject by teaching it well and can students trust them academically? The college students in that study rated their professors based on their first face-time experience with the professor. Once the professor introduced his/her expectations, students formed a specific idea of what the semester is going to be like in the course and their opinion about the professor. Students did an end of the semester teacher evaluation and Teven was able to see the impact of teacher misbehavior, or wrong-doing on the part of the teacher, and caring behavior and how it affected perceptions of teacher credibility. Teven believes that “personal interaction with other members within the academic community, including teachers, is a vital element in fostering student identification and engagement” (p.433-434). If a teacher has more credibility, students are more likely to give the teacher a high rating and perceive the teacher to be caring. The teachers that relate well with their students have high immediacy (direct and to the point), responsiveness (answering, replying, or strong communication), and assertiveness (listening and giving full attention). This is opposed to teachers that show high verbal aggressiveness, which was considered not caring. Examples of verbal aggressiveness are character attacks, competence attacks, background attacks, and physical attacks, ridicule, threats, swearing, and nonverbal emblems. In the study, Teven specifically researches misbehaviors and classifies them into three categories: incompetence (“lack of essential teaching skills,”) offensiveness (“dark side if human nature,”) and indolence (“inattentive or absent-minded professors.”) All responses by students were categorized and Teven who found the majority trusted their professors when they displayed appropriate behaviors and expressed caring towards students.

Findings from research on caring behaviors can help to explain how students react to teachers at school. In recent studies, researchers have found that the classroom environment is based on what the attitude of the teacher causes it to be. Once an environment is established, students understand the boundaries and adapt their reaction to the class and teacher till the end of the school year. Studies at the elementary and college levels have shown that the first time a student encounters the behavior of a teacher can be crucial in how that student continues to perceive the teacher (Horsch, Chen, and Nelson, 1999; Teven, 2007; Williams, Sullivan, & Kohn, 2012). In *Out of the Mouths of Babes* (2012) researchers asked undergraduate soon-to-be teachers to write letters to secondary students asking them to describe an outstanding educator. The pen-pal letters included personal questions about the secondary students and questions defining a good teacher. For example, one undergraduate student wrote in one extensive question:

What are the characteristics that make a great teacher? What is your favorite class? Why? What makes a class exciting and fun? What makes it boring? What makes a student respect a teacher? How do students behave in school? Should a teacher be strict or lax? What discipline rewards/consequences really work? What are the school rules? Do students have any part in making the rules?

They found that secondary students were seeking teachers with a caring attitude, were able to teach well, demonstrated competency in their content, and had high classroom management skills. The undergraduate students were able to develop these main themes to define a caring teacher by classifying key words into categories that were written frequently in the letters. These are all important factors and they merit further investigation, like my study, which will provide better information for educators on what secondary students want.

In my research I am studying the five principles of effective caregiving found in Wentzel's work and the concept of caring associated with certain minority groups that originated in Valenzuela's research. I will look at students' placement in Regular and AP classes as a variable, based on work done by Shaunessy and McHatton (2009), and investigate how students define caring and what behaviors caring teachers exhibit. I will also consider the work of Akey (2006) on students' perceived punitive and supportive feedback from teachers. That paper supports the idea that students will achieve better when they feel that they have received positive support and not negative feedback from educators. I will be able to relate her findings to what I discover in my research. Previous research has shown that caring or not caring about a person can create a positive attitude on the part of that person and how they respond to challenges. I will further the understanding of these relationships between caring and student motivation/ positive attitudes towards learning by observing teachers to determine whether those identified as caring teachers actually exhibit the behaviors that students associate with caring, and whether this varies between Regular, AP, STEM and non-STEM classes. In conclusion, the literature supports the significance and design of the study.

Chapter 3: Methods

Background

Setting

This study was conducted in one high school in the West Texas area. The school is predominately Hispanic and considered an “at-risk” school based on its low socioeconomic status and a drop-out rate of 4.7% compared to 2.4% for the state overall. Data was collected in the period between February and May 2013. Collection consisted of a four-part survey and four observations of each of participating teachers conducting a lesson in their classrooms. All core classes, English Language Arts, Math, Science, and Social Studies, were observed and two teachers from each subject were selected to participate in the study. The students’ grade level varied from tenth grade to twelfth grade and some varied within each core class. All participants gave informed consent to participate. The survey (Appendix A) was adopted from Valenzuela’s studies (1999) and contains both Likert scale and open-ended items. The use of the classroom observation protocol included a calendar of when to observe the teachers and a personal check list developed to organize how many times each teacher was observed.

Participants

The eight teachers were selected based on availability and type of academic class, AP and Regular. A master schedule of all the teachers’ schedules at the high school was used to determine the best class periods and teachers for this study. Teachers were chosen to complement with the researcher’s schedule, as well as meet the requirements for being awarded the Teacher of the Year title or non-Awarded teacher. While discussing with the

teachers the reasons for them being selected in the study, availability and the correct academic classes was the explanation given. After receiving consent from the teachers, the study began with introducing consent forms and instruction on the study to the students from each teacher. A time slot of one week was assigned to return a signed consent form with parent or guardian signature and whether their parent allowed their child to receive compensation of candy. Students returned any paperwork directly to the researcher or in a locked mailbox, located in the researcher's classroom for confidentiality. A total of 159 students were provided the information about the study but only eighty-two students returned signed parental consent forms to participant, AP (n=47) and Regular (n=35). The participants consisted of male (54.9%) and female (45.1%) students between 15-19 years old and both genders of teachers were equally represented between the ages of 25-65 years old. In addition to noting the kinds of academic classes they taught, the teachers were separated into two categories: four teachers that won "Teachers of the Year" and four non-Award winning teachers who volunteered to participate. None of the teachers were told which category they were placed in for the study in order to prevent the teachers from comparing each other. The "Teachers of the Year" are teachers from each of the core classes and were selected strictly by the student body as favorite teacher of the year. For example, one teacher from the Science department is selected by anonymous voting of students. The teacher is then recognized during the graduation ceremony and acknowledged by administrators. In 2009-2010, three Regular teachers and one AP (English) teacher were selected as Favorite Teachers of the Year. In 2010-2011, all four teachers that won were Regular (not

AP) teachers. In 2011-2012 school year, students selected one AP (Math) and three Regular teachers (ELA, Science, and Social Studies) and in 2012-2013 all four Regular teachers in each core class were chosen again. The current study focuses on the 2011-2012 winning teachers with four volunteered non-winning teachers. In other words, the Math AP teacher that won was compared to a Regular, volunteer teacher. The ELA, Science, and Social Studies Regular teachers who won were compared to three AP, volunteer teachers who did not win.

In the study, students are classified as students who are placed in the Advanced Placement program (AP) and graduate on the Distinguished Plan, and Regular students are classified based on not participating in an advanced program and being on the state Recommended Plan or Minimum Plan for graduation. **Table 1** provides the demographics of the eighty-two students involved in the research. The students were surveyed and each teacher's class observed four times in a 30-minute observation during the spring semester of 2013. Teachers and students were identified by anonymous codes when recording quantitative data on Excel and SPSS. This provided confidentiality and prevented bias in data analysis.

Table 1 Demographics of participants

Variable		<i>n</i> (% of sample)	School %	District %	State %
Race	African American	3 (3.7%)	2.5%	4.1%	12.8%
	Asian/Pacific	2 (2.4%)	0.6%	0.7%	3.6%
	Caucasian	22(26.8%)	18%	23.8%	30.5%
	Hispanic	50(61%)	77.8%	69.7%	50.8%/
	Other	5 (6.1%)	0%	0.4%	0.4%
Gender					
	Female	45(54.9%)	NA	NA	NA

	Male	37(45.1%)	NA	NA	NA
Education	Regular	35(42.7%)	35.6%	61.8%	45.9%
	Advanced Program	47(57.3%)	8.3%	5.8%	7.7%
Total		82	2,514	28,398	4,978,120
* Based on responses of 82 participants (following Shaunessy & McHatton, (2009); data from AEIS of campus on TEA website http://ritter.tea.state.tx.us/cgi/sas/broker)					

Procedures and Analysis

Survey

All participants received a survey that was composed of four sections: Personal Information (Sec.1), Caring vs. Non-caring in School (Sec.2), Teacher Interactions (Sec. 3), and Personal Opinion in Your Words (Sec.4) (See Appendix A for complete survey) Part of this survey was adapted from Valenzuela's study (1999). Section 1 describes the demographic data for the study, including race, gender, class placement (Regular or AP), citizenship, and years in the school district. Citizenship and years in the school district were excluded as variables in the data analysis because they are irrelevant to the current study. The main focus for Section 1 is to collect a percentage of race, gender, and classification in school (**Table 1**) and compare it across the district and state to determine if the percentage at the school in the study is higher or lower in any specific sub-group. This was collected to make sure the sample was representative to the overall population of the school and area.

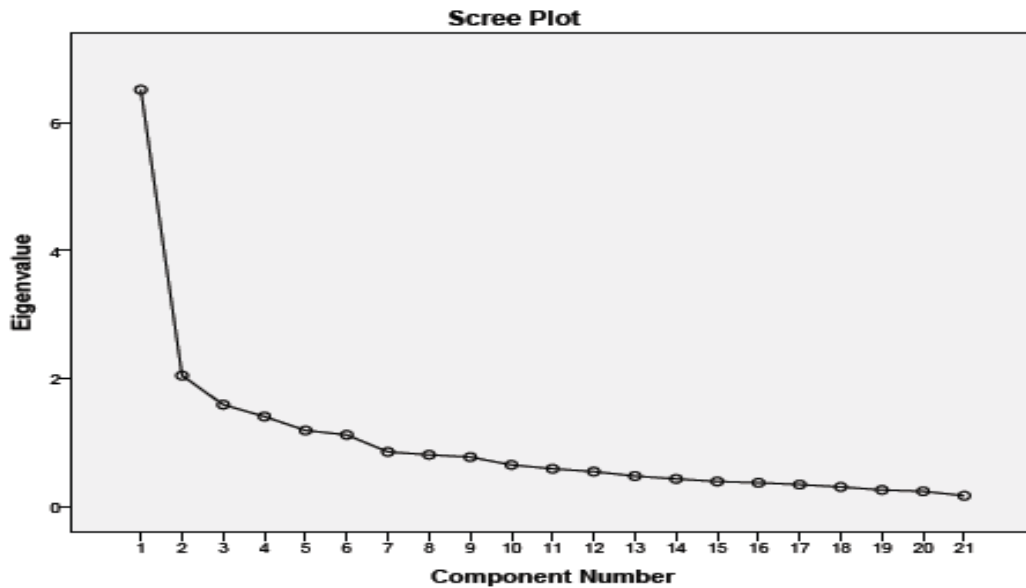
Section 2 was used to compare any significant differences between Regular and AP students in their views of caring and non-caring in school. In other words, do the two

groups have differing viewpoints about what they consider caring classroom behavior? This section of the survey contained twenty-one statements that students rated from 1 to 5 with 1 being “strongly agree” and 5 being “strongly disagree” on a Likert Scale. The data was coded by academic classification as well as their specific identifier for their survey. The total score of each individual response was collected, compared, and confirmed as normally distributed on a histogram before proceeding into further statistical analysis and investigation. A factor analysis was performed using SPSS software with all students’ responses to the twenty-one statements in order to determine which, if any, of the statements appeared to be measuring the same thing based on student responses. The factor analysis procedure identifies which items appear to be measuring the same thing, even if they are not asking for identical information, allowing the researcher to identify the overarching, ‘invisible’ components that are governing responses on an assessment. For example, questions asking about spring constants, water quality, and chemical composition might all turn out to be related because they all required the respondent to read a graph. In that hypothetical case, the factor determining the outcome is actually the respondent’s ability to read a graph (Marshall, Hagedorn & O’Connor, 2009). Section 2 of the survey had 21 items, and thus a possible maximum of 21 unobserved components in the unlikely case that each question turned out to measure a completely independent factor.

The factor analysis identified ‘invisible’ (i.e. not directly measured) components and how much influence each appeared to have on total scores on survey Section 2 and which questions were associated with each. The SPSS software created a ‘scree’ plot in

which each component number (from 1 up to 21, the largest possible number of components for 21 items) is plotted against the amount of variation in student responses (scores) it accounted for. (See **Figure 1**)

Figure 1 Scree Plot



The scree plot makes it easy to see which factors influence the scores the most. The factors that accounted for most of the variation, i.e. those that fell on the steeper part of the slope in the plot, were analyzed according to the questions associated with them to look for commonalities. All factors that fell after the curve leveled off in the scree plot were considered not influential to the study. In addition, a component matrix (**Figure 2**) was created to identify the most influential components, and in this study there were six, four of which showed significant loading (greater than 0.5).

In **Figure 2**, it is apparent that majority of the statements, labeled A-U, were highly ‘loaded’ on the first component (boxed), yielding the greater influence on the students’ responses in their total score. The second component (circled) is strongly loaded on by five statements and the third and fourth components (underlined) are linked to two and four statements, I-L, respectively. After identifying the observed components that influenced the total score, the researcher read through the statements to find any similarities of why these components were grouped this way. Upon investigation, similar words and phrases were seen in each component and ‘clustered’ or put together to identify a theme.

Figure 2 Factor Analysis Component Matrix

Component Matrix ^a						
	Component					
	1	2	3	4	5	6
A	.706	.151	-.027	.109	-.049	-.003
B	.704	.048	.207	-.314	-.127	-.086
C	.683	-.124	.118	-.030	.170	.226
D	.767	-.196	-.039	-.143	-.013	-.207
E	.665	-.230	-.152	-.214	-.265	.055
F	.384	.237	-.273	.314	-.266	.442
G	.636	.025	.315	.033	-.089	-.488
H	.737	.109	.007	.067	-.063	-.035
I	.422	-.076	.500	.524	-.146	.049
J	.176	-.151	.468	.175	-.452	.447
K	.433	-.103	-.100	.600	.271	-.198
L	.572	-.208	-.191	.447	.110	-.166
M	.583	-.145	-.392	-.109	.024	.153
N	.722	-.324	-.222	-.131	.170	-.103
O	.229	.547	-.502	.087	-.149	.065
P	.289	.630	.153	.115	.133	-.112
Q	-.146	.523	.330	.055	.551	.172
R	.492	.502	-.294	-.053	.089	.144
S	.239	.626	.150	-.188	-.387	-.312
T	.660	-.095	.129	-.165	.321	.264
U	.669	.064	.323	-.372	.204	.202

Extraction Method: Principal Component Analysis.

Only four components were used based on higher loading value on individual statements. The four components were classified in this study as Cluster 1: Personal Experiences of the Students, Cluster 2: Classroom and School Management, and Cluster 3: General View of Caring. Cluster 1 was classified on the personal experiences of the reader and words like “I,” “me,” and “my” appeared in the statements. Cluster 2 was classified on managing the environment of the class and school and “fairness,” “quality,” and “discipline” appeared in the statements. Cluster 3 was classified based on having the

word “care” or “caring” in the statement and general views of how teachers should treat students. Any statements that did not fall in these three categories were eliminated from the study. The students’ scores for each of the three clusters were calculated in the SPSS program using ANOVA to compare between Regular and AP students as well as between STEM and non-STEM classes. Data collected in Section 2 of the survey focuses on the first research question, “How do high school student describe caring behaviors on the part of their teachers?”

Data collected in survey Section 3 specifically asks the student to describe how their teacher interacts with them as an individual in the class. This section is composed of nine items and is based on a four-point Likert scale (Shaunessy and McHatton, 2009). The data was analyzed on Excel based on the percentile scale used by Gamrath-Shauman and Stirling (2004). Percentages were used, as opposed to a total score like Section 2, because there is one main question based on frequency of teacher to student interaction such as, “So far this year, how often has your teacher in this class spoken with you one-on-one about the following?” Following the question is a list of nine choices from “never experiencing” this one-on-one interaction to “more than five times per month.” Percentages of student responses in each frequency category allows for comparison across items. Section 3 survey data is one of the sections for which teachers’ responses were compared with the students’. Teachers were given an analogous survey (Appendix B) by email. The teacher’s responses provide a self-reported answer to one of the research questions, “How do high school teachers describe their own caring behaviors toward students?” Charts with student responses about frequency of interactions were

created for each core class (English, Math, Science, and Social Studies) and divided into AP and Regular student responses. Total percentages of student responses in each category were also calculated for AP only with all core classes, Regular only with all core classes, all eighty-two students, and STEM/non-STEM classes. In addition to the students', all teachers' percentages of scores were totaled for AP teachers only, Regular teachers only, and all teachers together. All charts with percentages of responses, students' and teachers', were analyzed side-by-side and examined for similarities and differences on each item.

Section Four of the survey, Personal Opinion in Your Words, allowed the students to describe in-depth what teachers do in order to show caring and non-caring behaviors towards them. Teachers were also given an opinion section in their survey on how they describe their own caring behaviors towards their students. This section is open-ended and is compared with the observational data collected by the researcher in this study. Observational data in the teachers' classrooms was collected in order to compare to student and teacher responses given in survey Section Four. In addition, this researcher conducted the observations to analyze the frequency of caring behaviors of teachers, based on Wentzel's Five Dimensions of Caregiving categories (**Table 2** is a summary of Wentzel, p.416, 1997):

Table 2 Wentzel's Five Dimensions of Caregiving

1.Modeling: focuses on indications that teacher cares about teaching
2.Democratic interactions: focus on communication
a) Communication style
b) Equitable treatment and respect

- 3.Expectations: student as a person/as a learner
 - a) Student as a person
 - b) Student as a learner
- 4.Nurturance: focus on teacher's informal/formal evaluations of student work
- 5.Other: Rule Setting/Vague answers/Personal attributes or responses that do not fit into the other categories

Each dimension has “caring” and “non-caring” examples listed in the Wentzel’s original table (Wentzel, p.416, 1999). The statements written by students were categorized based on specific words or key words. First, Grounded Theory (Corbin & Strauss, 1990; Mann, 1993), or the use of coding to identify themes, was used with the key words to create themes seen in this particular study. Then, the key words were compared to Wentzel’s themes: modeling, democratic interactions, expectations, nurturance, and other. Both types of analysis were used to evaluate what the researcher found and compare it to Wentzel’s research. According to Mann (1993), grounded coding allows other studies with caring behavior categories to not influence any natural phenomena categories found in this study. Overall, the categories that were consistent from all student responses were compared to the observations to answer the research question, “In classroom observations, do teachers exhibit the caring behaviors identified by students?”

All quantitative data were processed in Excel during the Spring 2013 semester because of the unavailability of the SPSS (Statistical Package for the Social Sciences) program (which can accept data in this format), to prevent any data being lost, and to keep data in one central location. Each core class was labeled with a tab in Excel: ELA, Math, Science, and Social Studies. Within the core classes, each academic class, AP versus Regular, were separated by lines in the spreadsheet. Teacher’s name and class

were coded to keep confidentiality. Students were assigned the teacher's identifying code and a specific individual number based on random order in their academic core class. Throughout the study, each participant's responses were assigned a unique identifier in all sections. Survey responses in Section 1 provided the demographic profile of the specific participant. Each piece of personal information was coded with a particular number to represent a certain category. For example, the gender is broken into female and male. Female was represented by a 1 and male by a 2 in Excel and SPSS. Another example of unique identifiers was used to distinguish AP and Regular students. AP was labeled as 1 and Regular as 2. All categories (Students, Teachers, Race, Gender, Academic, Type of Core Class, Clusters, and STEM/non-STEM) were done in this manner.

Observations

Observations were conducted by the researcher to see how teachers interacted with their students in a classroom environment. Each classroom was observed for a total of four, 30-minute sessions in the Spring 2013 semester. Behaviors and interactions between teachers and students were recorded with symbols, time stamps, and codes for names on a notepad. Observations, and student surveys, were contained in an encrypted manila folder that was kept in a secured closet and stored in a lock and key file safe. Each teacher was labeled on the observer's personal calendar, with a code, for observing various days and a check list for all requirements for the observations, such as how many times a teacher had already been observed. All observations were unannounced to the

teacher to eliminate any potential influence on instruction or behavior. Also, there was little to no interaction between the observer and students or teachers during the learning process. If an interaction was present between the observer and participants, it was recorded in the field notes.

Observations were coded based on Corbin and Strauss (1990) and Mann's (1993) work on Grounded Theory. In qualitative research, like classroom observations, grounded theory is defined as a process where data collection of natural phenomena occurs first and analysis of this data leads to a central theme, a theory, or hypothesis. For example, in this study, observations were made without the intention of the researcher searching for specific caring behaviors. The researcher observed what a student might observe time to time in that particular class from the teacher. Categories and themes were developed after all observations were done to create a central idea of caring behaviors. The categories were compared across the teachers and students to find any relationships and disagreements on defining caring behaviors.

The data was analyzed based on open-coding, which is comparing interactions for similarities and differences to build conceptual labels that lead into classifying categories. In other words, the coder finds repetitive ideas in the observations to create categories. Each set of field notes from an observation was thoroughly read and caring behavior categories were developed based on what type of possible behavior was shown. A second, independent reader, or coder, participated in reading only the observations, with no background of the class, teachers, or students. The coder was required to read about

grounded theory provided by the researcher (Corbin & Strauss, 1990; Mann, 1993) and was allowed to describe each observation as they saw fit. This coder summarized statements of teachers and students and provided an overall summary of each teacher. Adding this qualitative analysis to data from Section 4 of the survey, the observations helped to provide answers to research question three, “In classroom observations, do teachers exhibit the caring behaviors identified by students? Does it vary for AP/Regular classes and STEM/non-stem classes?”, as well as inform the other two research questions.

Chapter 4: Results

Survey Results

This section summarizes the quantitative data from the survey (Section 2 and 3) and compares the following groups' responses: AP vs. Regular students, STEM vs. non-STEM classes, Teachers only, and Teachers vs. Students.

Section 2: Comparison Across AP and Regular Students

Each part of the survey was analyzed by applying different statistical methods to produce the final results. Analysis of variance, ANOVA, was conducted on Section 2 of the survey. The factor variable was the Academic Placement (AP and Regular) compared with the dependent variable, Score, which is the total score of each student's responses. The p-value cut-off for the tests run in this study was $p = 0.05$, which means that there is less than a 5% chance that we would get these results if the null hypothesis was true, i.e. there was no difference between the two groups being compared. Therefore, there was a significant difference, $F(1,80) = 7.059, p < .010$ between AP students total score responses ($M = 46.6, SD = 10.4$) compared to Regular students total score responses ($M = 52.6, SD = 9.69$). Higher scores mean less agreement with the statements in the survey. The null hypothesis is rejected and we accept our alternative hypothesis of there being a difference in AP and Regular students' responses on Section 2 in the survey.

To further verify what influenced the difference between AP and Regular students' responses, three ANOVA tests were run on the total scores in each of the three

clusters, -Personal Experience of Caring, Classroom and School Management, and General View of Caring (Cluster 1,2, and 3) separately. Each cluster was labeled as the dependent variables and Academic Placement, AP and Regular, as the factors. When comparing Cluster 1 with AP and Regular students, there was significant difference, $F(1, 80) = 7.606, p < .007$ in how students responded on personal experiences. Cluster 2, $F(1,80) = 4.398, p < .089$ and Cluster 3 $F(1,80) = 8.900, p < .991$ did not show any significant differences between students. Therefore, Cluster 1, identified in the factor analysis, is a major influence in the students' responses and through ANOVA tests, is showing a significant difference between the students' opinions. Although Cluster 2 and 3 are not influencing students' scores as much as Cluster 1, Cluster 2 verifies that the fairness and quality of school is agreed between AP and Regular students. Cluster 3, pertaining to caring, also shows that students agree on identifying what a caring and non-caring teacher generally does in the classroom. These results can provide evidence that students may show different reports of personal experiences in school but have similar ideas of what classroom management is and how to detect a caring and non-caring teacher in general based on teachers' actions and behaviors.

Section 3: Comparison Between AP and Regular

In Section 3, there were nine items listed asking the students how often their current teacher spoke one-on-one about certain issues (**Table 3**). The first issue, disrupting class, 83% of all students, AP (89%) and Regular (77%), have never had conversations alone with their teacher about disruption. Good academic performance was

expressed with students 1-2 times/month and all issues, except not completing homework, were categorized as never occurring amongst students. AP students (62%) have never had their teachers ask them about not completing assignments but Regular (69%) students are addressed on this issue 1-2 times/month. When calculating all eighty-two students on not completing homework, 48% chose 1-2 times/month and 43% chose never. Overall, not completing homework was the only one issue that stuck out.

Table 3: AP and Regular Students Total Responses in Section 3 of the Survey

AP ONLY: Quality of Student-Teacher Relationships					
How often has your teacher in this class spoken with you one-on-one about the following?	Never (0)	1-2 times/month	3-5 times/month	More than 5 times/month	TOTAL
Disrupting class	41 (89%)	4 (9%)	1 (2%)	0 (0%)	47 (100%)
Good academic performances	12 (26%)	26 (55%)	3 (6%)	6 (13%)	47 (100%)
Not completing assignments	29 (62%)	16 (34%)	1 (2%)	1 (2%)	47 (100%)
Poor academic performance	35 (74%)	8 (17%)	3 (6%)	1 (2%)	47 (100%)
Interests and things that are important to you	20 (43%)	19 (40%)	6 (13%)	2 (4%)	47 (100%)
Your plans for college or work after high school	23 (49%)	14 (30%)	4 (9%)	6 (13%)	47 (100%)
Your worries	35 (74%)	10 (21%)	2 (4%)	0 (0%)	47 (100%)
How to complete homework assignments	13 (28%)	13 (28%)	10 (21%)	10 (21%)	47 (100%)
Active classroom participation	26 (55%)	8 (17%)	5 (11%)	8 (17%)	47 (100%)

Regular ONLY: Quality of Student-Teacher Relationships					
How often has your teacher in this class spoken with you one-on-one about the following?	Never (0)	1-2 times/month	3-5 times/month	More than 5 times/month	TOTAL
Disrupting class	27 (77%)	4 (11%)	2 (6%)	2 (6%)	35 (100%)
Good academic performances	11 (31%)	12 (34%)	10 (29%)	2 (6%)	35 (100%)
Not completing assignments	6 (17%)	24 (69%)	4 (11%)	1 (2%)	35 (100%)
Poor academic performance	23 (66%)	8 (23%)	3 (9%)	1 (2%)	35 (100%)

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	Interests and things that are important to you	17 (49%)	12 (34%)	5 (14%)	1 (2%)	35 (100%)
	Your plans for college or work after high school	19 (54%)	13 (37%)	2 (6%)	1 (2%)	35 (100%)
	Your worries	28 (80%)	6 (17%)	1 (2%)	0 (0%)	35 (100%)
	How to complete homework assignments	10 (29%)	8 (23%)	8 (23%)	9 (26%)	35 (100%)
	Active classroom participation	12 (34%)	8 (23%)	6 (17%)	9 (26%)	35 (100%)

Section 2: Comparison Across STEM and non-STEM Classes

STEM and non-STEM classes were compared using ANOVA tests on Section 2 between Academic Placement, Classes, and Cluster Scores, as well as percentages based on frequency in Section 3 of the survey. ANOVA tests compared the statements from Section 2, Clusters, as the dependent variable with Academic Placement and Classes as factors. There was a significant difference, $F(1,78) = 378.40, p < .001$ that STEM/non-STEM classes show in how they are answering Cluster 1. However, there was not a difference in Cluster 2, $F(1,78) = 1.138, p < .616$ and Cluster 3, $F(1,78) = .349, p < .845$ in how the students responded between STEM/non-STEM classes. Therefore, we can accept the alternate hypothesis that type of classes, STEM or non-STEM, respond differently in Cluster 1 about personal stance on experiences in school. This agreed with AP and Regular comparisons on the cluster statements.

Section 3: Comparison Between STEM and non-STEM Classes

Section 3 of the survey focuses on how often students' current teachers interact with them on certain issues. Three issues: not completing homework, interests/things that

are important to the student, and plans for college/work after high school, were different between STEM and non-STEM (**Table 4**). All other issues were never discussed with students one-on-one with their teachers. Teachers in STEM classes (49%) never discuss about not completing assignments, while non-STEM classes (60%) have discussions 1-2 times/month on not completing assignments. On a side note, comparing AP (62%, never) and Regular (69%, 1-2 times/month) students, this difference was also noticed. The second issue, interests/things that are important to the student, had 49% STEM classes reporting never occurring and 46% non-STEM classes reporting 1-2 times/month in discussions. The last issue, plans for college/work after high school, showed the same difference as interests/things that are important to the student, STEM, 57% never happening, and non-STEM, 46% 1-2 times/month.

Table 4 STEM and non-STEM Classes Total Responses In Section 3

STEM: Quality of Student-Teacher Relationships

How often has your teacher in this class spoken with you one-on-one about the following?	Never (0)	1-2 times/month	3-5 times/month	More than 5 times/month	TOTAL
Disrupting class	36 (77%)	6 (13%)	2 (4%)	3 (6%)	47 (100%)
Good academic performances	9 (19%)	22 (47%)	10 (21%)	6 (13%)	47 (100%)
Not completing assignments	23 (49%)	19 (40%)	3 (6%)	2 (4%)	47 (100%)
Poor academic performance	30 (64%)	11 (23%)	4 (9%)	2 (4%)	47 (100%)
Interests and things that are important to you	23 (49%)	15 (32%)	7 (15%)	2 (4%)	47 (100%)
Your plans for college or work after high school	27 (57%)	11 (23%)	4 (9%)	5 (11%)	47 (100%)
Your worries	33 (70%)	13 (28%)	1 (2%)	0 (0%)	47 (100%)
How to complete homework assignments	10 (21%)	10 (21%)	10 (21%)	7 (15%)	47 (100%)
Active classroom participation	21 (45%)	7 (15%)	7 (15%)	12 (25%)	47 (100%)

NON-STEM: Quality of Student-Teacher Relationships

How often has your teacher in this class spoken with you one-on-one about the following?	Never (0)	1-2 times/month	3-5 times/month	More than 5 times/month	TOTAL
Disrupting class	32 (91%)	2 (6%)	1 (3%)	0 (0%)	35 (100%)
Good academic performances	14 (40%)	16 (46%)	3 (9%)	2 (6%)	35 (100%)
Not completing assignments	12 (34%)	21 (60%)	2 (6%)	0 (0%)	35 (100%)
Poor academic performance	28 (80%)	5 (14%)	2 (6%)	0 (0%)	35 (100%)
Interests and things that are important to you	14 (40%)	16 (46%)	4 (11%)	1 (3%)	35 (100%)
Your plans for college or work after high school	15 (43%)	16 (46%)	2 (6%)	2 (6%)	35 (100%)
Your worries	30 (86%)	3 (9%)	2 (6%)	0 (0%)	35 (100%)
How to complete homework assignments	13 (37%)	11 (31%)	9 (26%)	2 (6%)	35 (100%)
Active classroom participation	17 (49%)	9 (26%)	4 (11%)	5 (14%)	35 (100%)

Only one issue, disrupting class, was agreed by both classes as never occurring but an unusual difference of percentages was shown. 91% students report never discussing one-on-one about disruption in non-STEM classes and 71% students say it is never mentioned in STEM classes. It is intriguing to see that there is a 20% difference but further investigation using t-tests through SPSS may show whether there is a significant difference between these two groups on the issue of disrupting class.

Comparison Across Teachers

All eight teachers were compared between AP and Regular teachers, Favorite Teachers and non-Awarded teachers, and totaled all together. Teachers for the most part

agree that they have discussion more than five times a month on each issue, except the issue, disrupting class, which was tied in 1-2 times/month (Compared to: All =38%, AP only = 50%), 3-5 times/month (Compared to:All=38%, Regular only = 50%) and one teacher in the never category (Science, AP; Compared to: All = 13%, AP only = 25%) and one teacher in more than five times per month (Social Studies, Regular; Compared to: All =13%, Regular only = 25%). Plans for college/work after high school and worries had a split between teachers as seen in **Table 5**.

Table 5 All Teachers Responses from Section 3 in the Survey

ALL Teachers: Quality of Student-Teacher Relationships

How often has your teacher in this class spoken with you one-on-one about the following?	Never (0)	1-2 times/month	3-5 times/month	More than 5 times/month	TOTAL
Disrupting class	1 (13%)	3 (38%)	3 (38%)	1 (13%)	8 (100%)
Good academic performances	0 (0%)	1 (13%)	2 (25%)	5 (63%)	8 (100%)
Not completing assignments	0 (0%)	0 (0%)	2 (25%)	6 (75%)	8 (100%)
Poor academic performance	0 (0%)	1 (13%)	3 (38%)	4 (50%)	8 (100%)
Interests and things that are important to you	0 (0%)	2 (25%)	1 (13%)	5 (63%)	8 (100%)
Your plans for college or work after high school	0 (0%)	4 (50%)	0 (0%)	4 (50%)	8 (100%)
Your worries	0 (0%)	3 (38%)	2 (25%)	3 (38%)	8 (100%)
How to complete homework assignments	1 (13%)	0 (0%)	3 (38%)	4 (50%)	8 (100%)
Active classroom participation	1 (13%)	1 (13%)	2 (25%)	4 (50%)	8 (100%)

Comparison Across Teachers and Students

Teacher surveys were not compared with students through ANOVA because there were only eight teachers, which is uneven when compared to the eighty-two students. Comparing teachers and students was based on quantitative data in Section 3. Many of the issues of teachers speaking one-on-one with students were perceived to occur more often (>5 times/month) by teachers than students reported them to be (compare **Table 5** and **Table 6**).

Table 6 All (82) Students Responses From Section 3 in the Survey

ALL Students: Quality of Student-Teacher Relationships

How often has your teacher in this class spoken with you one-on-one about the following?		Never (0)	1-2 times/month	3-5 times/month	More than 5 times/month	TOTAL
	Disrupting class	74 (90%)	8 (10%)	3 (4%)	3 (4%)	82 (100%)
	Good academic performances	23 (28%)	38 (46%)	13 (16%)	8 (10%)	82 (100%)
	Not completing assignments	35 (43%)	40 (48%)	5 (6%)	2 (2%)	82 (100%)
	Poor academic performance	58 (71%)	16 (20%)	6 (7%)	2 (2%)	82 (100%)
	Interests and things that are important to you	37 (46%)	31 (38%)	11 (13%)	3 (4%)	82 (100%)
	Your plans for college or work after high school	42 (51%)	27 (33%)	6 (7%)	7 (9%)	82 (100%)
	Your worries	63 (77%)	16 (20%)	3 (4%)	0 (0%)	82 (100%)
	How to complete homework assignments	23 (28%)	21 (26%)	19 (23%)	19 (23%)	82 (100%)
	Active classroom participation	38 (46%)	16 (20%)	11 (13%)	17 (21%)	82 (100%)

The only exceptions were a few teachers and students exactly agreeing on how often an issue was discussed. The following teachers and students agreed with these specific issues: ELA, Regular agreed with “Interests/Things that are Important to You”

by 56% in 1-2 times/month; Math, Regular agreed on “How to Complete Homework” (30%) and “Active Classroom Participation” (40%) both issues discussed more than 5 times/month; Science, AP, agreed on several issues, “Disrupting Class” (80%, never), “Plans for College/After High School” (60%, >5 times/month), “Worries” (60%, 1-2 times/month), “How to Complete Homework” (40%, 3-5 times/month), and “Active Classroom Participation” (40%, never); Science, Regular agreed on “How to Complete Homework” (50%, >5 times/month); and Social Studies, AP agreed on the issue of “Interests/Things that are Important to You” (45%, 1-2 times/month). Why this might be the case is discussed later in Chapter 5.

Section 4: Teachers Thoughts of Their Class

In the Teacher Survey (Appendix B) an extra question, not included in the Student Survey, asked teachers what their honest opinion on behaviors, academia, and general experience about the class that was observed. The ELA AP felt it was hard to get her class focused, including herself, because of the class being in the afternoon and students’ coming from different activities (i.e. choir, AP Calculus, home, lunch, etc.). It is interesting that she mentions AP Calculus as a factor of why it is harder for them to focus. The ELA AP teacher wrote two paragraphs explaining how the students were “skirting the issue of reading” by using “the quick fix of the internet.” In her explanation, she is well aware of technology taking place of simple tasks like reading and writing with a pencil on paper. With her 37 years of experience, it shows in her response that she is informed of the strengths and weaknesses of her students and knows how she can assist

them. As for the ELA Regular teacher, who has 11 years of experience and was selected as Favorite Teacher of the Year, he felt his class had potential of being a great class but individuals were causing the class to not succeed as highly as he expected. He had to give his full attention to those individuals and students who were demanding. ELA Regular did not mention any strengths but the weakness of students distracting each other.

The Math AP teacher, who has taught for 6 years and was Favorite Teacher of the Year, wrote positive comments, “The class as a whole was good. Discipline was rarely an issue and the majority of the class was attentive and engaged on a daily basis.” The results in the study clearly show that his statement corresponds with students’ responses in Section 3 and observations seen from the researcher. He is aware of the strengths and weaknesses of his class and showed them through his teaching. The Math Regular teacher, having 16 years of experience, also praised the class as being the best she had ever taught. “They respected each other and me.” She even commented how her students were AP “drop-outs” and how they appreciated the slower pace of her class lessons. Her students care about their grades and “acted like they wanted to do the best they could to be successful. We worked as a team!” It is evident in both math classes that teachers think highly of their class and mentioned more strengths than weaknesses.

The Science AP (13 years of experience) commented a simple response, “General behavior is okay. Academically, it was a poor class on average.” His statement was brief but explained exactly what seemed to be seen in the observations. While the Science Regular teacher, only having 2 years of experience and selected as Favorite Teacher of

Year, was very aware of the discipline issues in her class, “the class you observed is very vocal and full of energy.” She compliments that her students are good kids but are easily distracted and needed consistent reminders to stay focus. Both teachers, similar to the math teachers, identified strengths and weaknesses in the observed class, which were also seen in the observations.

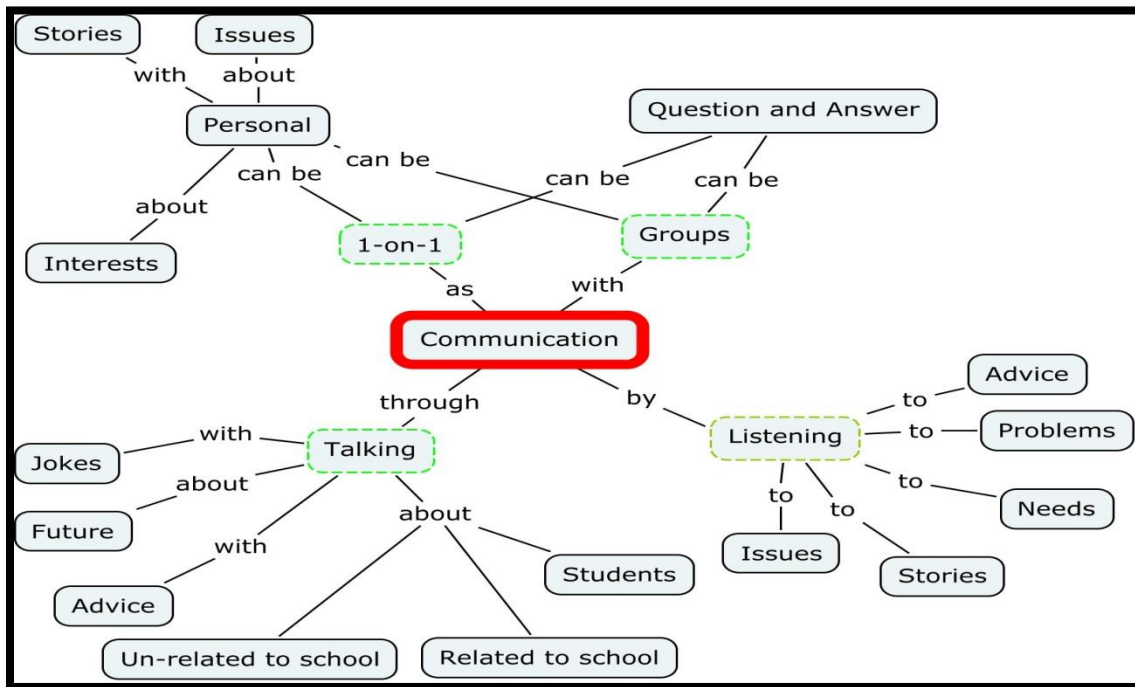
The Social Studies teachers also had good and bad views of their classes. The Social Studies AP, who has 25 years of experience, enjoyed the class but felt that students lack the motivation and interest in the subject to do well in her AP class. She had high expectations for her students’ academic goals but some students were not on the same level as she hoped for. This is compared to the Social Studies Regular teacher with 17 years of experience and awarded as Favorite Teacher of the Year, who explained how the class was given to him after their original teacher resigned and described the frustration of building on unmotivated students. In his statement, he included details of the experiences the students and he went through before being observed, like misbehaviors, parent calls, expectations in his class that were not expected in the other teachers’ classes and grades. Although it was a rollercoaster of a semester, he kept in his mind that the students acted this way because of the change in teachers and expectations. However, some students were seen to interact very positively with the Social Studies Regular teacher but a few students did not. It was clear in observations that there was a disconnection between some students and the teacher.

Observation Results

The observation results summarize all eight teachers with a total of ~120 minutes observed for each teacher. Each teacher has an estimated amount of minutes (noted in parenthesis after each behavior in this section of the report) indicating how long they displayed a specific behavior. The core classes were compared between AP and Regular teacher, as well as Favorite Teacher and non-Awarded Teacher. The results were collaborations between the researcher and a volunteer coder with an overall synthesis of all teachers. Many themes, based on Grounded Theory, were developed but a final conclusion of six major themes resulted: Communication, Physical Movement, Feedback, Teacher Personality, Academic Assistance, Classroom Management and Content. Certain themes were observed either in the observations of the teachers, teacher and student survey, or both observations and survey.

Communication (**Figure 3**) is described as an exchange of information through verbal and non-verbal gestures. Examples of interaction in the observations were either question-and-answer between student-teacher, teachers listening to students talking, and personal talks that range from concern about the student's health or simply wondering where students are if absent. Students' 'caring' responses from Section 4 in the survey, also informed this category. The words "talk" or "conversations" were mentioned in students' open-ended responses one time in every class which was a rare agreement across all eight classes. One can assume that this caring behavior is important to students.

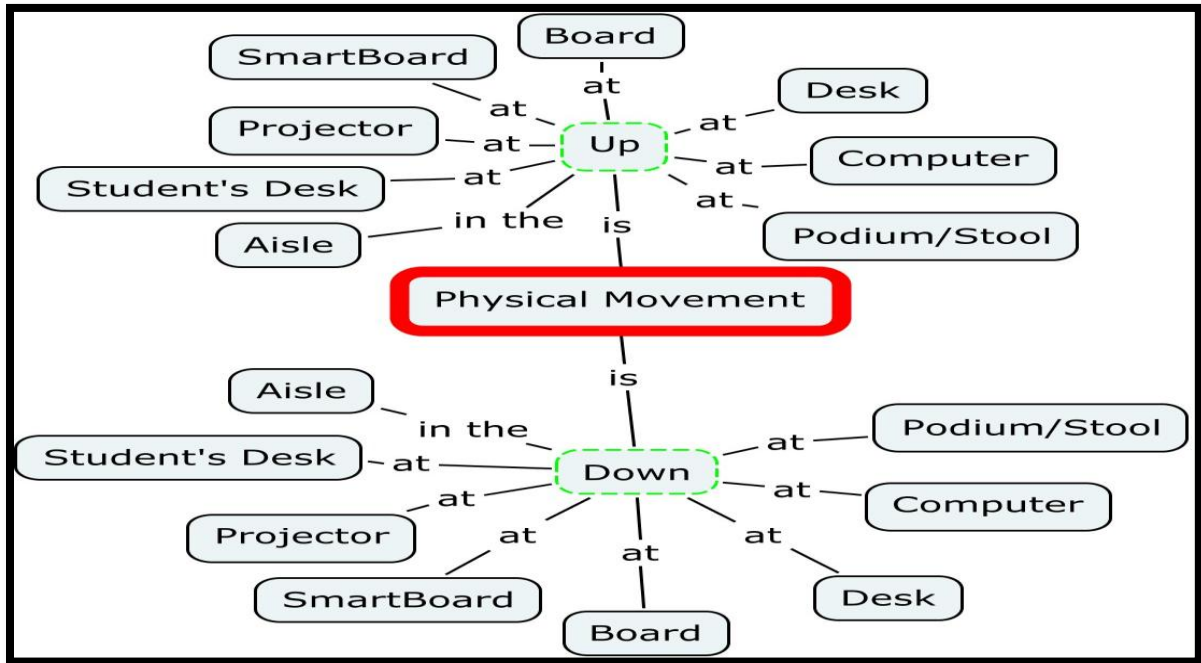
Figure 3 Communication



Physical movement (**Figure 4**) was a factor observed only in the observations and mentioned by two students out of eighty-two in the survey. Although majority of the students did not mentioned any physical characteristics as a caring or non-caring behavior, this form of behavior could possibly be a factor observed by an outsider, or the observer, in the classroom. Students and teachers may not notice the physical movement of the people in a classroom until someone points it out. In the pilot study conducted in Fall 2012, open discussions with students mentioned motion when the researcher asked, “What does a teacher look like physically in the classroom?” Students responded with descriptions of professional clothing, smiling, hair being clean, then mentioned that caring teachers move around the classroom and non-caring teachers sit at their desk the whole class period. Without the researcher steering the students to think of other factors

of caring behaviors like motion, none of the students commented on physical movement. In this study, in the open-ended part of the survey, yet again students did not mention motion, except for two individuals.

Figure 4 Physical Movement



The next theme witnessed in observations and mentioned in survey responses was feedback. Feedback is a form of communication but has a specific motive of a communicator influencing the mood or behavior of the receiver based on critiquing with particular words or signals. Positive phrases like, “Good job!” and “Congratulation on achieving your goal!” were classified as caring behavior. Embarrassing a student in front of classmates, showing disappointment in the student’s performance, and rudely putting down a student for incompetence were commented on by students as non-caring behaviors. This theme was the easiest behavior to detect in both observations and

responses in the open-ended section. Therefore, a figure for feedback is not included because the observer and coder agreed that feedback is either classified as positive (supportive) or negative (punitive) feedback. Words related to either type of feedback are easily identified in the written observations and interpreted as positive or negative.

Teacher personality is a theme found only in the responses of students. This theme is described as quality of characteristics that are displayed as descriptive words in the surveys like “friendly,” “nice,” “funny,” “mean,” or “rude.” Basically a person’s experiences in life shape and influence how they express themselves to others. A person’s character is their personality. Personality is mentioned by few students in the caring behavior responses but expressed frequently in non-caring behaviors of teacher.

Academic assistance is a big theme seen in observations and responses. This theme was developed based on specific words mentioned continuously by students. For example, the term “help” was used in different formats like “help me with my work,” “help me to pass,” “help me on how to complete homework,” and “check for my understanding to help me learn.” Examples of non-caring phrases written by students in their responses were, “when I need help, they reply they are busy,” “don’t help me,” and “expect you to finish the work without any help at all.” A general idea was assumed that students were seeking someone who can assist or guide in how to do something. Grades or grading, re-takes of tests and quizzes, tutoring, and repeating a lesson or work were placed in this theme because of the involvement of the teacher assisting the student to achieve academically in school.

The theme of classroom management was seen mostly in observations and a few comments in responses to the survey. This theme is how teachers maintain classroom behavior, discipline, and structure. The researcher and coder discussed how teachers delivered their content in the lesson. It was mentioned in students' responses to the open-ended section of the survey but not classified to be as important in discussions between the researcher and coder. Therefore, classroom management and content were added together to describe how the class is being controlled and lessons being taught to give the overall experience in the classroom. Content is defined as any connection of the lesson, subject, and material that is delivered to the students. Comments like, "explain or re-teach a lesson," "teach more content than required", "knowledgeable about the material," "teaches a boring class," or "explain the objective poorly" are examples of what would be categorized as content.

The following are summary descriptions, minutes in parenthesis, of what was observed in each teacher's classroom:

ELA Teachers

The ELA AP teacher displayed high expectations (8), modeling through examples of work (8), and answering all her student's questions in the classroom (76). Some unique interactions, which were displayed in three observations, that she showed were: concern for students outside of school (3), offering tutoring (1), and mentioning college opportunities (1). ELA AP jokes (11), listens to the students (11), praises students (13), and has more one-on-one conversations (76) than with the overall group of students (13).

She also moves often around the room, like moving in the aisle (9), at students' desks (7), up (10) and down (8) from her desk, at her computer (6), the projector (9), the board (1), standing at the front (20) and sitting down on a stool (4). ELA AP teacher disciplines (12) and gives permission to students (2) to go to the restroom. Discussed between the researcher and coder, the themes observed in her classroom were: communication (one-on-one), physical movement (moved extensively around the room), feedback (gave compliments and returned work), personality (joked and talked personally), academic assistance (guided students), classroom management (disciplined and class was on task), and ELA AP not showing content (lacked in teaching a lesson). In her free response on what she felt she showed as caring behaviors was "conversational way of presenting material, verbal and written praise for participation in class and feedback on written work, and sense of humor." All were apparent in her observations.

The main concern of the ELA Regular teacher was that he never stood up in any observations. He sat at his desk the whole 120 minutes. However, he did assist students (28) when they came to his desk, gave expectations for assignments (18), spoke one-on-one with students in a question-answer manner (38) and addressed the whole class by asking questions or open discussions (32). ELA Regular jokes (14) in every observation, listens to students stories (4) and was not shy with arguing (4), telling personal stories (2), disciplining (9), giving personal opinions on controversial issues in the world (3) and being annoyed with non-verbal impressions (8) with the students. He also provided positive (5) and negative (1) feedback to his students. One unique interaction was allowing students to use their phones to find absent students and check if they were ok

(4). The researcher and coder agreed the themes ELA Regular displayed were communication (one-on-one), feedback (telling students what was good and bad on their work), personality (joked and gave his opinion), academic assistance (helps and guides students on project), classroom management (disciplines and students mostly on task) and the teacher not showing content (limited on teaching a lesson) and physical movement (never moving). In his free response on what he felt he did to show caring behaviors were students having access to him outside of class, seeing their grades in class on a daily basis, and giving opportunities like Saturday school tutoring to complete make-up work. However, only a one- minute notation in the observations mentioned graded work or tutoring.

The main difference between the ELA teachers were physical movement in the classroom (moving (AP) vs. non-moving (Regular)), writing and providing examples and models (AP) versus not (Regular), and no debates or open-discussions in the AP class while Regular allowed debates and students to be open with their opinions. AP provided extensive positive feedback, while Regular gave both positive and negative feedback to their students. Lastly, the AP teacher monitored the students' progress in work in every observations and the Regular teacher did not. The main similarities between the two academic classes are: grading papers during class, joking with students, personal talks with the students, one-on-one interactions in all the observations, discipline being enforced as classroom management, and rarely seeing the teacher actually teaching a content lesson (i.e. showing notes and having students copy).

Math Teachers

The Math AP teacher explained content thoroughly by scaffolding lessons and telling the students what he expected in the class (62). He was very active in movement in the front of the classroom (11), standing at the podium (16), at the SmartBoard (31), at his desk (8) and at his computer working with a projected calculator on the board (5). Every day the Math AP teacher joked with his students (14), interacted one-on-one with students (51) during the lesson, and asked the class questions (22). He also provided constructive criticism, both positive (11) and negative (1), on students' performance, as well as showing his disappointment (3) in grades in three out of four observations. The unique interaction the Math AP teacher did was checking for students' understanding witnessed in all observations (7), fixing mistakes pointed out by students and not getting upset (5), and relating the lesson to the students (6). He was the only teacher observed who changed students' seating chart. Overall evidence for all seven themes was found and it was agreed on between the researcher and coder that the Math AP teacher showed all seven themes in a positive perspective. The Math AP teacher explained that he showed caring behaviors by discussing with the students about their lives outside of school, their personal goals, and giving individual attention about their concerns. Similar to the ELA Regular teacher, these behaviors were not seen in the four observations in this study.

The Math Regular teacher had interactions with the students at her desk (41) and students were working on the lesson on the laptop (44) in all observations. With that said,

the teacher does use technology with her students but rarely monitors it (25). The teacher only joked one time in an observation but students had to begin the joking interaction (3). There was limited motion at the board (1), students' desks (2), and she was observed mostly sitting at the desk (22) and being on the computer (22). The Math Regular teacher did provide positive (3) and negative (4) feedback to her students and showed discipline in her class (5). The unique interaction was telling students about their grades (10) and moving on in lessons without checking for understanding (3). The themes the teacher showed and were agreed upon between the researcher and coder were communication (one-on-one), feedback (gave both positive and negative feedback), academic assistance (helped when students asked), the teacher not showing physical movement (limited in moving around the classroom), teacher personality (seemed to be distant from the students and not joking), content (unsure what was being shown on the laptops), and classroom management (students sleeping during lesson and the teacher not addressing). The Math Regular listed in her free-response what she felt she did that was caring, "treat students with respect and as young adults," "give good, thought out notes and explain so that they understand (I try to always be prepared so that I don't waste their time)," and "do not give busy work, I give work that respects their time and effort." Interestingly as an observer in her classroom, the teacher was prepared with the lesson by making it an online lesson but the students seemed to be doing busy work. Also, it is unclear in the four observations if the Math Regular teacher showed respect to her students.

The main differences between the Math AP and Regular teachers were: movement (AP) versus minimal movement (Regular), joking in every observation (AP)

versus only once (Regular), and not grading in class (AP) and grading in class (Regular). A big difference was in the AP class the lesson was being taught every time by the teacher while the Regular class had their lesson presented to them with a video on their laptops. The AP teacher also showed more excitement in teaching and managing his class and the Regular teacher did not display any excitement and did not show classroom management skills. The similarity in behaviors that both teachers displayed was using technology to teach the lesson and one-on-one interactions with students in all observations.

Science Teachers

During the observations of the Science AP teacher, the teacher was preparing his students for the AP test and had many group conversations with his students. He consistently had one-on-one conversations with students (45) and group discussions (23) while explaining problems and told them what he expected in the class and on the test (56). He moved around the classroom near the front (9), at the SmartBoard (9), at his desk showing examples on the computer to the class (29), at the board (15), and leaving the classroom to go to his office to get papers (6). The Science AP teacher joked with his students (11) and talked about non-related school topics at the end of the period (2). The unique interactions the Science AP teacher exhibited were showing encouragement (15), checking for understanding (22), mentioning college (2), and allowing students to fix his mistakes and then teach the class (4). The themes seen in his observations were communication (discussions with the lesson), physical movement (although limited to the

front, he still moved around), feedback (encouragement), teacher personality (joking with students), academic assistance (explaining how to solve problems), content (teaching a science lesson and engaging with the students), and classroom management (rare discipline problems). The researcher and coder felt that the classroom management was harder to include as a theme because the class only had nine students. In the end, both agreed that the Science AP teacher still displayed this theme and rarely had problems with the students and managing the class. In his free-response, he listed the following three caring behaviors he considers caring: ask about college and personal concerns, reiterate his expectations of them, and do not always give them the grade they deserve. The Science AP teacher did mention college, personal concerns of the students, and his expectations of the class in most of the observations. However, discussing or showing grades were not seen in any of the observations.

One behavior the Science Regular teacher did was constantly move around her classroom in various areas like being at the front of the classroom (26), at her desk (17), at her computer checking roll or changing the slides on PowerPoint (10), at her podium (12), at students' desks (3), at the board (46), and walking down the aisle (39). During the lab day, she was moving around to each lab table (14). However, she was not in control of her class even after disciplining (23) and giving instructions repeatedly (20). However, she did show a more extensive one-on-one interaction with students (74) than with the class as a whole (23) and joked in every observation (9). With the bad behavior of individual students in her classroom, at times she was talking to one side of the class more often than the other (10), not checking for understanding but instead moving on in

the lesson (5), and showing annoyance (5). Even with the disturbing students, she did provide positive feedback to students (6), listen to students' personal stories (6), and showed concern about students by asking how they were (8). She also was the only teacher that had clear, written instructions on the board (i.e. what supplies to use for the day and learning objectives) and students followed the instructions in every observation. The Science Regular teacher also mentioned tutoring (1) and grades (5). Despite having a disruptive class, she still was able to teach lessons and have a lab to keep the students active. The themes agreed between the researcher and coder that summarized the Science Regular teacher's observations were: communication (many one-on-one interactions), physical movement (moved so much it was hard to keep up with), feedback (provided supportive feedback and grades), teacher personality (joked and was nice), academic assistance (did show examples and help in the lab), and content (taught lessons and had a lab). Classroom management was very poor in her classroom. Both coders agreed that her uncontrollable class may reflect badly on how she manages and disciplines her students. In her free-response, she stated that her caring behaviors were welcoming students individually in her classroom, asking about their day, and being concerned about their learning in class. During the observations, this teacher did show greetings with her students and asked about their day. She also showed concern about the students' learning by providing a hands-on lab and worksheets that showed step-by-step examples on solving problems.

The differences between the Science AP and Science Regular teachers are the AP teacher not having hands-on activities and only having open-discussion. The Regular

teacher provided a lab that applied what the students were learning that week. However, the Science AP teacher showed more control of his classroom than the Regular teacher did. He also checked for understanding in every observation and the Regular teacher at some points moved on in lessons. The AP teacher moved in one general area while the Regular teacher moved consistently throughout the classroom. Although she moved more, students participated more in the AP class than the Regular class. Grades were only discussed in the Regular class and not the AP class. As far as the similarities, both teachers joked with their students, had one-on-one interactions with all students, and gave positive feedback.

Social Studies Teacher

The Social Studies AP teacher was very vocal about positive (21) and negative (33) feedback. In some instances, she would say a nice comment to a student and then the next minute bring them down. It was very obvious that the negative affected the students' confidence in responses because of the students' shying away in their response to the teacher. She constantly checked to see if students were paying attention (13) and reminded them that they were preparing for an important AP test and had no time to waste (16). The class had many group open discussion with the teacher (31) and individual one-on-one interactions as well (83). The teacher's expectations were very clear (54) in every observation and the Social Studies teacher tells what the students need to do to be successful in her class (22). When the students took a timed test, the teacher monitored (8) and did not grade. Her class is a very fast pace class but she still had time

to joke a little (3). The Social Studies AP teacher does move frequently (21), goes to the students' desks (8), walks through the aisle to talk to students (21), shows examples on the board (9), and stays at the desk (29). The unique behavior of this teacher was forgetting students' names twice (2), hurrying the students (3), listening to the students stories (2), and giving detailed instructions (19). The themes seen in her classroom were: communication (group and individual interaction), physical movement (moving around the classroom), feedback (had positive words but the negative were affecting students' performance), academic assistance (did help students with their questions and guided with examples), content (strongly showing how to pass the AP test), and classroom management (rarely any discipline problems and if there were, they were addressed immediately). Her personality was minimal on jokes and came across as very strict. Her free-response on caring behaviors is giving praise for listening and trying in her class, remembering little details about her students, and just enjoying them. She does show all these caring behaviors but does show negative behaviors, like negative feedback that hurts students' feelings.

The jokes (20) and telling personal stories (16) were big behaviors observed in the Social Studies Regular teacher. This teacher enjoyed telling the students about himself and was not shy about it. He did talk one-on-one with students (51) and to the group (21) but had a few students not participating with the class, who sat in silence (19). He did not correct their misbehavior and discipline. He provided positive feedback (8) and only once in the observations he gave negative feedback (1). The Social Studies Regular teacher's motion was mostly at his desk (39) and the computer (25) and he walked in the aisle (7),

at students' desks (6), at the board (5) occasionally. Only one lesson through a PowerPoint presentation was observed of him explaining vocabulary (26). Most of the observations were students working on make-up or re-do work that the Social Studies Regular teacher gave back graded. He did mentioned grades (6) and instructions on assignments (16). The unique behaviors in his class were allowing his students to leave without asking permission (1), students were engaged when he spoke of interesting facts but not engaged when teaching, and listened to the students in most of the observations (3). The themes seen in the Regular teacher's classroom were: communication (listening to the students' stories and advising the students what to do), physical movement (up and down but was still interacting with students), feedback (positive compliments), teacher personality (joked and gave personal stories), and academic assistance (allowed re-do and make-up work to help students' grades). The Social Studies Regular teacher lacked in content (minimal lessons of the subject and mostly working on make-up or re-do work) and classroom management (students not participating and not disciplining). The three caring behaviors he felt he showed were allowing make-up work after district requirements, allowing students to work on other work from other classes, and advising them with facts on being safe in the world. All three of his behaviors were seen in the observations.

The similarities between the Social Studies AP and Regular teachers were: moving frequently in the room, having one-on-one interactions with their students, and giving graded work back. There were several differences between these two teachers, one joked extensively (Regular) while the other (AP) made a few side comments. While

observing, the AP felt less personal with their students than the Regular teacher who was telling personal stories and information about himself to his students. The AP teacher provided feedback but the AP also gave more negative feedback to the students on their performance. However, the AP teacher had better classroom management than the Regular teacher, who did not address the misbehavior in the class. The AP class was very fast paced, had clear expectations, and a lesson was done every observation. The Regular class was slow paced, no expectations were mentioned, and only one lesson was witnessed.

Comparison Between AP and Regular Teachers

The second coder was not told which teacher was categorized as AP or Regular. This was done to see if certain caring behaviors were observed more frequently in an academic class. The coder predicted that AP teachers were ones that allowed more open discussions for students' opinions to be laid out, would be engaging students more in the class, having a fast pace class, interacting with students more, and have created an environment where students were more willing to contribute to the class lesson. The coder felt that Regular teachers maintained a slower paced class in order to explain every single step for students, not allow for students to not be independent or expect and solicit responses in the lesson, and have more discipline problems. When asked which teacher was AP or Regular, the coder was right three out of four times on who was AP or Regular in each subject based on his opinion of AP and Regular teachers and their classroom.

Comparison Between Favorite Teachers and non-Awarded Teachers

The Favorite Teachers of the Year were all teaching in Regular classes except for Math. Again, the second coder was not told which teacher was categorized as the favorite or not awarded teacher. The coder was asked which teacher in each subject they thought was selected as Favorite Teacher based on what they read in the observations. He felt that the favorite teacher displayed more interaction with students and tells personal stories to their students. Surprisingly, the coder was correct three out of the four times when asked who was the favorite teacher or not just based on the behaviors recorded in the observations. The qualities that were seen in observations of Favorite Teachers consistently included: communication, like being personal with the students by telling stories or listening to the students' personal lives. Feedback was seen as providing support to help the students improve in school and in life whether it was positive or not. The fact that the teacher provided some feedback was seen as positive; the students seem to favor this behavior in the classroom. Teacher personality like joking and being nice was seen in all the Favorite Teachers and academic assistance was a behavior shown through helping the students with the assignments, asking questions to guide the student to the answer, and graded work. Content and classroom management varied between Favorite Teachers and non-Awarded Teachers. Sometimes the Favorite Teacher did not show in depth of content or engaging lessons but was still selected as Favorite Teacher and vice versa with non-Awarded teachers.

Comparison Between STEM and non-STEM Classes

STEM classes in the observational data were observed to take more notes and spent more time working on problems than were non-STEM classes. English and Social Studies classes had more open-discussions and students were interacting with each other during the observations. Math and Science classes had fewer in such interactive discussions and focused more on learning the content. One-on-one interactions were witnessed in Math and Science classes for a total 211 minutes while English and Social Studies classes had more one-on-one interactions for a total 240 minutes. This supports the data of frequency in students' responses reported in Section 2 about how often teachers interact one-on-one with students. Specifically finding which issues teachers and students interact about would need more detailed investigation and provide more answers to verifying a true difference in STEM and non-STEM classes.

Discussion

My Six Themes vs. Wentzel's Five Dimension of Caring Behavior

The development of my six themes (**Table 7**) from the study, (Communication, Physical Movement, Feedback, Teacher Personality, Academic Assistance, Classroom Management, and Content) were compared to Wentzel's Five Dimensions of Caring Behaviors (1999). The themes were based on observations and survey responses, by using the techniques of Grounded Theory, that developed ideas based on little or no influence of other models. Wentzel's first dimension of caring behaviors, Modeling, is

defined as “indications that the teacher cares about teaching,” and is similar to my Classroom Management and Content. The second dimension is Democratic Interactions divided into Communication (or the “act of communication itself”) and Equitable Treatment and Respect (“honest and fair treatment, as well as keeping promises”) was compared with my theme, Communication. Wentzel’s next dimension, Expectations based on Individuality, which is divided into two parts, student as a person (“recognition of student’s individuality, and concern with the student’s non-academic functioning”) and student as a learner (“recognition of the student as having unique academic skills, problems, and contributions to make to the class”) is a merger of two of my themes, Teacher Personality and Academic Assistance. Wentzel’s fourth dimension, Nurturance (“teacher’s informal and formal evaluations of student work”), was compared to my theme of Feedback. Lastly, the dimension, Other (“all references to personal attributes, or responses that do not fit into the other categories”) was matched with my Physical Movement because motion theme would be consider in “other” and does not fit in other categories.

Table 7 Comparing Examples of Caring Behavior (Wentzel, p.416, 1999)

Wentzel’s Five Dimension of Caring Behaviors		My Six Themes of Caring Behaviors	
1. Modeling		Classroom Management and Content	
Caring: makes a special effort, teachers in a special way, makes class interesting	Non-Caring: doesn’t care about grades, gets off task, teacher while students aren’t paying attention	Caring: explains and re-teaches, teaches more than is required, disciplines misbehaviors to prevent distraction to other students, fun lessons like hands on activities,	Non-caring: always lecturing, boring lessons, focused on state testing and not subject, too much free time, teaches bare minimum, teaching too fast/rush lesson because behind,

		adapts to class	explain poorly, little explanation, incompetent in subject, lacks management, disciplining, just gives notes, keeps class uninteresting, let you do whatever the students want, lets things slide
2. Democratic Interactions: a) Communication and b) Equitable Treatment and Respect		Communication	
Caring: a) talks to you, pays attention, asks questions, listens b) trusts me, tells you the truth	Non-Caring: a) screams, yells, ignores, interrupts b) embarrasses, insults, picks	Caring: talks to me, listens, 1-on-1, group discussions, personal, tells stories, jokes, talks about the future, talks about outside/inside school	Non-Caring: ignores me, forget student's names, no relation, doesn't push students to use abilities, rude jokes and remarks, not fair in groups, does not listen, not engaged in conversation, no eye contact, does not speak directly, does not talk or pay attention, one word answers, does not bother asking students why, no interest in students outside life, not on a personal level with students, no talking 1-on-1
3. Expectations based individuality a) Student as a person b) Student as a learner		a) Teacher Personality and b) Academic Assistance	
Caring: a) Asks what's wrong, talks to me about my problems,	Non-Caring: a) Forgets names, doesn't ask why I'm sad, does nothing when I do	Caring: a) Concern, jokes, nice, strict, friendly, values,	Non-Caring: a) Frustrated, picky, contradicts, tired, stressed, negative

<p>acts as a friend</p> <p>b) Asks if I need help, takes time to make I understand, calls on me</p>	<p>something wrong</p> <p>b) Doesn't explain things or answer questions, doesn't try to help you</p>	<p>patient, not scold or mean, be involved in students lives, uses incentives and rewards, sympathy, doesn't judge, happy, refers students as their own children, polite</p> <p>b) Helps me with my work, help me to pass/grades, how to complete homework, check for my understanding to help me learn, tutoring, allows re-do's</p>	<p>attitude, distracted, rude, mean, not friendly, gives up, too personal about their own lives, belittles, yells, hates kids, nonchalant, selfish, no effort</p> <p>b) No guidance, no opportunities to re-do, doesn't help with work, too busy, gives work more difficult than does in class, doesn't show grades to help me, no tutoring</p>
4. Nurturance		Feedback	
Caring: checks work, tells you when you do a good job, praises me	Non-caring: sends to office, gives bad grades, doesn't correct work	Caring: concern, encourage, congratulates, compliments student and their work, praise me	Non-Caring: discourages, disappointment, negative words about students and their work, frustrated, puts down

<p>5. Other: Vague answers (“nice to me, helps me”), all references to personal attributes, or responses that do not fit into the other categories</p>	<p>Physical Movement is a vague theme that needs more research in, assuming with the pilot study, moving teachers are caring, and sitting teachers are not caring.</p> <p>Two students who mentioned in this study: “Too many sit and do talking assignments instead of actually doing something” and “Just sit and be at their computer” as non-caring.</p>
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With these findings, the six themes that emerged from my analysis relate to Wentzel’s in some aspects, like communication, but are not established in others, like physical movement and another, vague answers. However, there were many similarities in the examples of caring and non-caring that I feel verify how the themes align with Wentzel’s framework for dimensions of caring behaviors.

Chapter 5: Conclusions

Answering the Research Questions

1. How do high school students define caring behaviors on the part of their teachers?
 - a) Does it vary between AP and Regular students?
 - b) Does it vary between STEM and non-STEM students?

Students define a caring teacher the same as researchers have found, as a person who is interactive with students over school and non-school issues, provides supportive feedback, and manages their classroom with professional integrity and respect.

Answering part 1a, the way students describe caring behaviors in general does not vary between AP and Regular students, but their experience of caring behavior does vary to an extent. Analysis of responses to Section 2 of the survey verified that students answer Cluster 1, statements about their personal experiences of caring, differently depending on whether they are in AP or Regular classes, but did not show any difference in the class and school management and statements with perspectives on caring in general. This agrees with the results of Shaunessy and McHatton (2009). However, in the free response AP students reported caring teachers as someone who addresses future plans, college, and goals. This was not mentioned in any Regular classes where caring behaviors like helping students with their work, grades, and personal issues were mentioned more often. As far as STEM and non-STEM classes, there was also a different view on caring behaviors expressed. STEM classes reported teachers never or rarely interacting one-on-one about certain issues like not completing homework, interests and things important to students,

or plans for college or work after high school, while non-STEM classes reported interactions on those issues about 1-2 times/month. A possible reason for a higher frequency of students' responses from non-STEM classes on these issues is that English and Social Studies require more group discussions and elicit opinions of students in order to complete writing assignments. Non-STEM teachers may be able to learn more about their students' personal lives in order to engage students and make sure the students relate to their work, while Math and Science require more time in learning steps in solving problems and participating in labs. This may reduce the amount of time for getting to know the students on a personal level but may meet the needs of students on how to complete the required work.

2. How do high school teachers describe their own caring behaviors toward students?
 - a) Do they report different caring behaviors for AP and Regular students?
 - b) How do their descriptions compare with the student's descriptions of caring behaviors?

High school teachers describe their own caring behaviors differently than their students do. Most teachers reported interacting more than five times a month with one-on-one conversations with their students, while students reported it never or rarely occurring. The difference may be that the teachers were thinking of how many one-on-one interactions they had with students in total, as opposed to with any individual student. Even when comparing AP teachers and Regular teachers' responses from Section 3, the majority of the issues like good academic performance, active classroom participation,

and not completing homework, were agreed upon between the teachers in the two groups. The only issues slightly different in responses from the two academic tracks were disrupting in class, discussing students' worries, and how to complete homework assignments. AP teachers discuss with their students less on these issues than Regular teachers, with the assumption that AP classes have fewer discipline problems and more responsibility in their work. Regular classes, as seen in observations, were more disruptive, teachers were more concerned about their students, and they displayed more step-by-step procedures on how to complete work in the class. Even though this was not seen as often in the AP class observations, it cannot be assumed that these issues were not addressed at all.

As for answering question 2A, there are different caring behaviors shown towards AP and Regular classes based on AP students' reporting a more positive personal experience of caring at school from Section 2 of the survey than Regular students reported. The reader can assume that teachers are displaying different behaviors towards the AP students because the students are claiming that academically they are satisfied and personally they want more individual interactions with teachers. While Regular students are claiming in their open-responses that they are receiving personal interactions with teachers but want more guidance and help in their work and grades.

When comparing students' and teachers' descriptive words of caring behaviors, they are similar in the open-ended responses but different in how often it is being shown, as in Section 3, frequency of caring behaviors. All the teachers mentioned at least one

example that they thought they displayed as caring with each theme of caring behavior (communication, feedback, teacher personality, academic assistance, content, classroom management and excluding physical movement). In conclusion, teachers and students are on the same page when defining caring behaviors but there is a disconnection of how often they report the behaviors being delivered and received. Again, this discrepancy could have been due to teachers interpreting the question to ask how often they interacted with all students in the class combined, while students answered for themselves individually.

3. In classroom observations, do teachers exhibit the caring behavior identified by students?
 - a) Does it vary for AP and Regular classes?
 - b) Does it vary between STEM and non-STEM classes?

Similar to the answers from question 2, some of the teachers exhibit the caring behaviors identified by students. Again, since each teacher was observed four times (~120 minutes) it makes it difficult to conclude whether a teacher is caring or not. In some instances, maybe the teacher did display the caring behavior but the researcher was not present to see the interaction or vice versa. The researcher must assume that some teachers expressed the caring behaviors exactly as the students described based on the qualitative and quantitative data from the survey. Also, using the teachers that were selected as Favorite Teacher of the Year helped me to assume that the teacher that was observed must display the caring behaviors because they won the award. Those who are

awarded are favored by students and must have the qualities the students seek in caring teachers.

While observing there were certain interactions that were seen more often in Regular classes than AP classes, like disciplining issues and interactive lessons, but then it also was the other way around, too, like AP classes having more open-discussions over the lesson. There was more of a difference in the Favorite Teacher classes versus the non-Awarded teachers classes than AP versus Regular classes. The reason again, that the researcher can assume that these teachers have a particular caring behavior that students favor. In the observations, all the Favorite Teachers were consistent on telling personal stories, joked with the students (not towards them), or gave personal information about themselves. Some Favorite Teachers appeared friendlier but still withheld expectations in their class and were sometimes strict, while others engaged in one-on-one interactions with their students on future goals, work related endeavors, and discussions over content.

Between STEM and non-STEM class observations, the Math and Science classes were focused on content and teaching the students step by step how to work problems. It appeared as if they had lessons being taught in every observation. The English and Social Studies classes had more open-discussions and down time for teachers and students to interact with each other more often. Sometimes the teachers were not teaching content and allowing students to work on their own. As previously stated, STEM teachers might have less time to interact with their students and show different caring behaviors than non-STEM teachers because the requirements of teaching rigorous solving skills in math

and science involves time. In addition to these skills, the teachers must also battle the fight with students appreciating and understanding the uses of math and science beyond school. Non-STEM teachers have the advantage of being able to relate literature and history to a students' everyday life. Math and science classes are introducing new vocabulary that is harder for students to grasp and relate to themselves. In the quantitative data from Section 3, it was very obvious the differences between STEM and non-STEM students on issues discussed one-on-one with their teachers. In classroom observations, the differences were based on the amount of time a teacher had to be able to interact with every single student. Investigating more into STEM and non-STEM classes can fully answer why there may be a difference between the two classifications.

Future Research

Many factors could be further investigated, like the differences between responses based on gender, going into more depth with the Favorite Teachers of the Year and non-Awarded teachers as well as specific STEM and non-STEM classes, for example, physics vs. biology. Teacher years of experience compared with other factors like Teacher of Year status could also be considered for future research. As well as investigating the years of experience as a variable to determine whether it influences a teacher's caring behavior and if the experience makes a difference in teaching. Also, physical movement was a main theme developed from the observational data but it was hard to determine if a caring or uncaring teacher moved more frequently or less often. For example, some of the teachers that were recognized as Favorite Teacher of Year (i.e ELA Regular teachers and

SS Regular teacher) did not move frequently or at all but were still considered caring teachers by their students. Movement is definitely a factor to consider in future research.

Chapter 6: Applications to Practice

With the high rates of students dropping out of high school and scarcity of teachers, finding factors like caring behaviors can possibly make a difference by indicating how schools might encourage both students and teachers to stay. The classroom experience can be positive for both parties when a set of expectations are established and caring skills can be developed as one of those expectations. From my own experiences in high school, and many others can relate, there are always examples and stories about that one great teacher that inspired and that one awful teacher that turns students away from school. The inspiration for this study was based on how to be the teacher that inspires, not the teacher that students dread to see every day. The current study can benefit teachers who want and need to develop these caring behaviors like talking with students over non-school related topics or maneuvering the class lesson at a productive but steady pace. As a secondary high school teacher, it is hard to accept that these factors have not already been addressed in the classroom but clearly from the results of this study, the data shows that there are shortcomings on some issues. These need to be addressed! Teachers think they are providing enough feedback to their students but in reality, they are sometimes displaying just enough for the students to not completely hate them.

Development and Mentoring

Teacher development, or developing new skills in a teacher's craft, is a requirement for teachers that want to grow and evolve in their abilities. Understanding

the behaviors that teachers display every day in school can help teachers develop into a better role model and more appreciated teacher in the classroom. Each of the teachers in this study had taught for a different amount of years, ranging from 2 years to 37 years of experience. As mentioned in the future research section, it would be interesting to see how the mentoring and development skills of each teacher have developed through the years in order to compare these skills to the amount of teachers' experience. Many new teachers are assigned a mentor teacher to create positive habits and successful techniques. Novice teachers have an easier time being open to leaders, new ideas, and allowing people to critique them. However, through the years of teaching, having a mentor is less often considered as a development option for well-rounded and senior teachers. Intermediate and expert teachers sometimes feel belittled when questioned about their teaching ability or approaches they have used in the classroom for years. In the end, they shy away from guidance, assistance, or advice in crafting themselves. This should not be the case. In general, all teachers should build themselves and allow mentoring to continue throughout their career. Mentoring should not be seen as a weakness but as strength in finding innovative ideas to store for future or current use. I personally feel that telling teachers to work on their social behaviors like caring can come across as offensive but maybe this unconsidered skill is disabling their connection with students.

Another possible driver of a teacher's desire to grow and develop in their professional skills is encouraging teachers to observe each other. The observation process can help improve both teachers in teaching skills and lessons and benefit the students by allowing them to become familiar with additional faculty members at the school. Along

with discussing weaknesses and strengths, teachers can share ideas about student improvements, and other details. However, the observations should not feel like an obligation or a ‘critique fest’ of negative comments to defeat a teacher, but should be a way of communicating and collaborating in a different manner than sitting around a desk doing lesson planning. I honestly feel that I improved my teaching and social skills with my students because of what I saw as a bystander in the classroom. I realized the little habits teachers do that either favor or disfavor students.

My plans are to change certain behaviors in my classroom, like mentioning future plans more often with the students and not rushing through the lesson. It is hard not to be focused with trying to rush the students to get the unit done before testing season. However, what was found in this study, ‘rushing’ is jeopardizing the students’ relationship with their teachers. Students feel that not discussing on how to complete homework correctly, helping them with their work, or showing more examples, makes teachers appear like they do not care for their students. I would need to find a balance of maintaining with the district/department’s requirements in curriculum with the needs of my students. Although the requirements are very important, the students’ social and emotional well-being is far more important for them to be successful. They need to gain trust and respect with their teachers before they will do anything for the teacher, just like Dr. Valenzuela’s quote from the review of literature section. In the future, I will need to check my students’ needs more often than waiting for a final feedback survey at the end of the year. The more often that I communicate with my students, the better relationship and environment we both can develop in the classroom to be productive.

Appendix A: Student Survey

SECTION 1: Personal Information

Circle below what applies to you:

Race? African American Asian/Pacific Caucasian Hispanic Native American

Gender? Female Male

Fill in the following questions:

Is this an AP/Pre-AP (Advance Placement) or Regular Class? _____

Are you currently: a) a natural born citizen b) a legal permanent resident or Green Card Holder

c) applied and granted US citizenship d) applied and was not granted US citizenship

How long have you been in the Ector County Independent School District? _____

SECTION 2: Caring vs. Non-caring in School

Circle which number best fits your opinion.

<i>Statement</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
Overall my teachers at OHS give me the moral support I need to do well in school.	1	2	3	4	5
I rely on my teachers for advice and guidance in making important school-related decisions.	1	2	3	4	5
My teachers are sensitive to my personal needs.	1	2	3	4	5
My teachers are good in helping me solve school related or academic problems.	1	2	3	4	5
My teachers are good in helping me solve personal problems.	1	2	3	4	5
I have a friendly and trusting relationship with at least one teacher.	1	2	3	4	5
Students get along well with teachers.	1	2	3	4	5
There is a good school spirit because of the teachers.	1	2	3	4	5
Discipline is fair in school.	1	2	3	4	5
Students do not disrupt class time.	1	2	3	4	5
The quality of teaching is acceptable.	1	2	3	4	5
Teachers are interested in students' progress in school.	1	2	3	4	5
When I work hard on school work, my teachers praise my effort.	1	2	3	4	5

Most of my teachers listen to what I have to say.	1	2	3	4	5
Caring teachers have interesting things in their classroom.	1	2	3	4	5
Good teachers care about all their students.	1	2	3	4	5
A teacher who cares about students is always a good teacher.	1	2	3	4	5
I know when a teacher cares about me.	1	2	3	4	5
I know when a teacher does not care about me.	1	2	3	4	5
I believe my teacher in this class cares about me.	1	2	3	4	5
I believe this teacher shows caring behaviors towards the students.	1	2	3	4	5

SECTION 3: Teacher Interactions

So far this year, how often has your teacher in this class spoken with you one-on-one about the following?

For each statement write one (1) response from the list below that best fits.

(Never 0) (1-2 times a month) (3-5 times a month) (More than 5 times a month)

- a) Disrupting class. _____
- b) Good academic performance. _____
- c) Not completing assignments. _____
- d) Poor academic performance. _____
- e) Interests and things that are important to you. _____
- f) Your plans for college or work after high school. _____
- g) Your worries. _____
- h) How to complete homework assignments. _____
- i) Active classroom participation. _____

SECTION 4: Personal Opinion in Your Words

Answer the following questions with at least 3 responses.

List at least 3 things that teachers do to show that they care about you.

- 1.
- 2.
- 3.

List at least three things that teachers do to show that they do NOT care about you.

- 1.
- 2.
- 3.

Appendix B: Teacher Survey

SECTION I: Personal Information

Fill in the following questions

What is your specific content that you teach? _____

What is your highest earned degree? _____

How many years have you taught in: a) ECISD (including this year)? _____ b) Outside of ECISD? _____

SECTION 2: Caring vs. Non-caring in School

Circle which number best fits your opinion.

<i>Statement</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
I give moral support daily for students to do well in school.	1	2	3	4	5
I give advice and guidance daily to students in making important school-related decisions.	1	2	3	4	5
I am fully aware of student's personal needs.	1	2	3	4	5
I assist students daily in solving school-related or academic problems.	1	2	3	4	5
I am good at helping students solve personal problems.	1	2	3	4	5
I have a friendly and trusting relationship with most of my students.	1	2	3	4	5
I get along well with students.	1	2	3	4	5
There is a good school spirit because of the students.	1	2	3	4	5
Discipline is fair in school.	1	2	3	4	5
Students do not disrupt class time.	1	2	3	4	5
My lessons are consistently effective.	1	2	3	4	5
I am interested in my student's progress in school.	1	2	3	4	5
I give positive feedback to students when they work hard on school work.	1	2	3	4	5
I listen often to what my students have to say.	1	2	3	4	5
I have interesting things in my classroom.	1	2	3	4	5
I care about all my students.	1	2	3	4	5
I care about all students in general.	1	2	3	4	5
My students can detect when I care about them.	1	2	3	4	5

My students can detect when I do not care about them.	1	2	3	4	5
My students in this class know I care about them due my behaviors.	1	2	3	4	5

SECTION 3: Teacher Interaction

Please reference to only the class I, the researcher, observed.

Q: How often have you spoken one-on-one with your students about the following issues?

For each statement write one (1) response from the list below that best fits.

(Never 0) (1-2 times a month) (3-5 times a month) (More than 5 times a month)

- j) Disrupting class. _____
- k) Good academic performance. _____
- l) Not completing assignments. _____
- m) Poor academic performance. _____
- n) Interests and things that are important to them. _____
- o) Plans for college or work after high school. _____
- p) Your students' worries. _____
- q) How to complete homework assignments. _____
- r) Active classroom participation. _____

SECTION 4: Personal Opinion in Your Words

List 3 things that you show in your classes that would be considered caring towards your students.

- 1.
- 2.
- 3.

List 3 things that you show in your classes that would be considered **not caring** towards your students.

- 1.
- 2.
- 3.

What is your honest opinion about the class that I observed? Like how the class went and what you think about your students behaviors, academia, etc.?

References

- Akey, Theresa M. "School Context, Student Attitudes and Behavior, and Academic Achievement: An Exploratory Analysis." *MDRC* (2006 January): 1-40.
- Corbin, Juliet M., and Anselm Strauss. "Grounded Theory Research: Procedures, Canons, and Evaluative Criteria." *Qualitative Sociology* 13.1 (1990): 3-21. Print.
- "Factor Analysis." *Factor Analysis*. N.p., n.d. Web. 01 Aug. 2013.
<<http://luna.cas.usf.edu/~mbrannic/files/tnm/factor.htm>>.
- Ferreira, Maria M., and Kris Bosworth. "Defining Caring Teachers: Adolescents' Perspectives." *Journal of Classroom Interaction* 36.1 (2001): 24-30. Print.
- Gamrath-Schauman, Robin, and Diane Stirling. *Students As Allies*. What Students Can Do, 2004. Web. 17 Apr. 2013.
- Garrett, Tracey, Jason Barr, and Terri Rothman. "Perspectives on Caring in the Classroom: Do They Vary According to Ethnicity or Grade Level?" *Adolescence* 44.175 (2009): 505-21. Print.
- Green, Samuel B., and Neil J. Salkind. *Using SPSS for Windows and Macintosh: Analyzing and Understanding Data*. Upper Saddle River, NJ: Pearson/Prentice Hall, 2008. Print.
- Goldstein, L. S. "The Relational Zone: The Role of Caring Relationships in the Co-Construction of Mind." *American Educational Research Journal* 36.3 (1999): 647-73. Print.
- Horsch, Patricia, Jie-Qi Chen, and Donna Nelson. "Rules and Rituals: Tools for Creating a Respectful, Caring Learning Community." *Phi Delta Kappan* (Nov.1999): 223-27. *Rules and Rituals: Tools for Creating a Respectful, Caring Learning Community*. Print.
- Mann, Mary Pat. "Grounded Theory and Classroom Research." *Journal on Excellence in College Teaching* 4 (1993): 131-43. Print.
- Marshall, J.A., Hagedorn, E.A., & O'Connor, J. (2009). Anatomy of a physics test: Validation of the physics items on the Texas Assessment of Knowledge and Skills. *Physical Review Special Topics: Physics Education Research*, 5(1), 32-43.
- Noddings, Nel. "The Language of Care Ethics." *Knowledge Quest Caring Is Essential* 40.5 (2012): 52-56. Print.

- Shaunessy, Elizabeth, and Patricia A. McHatton. "Urban Students; Perceptions of Teachers: Views of Students in General, Special, and Honors Education." *Urban Rev* 41 (2009): 486-503. Print.
- "Texas Education Agency." *Texas Education Agency*. N.p., n.d. Web. 2013.
- Teven, Jason. "Teacher Caring and Classroom Behavior: Relationships with Student Affect and Perceptions of Teacher Competence and Trustworthiness." *Communication Quarterly* 55.4 (2007): 433-50. Print.
- Tosolt, Brandelym. "Middle School Students' Perceptions of Caring Teacher Behaviors: Differences by Minority Status." *The Journal Of Negro Education* 78.4 (2009): 405-16. Print.
- Valenzuela, A. "Chapter 6: Subtractive Schooling: U.S.- Mexican Youth and the Politics of Caring ." *Padilla, Y.C. (Ed) Reflexiones: New Directions in Mexican American Studies*. UT Austin CMAS Books. (1999) 123-146. Print.
- Valenzuela, Angela. "Chapter 3 Teacher-Student Relations and the Politics of Caring." *Subtractive Schooling: U.S.-Mexican Youth and the Politics of Caring*. Albany: State University of New York (1999): 61-113. Print.
- Wentzel, Kathryn R. "Student motivation in middle school: The role of perceived pedagogical caring." *Journal of Educational Psychology* (1997) 89(3): 411-419. Print.
- Williams, Patricia, Sam Sullivan, and Lawrence Kohn. "Out of the Mouths of Babes: What Do Secondary Students Believe About Outstanding Teachers?" *American Secondary Education* (2012): 104-19.