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The CS Teacher Evaluation Model: Exploring Teacher and School Leader Perceptions and a Model for Improving Teacher and Student Growth

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The CS Teacher Evaluation Model: Exploring Teacher and School Leader Perceptions

and a Model for Improving Teacher and Student Growth

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Abstract

This study investigated the teacher evaluation model used by Concept-managed charter schools. The STEM-focused, college preparatory Concept Schools is a management company that manages 31 charter schools in seven different states in the U.S. The Concept Schools (CS) teacher evaluation model was based on the Danielson Framework and has been used in all CS-managed schools since 2011. This dissertation used data from three years of consecutive teacher evaluations scores to create a predicting model for K-12 school districts. The model analyzed an individual teacher's performance growth and predicts future performance. The study used both qualitative and quantitative methods. The researcher interviewed seven teachers and six principals. For analysis of interview data, the thematic analysis method was used. The quantitative part of research was used to collect teachers' evaluation scores and students' standardized math and reading scores. The Structural Equation Modeling (SEM) and Analysis of Moment Structures (AMOS) used for statistical calculation included estimation of fit indices, errors, and model parameters. The study findings indicated that there was no overall significant relation between teacher evaluation scores and student standardized test scores. However, between year-two and year-three teachers there was a relation between evaluation scores and student standardized test scores. This study also highlights the importance of open dialogue between teacher and principal, meaningful feedback, non-core subjects training, and clears rubrics to support trust building between teachers and principals. Finally, findings indicated targeted or need-based professional development plans for teachers that could have more potential in an area of improvement.

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Chapter 1: Introduction

1.1 Introduction

This study investigated the teacher evaluation model used by Concept-managed charter schools. The STEM-focused, college preparatory Concept Schools (CS) is a management company that manages 31 charter schools in seven different states throughout the U.S. The CS teacher evaluation model was created based on the Danielson Framework and has been used in all CS-managed schools since 2011. This dissertation used data from three consecutive teacher evaluations to create a predicting model for K-12 school districts. The model analyzes an individual teacher's performance growth and predicts future performance. The teacher evaluation data was a combination of formal evaluations, classroom walkthroughs, and teacher-responsibilities evaluations. The complete teacher evaluation also includes students' grade point averages, state test scores, and standardized test scores. The researcher is a school administrator at Gateway Science Academy (GSA) of St. Louis and uses data from the GSA school district. During Chapter 1, the researcher explains the driving force for the research and elaborates why this study is essential for K-12 public school districts throughout the U.S.

1.2 Motivation for the Research

The researcher is a long-time science teacher and school leader in K-12 public-Charter schools. The charter school lifespan is solely dependent on students' achievements. A teacher's performance in the classroom is the most impactful factor for student achievement (Harris, Ingle, & Rutledge, 2014; Rockoff, Staiger, Kane & Taylor, 2010). The most recent educational policy in the 2010s, Race to the Top (RttT),

encouraged public school districts to apply for federal grants based on student and teacher performance. Many of the states across the U.S have established a new approach to teacher evaluations (Attiento, Lare, & Waters, 2006). After completing numerous evaluations, the researcher discovered a need for a new method for evaluations. There is a need for a methodical approach to give constructive feedback to teachers. The goal of this study is to propose a model for school leaders and teachers to predict teacher evaluation scores. This predicted score helps to create meaningful individual teacher growth or improvement plans each year. This model allows school leaders to facilitate growth in teacher performance and student achievement by observing the relationship between predicted scores and actual scores.

1.3 Statement of the Problem

The history of U.S teacher evaluation models demonstrates state and federal politicians have always influenced teacher evaluations (EskroClemetsen, 2000; Ellet & Teddlie, 2003; Taylor, 1991; Wetzel, 1929). Public school education is regularly a subject of politicians' election campaigns. Educators and school districts come under pressure with new federal and local policies with every election. Public school districts had been under pressure with President Bush's *No Child Left Behind* (NCLB) Act. Title II, Preparing and training teachers by NCLB act: Sec.2101 says:

> The purpose of this part is to provide grants to State educational agencies, local educational agencies, State agencies for higher education, and eligible partnerships in order to (1) increase student academic achievement through strategies such as improving teacher and principal quality and increasing the number of highly qualified teachers in the classroom and highly qualified principals and assistant principals in schools; and (2) hold local educational

agencies and schools accountable for improvements in student academic achievement.(2005).

After the NCLB Act, local school districts received school report cards from states' education departments. Local school districts' annual report cards with low test scores caused districts to find innovative ways to mask their problems. The NCLB Act required students to be proficient in both math and reading content areas. Recently, more than two-thirds of states made substantial changes to teacher evaluations in local school districts. The main driving force for this dramatic change in teacher evaluation was motivated by incentives through federal programs, NCLB waivers, Teacher Incentive Fund, and RttT. Changing teacher evaluation models to include students' performance was the key in applying for grants made available by these federal programs for the states (Bornfreund, 2013). This study aimed to create a model based on the CS teacher evaluation model for school districts to analyze individual teacher growth using students' test scores.

1.4 Purpose of the Study

The purpose of this study collects and analyzes data from a K-12 school district to make an in-depth analysis of individual teacher growth. The study created a model for a K-12 school district to analyze an individual teacher's performance. This study explored the GSA school K-12 district service in St. Louis, Missouri. The GSA school district has used CS teacher evaluation model since 2001. Teacher growth was measured based on the CS teacher evaluation model. The CS evaluation model has two parts, and each part is weighted equally. The first part of the CS evaluation model is based on the Danielson

Framework, which has four domains: planning and preparation, instruction, classroom management, and professional attributes. The second half of the CS teacher evaluation is based on student academic achievement. The study made an in-depth analysis of each teacher's evaluation scores, specifically focused on the previous three years of evaluation data with students' standardized test scores. The researcher conducted interviews with teachers and administrators to investigate their beliefs and perceptions to explore more about the teacher evaluation model. The detail proposed the model as follows:

A) Students' academic achievement which is measured by three things: 1) Missouri Assessment Program (MAP) and End of Course Assessment (EOC) scores, 2) Students' Grade Point Average (GPA), 3) Northwest Evaluation Association (NWEA) test.

B) Teacher evaluation scores measured by three things: 1) Teacher formal evaluation score, 2) Classroom walkthrough, 3) Professional Responsibility.

1.5 Research Questions

Previous teacher evaluation research demonstrates that student growth was not only dependent on the relationship between the student and teacher but also on the relationship between the teacher and administrator (Bocala & Chang, 2015; Cuban, 2013; Jiang, Sporte, & Luppescu, 2015). Some research indicated the new teacher evaluation models raise tension between teachers and administration (Pogodzinski, Umpstead, &, Witt, 2015). This dissertation was focused on developing a model, which combines both formal evaluation tools and students' academic achievement. How this new model impacted the teachers' and students' growth is by interviewing both teachers and

administrators in a study using a qualitative research method. Using a qualtitative

research methodology, this also includes three consecutive years of an individual

teacher's evaluation scores along with students' test scores.

The following questions guided this study:

- How do principals reflect upon the CS teacher evaluation model to encourage and support each teacher's growth?

- To what degree do teachers believe the use of the CS teacher evaluation model will contribute to their professional development as a teacher?

- To what degree do teachers believe the implementation of the CS teacher evaluation model helps them create improvement plans for their classroom practices?

- What are the perceived advantages and disadvantages, if any, of the use of the CS teacher evaluation model used at the K-12 GSA District?

1.6 Theoretical Framework

Charlotte Danielson first created the Framework for Teaching in 1996. The Framework for Teaching is the most common evaluation model in the U.S. and has been adopted as the single model, or one of several approved models, in more than 20 states. In 2011, the model was chosen by the New Jersey State Department of Education as one of the approved models for teacher evaluation ("The Danielson Group," n.d.).

The researcher uses the CS teacher evaluation protocols developed from the teacher evaluation process using the Danielson Framework for Teaching. The Framework for Teaching was aligned with the Interstate New Teacher Assessment and Support Consortium, or INTASC standards, and grounded in a constructivist view of learning and teaching. The model is divided into four domains of teaching responsibility ("The Danielson Group," n.d.). The researcher also reviewed the constructivist view of learning and teaching since the Danielson Framework of teacher evaluation model is grounded in a constructivist view of learning. The Constructivist Learning Theory states that learning is a dynamic process of creating meaning from different experiences. Naturally, students learn best when they use their previous knowledge to build upon something on their own along with teacher's guidance.
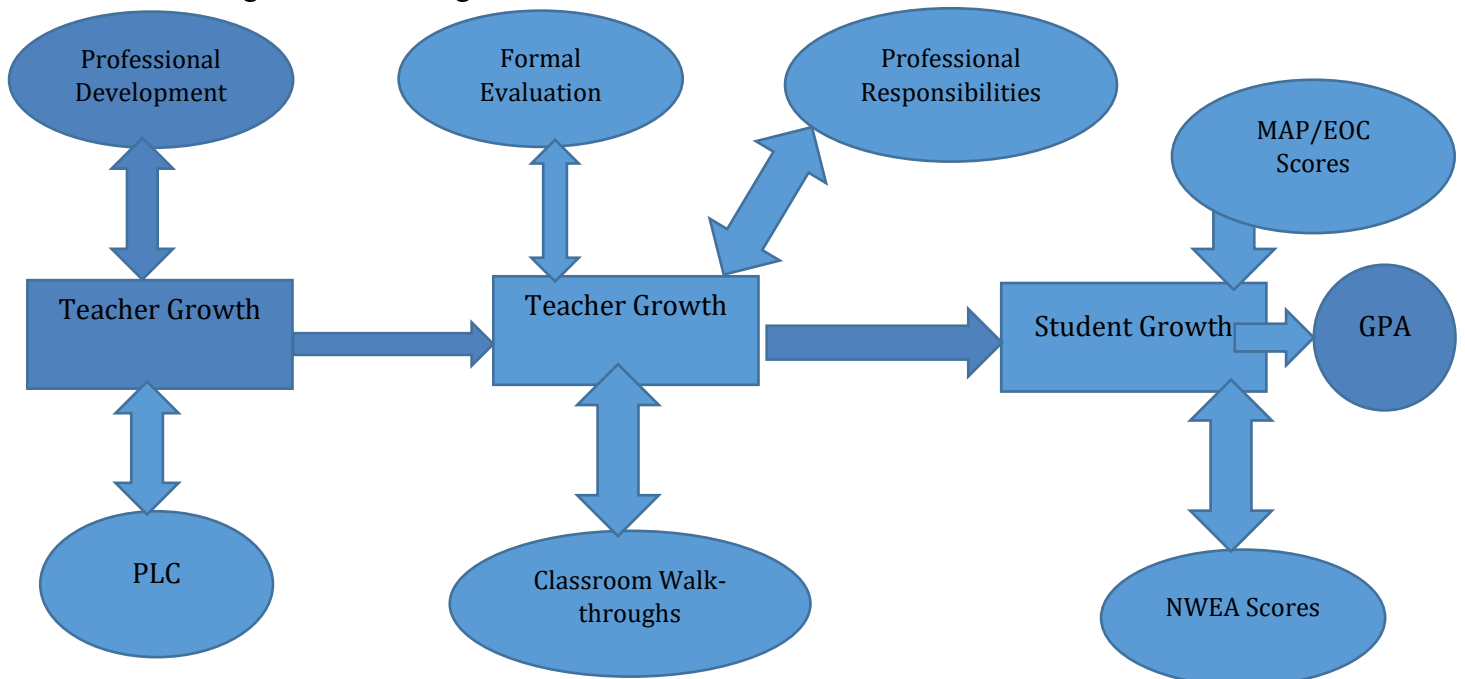
Figure 1: The Theoretical Framework developed by Danielson and Marzano Teacher Evaluations Models

1.7 The Model

The participants selected had at least three years of experience, including students' test scores on the NWEA, EOC/MAP, and teachers' evaluation scores. The model will predict student test scores by each individual teacher, along with the teacher evaluation scores.

Year 1 → Year 2 → Year 3 → Year 4

Professional responsibility scores

Classroom walks though

NWEA

Teacher 1

Teacher 1 Students' performance

MAP/ EOC

Formal Evaluation

GPA
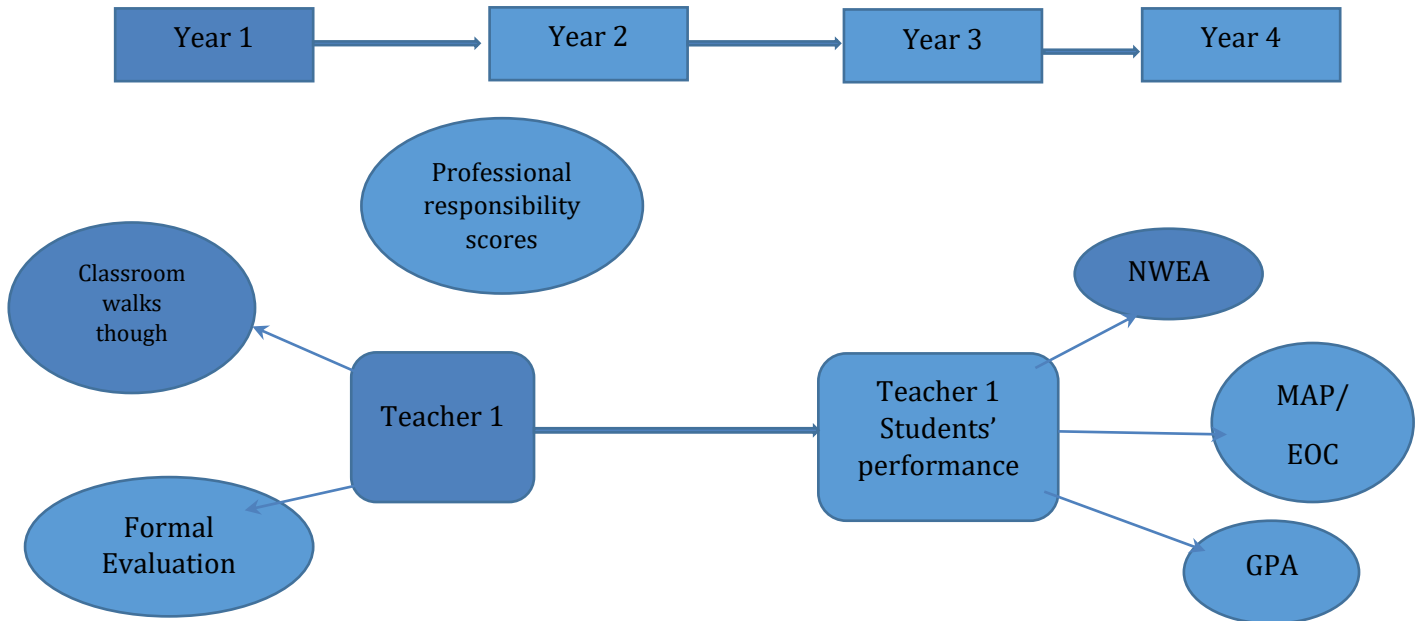
Figure 2: The Model for predicting teacher and student growth

1.8 Design and Methodology

This study was based on both quantitative and qualitative methods of research. The study was designed to collect data from teacher and administrator perceptions of teacher and student growth by conducting interviews and analyzing students' test scores from the previous years. The mixed method is frequently used together in social science

research, as they both support and provide substantial evidence that can potentially contribute to the advancement of educational research. It is suggested that mixed methods, which are a combination of qualitative and quantitative data, might have the potential to contribute to social science research. This method might be useful when researchers can collect data from both sources. This method can be helpful to eliminate biases for some educators who only rely on numerical data.

Part One - Interview: The researcher interviewed with seven teachers and six administrators to find the answer on the effect of the CS teacher evaluation model on teacher and student growth. The interview took approximately 30 minutes of participants' time. The subjects were selected to participate in a semi-structured interview. The researcher used a Google drive and its voice recorder to record interviews and to explore follow up questions. The subjects were selected from the GSA school district, which is also where the researcher works as a school administrator. After IRB approval, the researcher distributed the participant consent forms to interview participants and gave brief information about the study via email along with interview questions.

Part Two – Data Mining: The researcher used the GSA district teacher evaluation scores and students' NWEA, MAP, and EOC scores and student GPA. The teachers' previous year's evaluation scores and students' test scores were used to create a nonlinear regression model to predict the upcoming year's scores for both teachers and students. Approximately 50 teachers and their students' data were collected and analyzed. Additionally, the researcher analyzed and reviewed annual teacher survey data from the

last three years to determine teacher reflection on evaluation and more. After IRB approval, the researcher collected data from the GSA district.

To maintain confidentiality, the researcher was the only individual with access to interview data and data from the GSA district. Participants' responses were identified by interview numbers (i.e. Interview #1, Interview #2) and subject names associated with the interview number remained in a separate, passcode-protected file.

1.9 Significance of the Study

The most current reforms on education policy include the federal programs such as Elementary and Secondary Education Act waivers, No Child Left Behind waivers, Teacher Incentive Fund, and Race to the Top. A report about the shifting landscape of teacher evaluation policies noted that since 2009, 80% of the states in the U.S. included student growth or achievement as a factor for overall teachers' ratings (Tooley, 2014).

This study is significant to the current teacher evaluation movement, which included student growth or achievement as a significant factor in teacher evaluation models. In more than 41 states, teacher evaluation models have included this new evaluation model at local school districts (Attiento et al., 2006). School leaders and teachers can use the model created by this research to develop and implement an effective teacher evaluation model. The model intended predicts the upcoming year's scores in detail, so teachers and school administrators can use this score for individual, teacher-targeted growth plans and student growth plans.

1.10 Definition of Terms and Acronyms

Concept Schools (CS),

Gateway Science Academy of St. Louis (GSA),

Missouri Assessment Program (MAP),

End of Course Assessment (EOC),

Students Grade Point Average (GPA),

Northwest Evaluation Association (NWEA),

Race to the Top (RttT),

The Reauthorization of the Elementary and Secondary Education Act (ESEA)

Chapter 2: Literature Review

This chapter reviews the literature of teacher evaluation protocols. The chapter first examines the history of teacher evaluations and continues with school principal and teacher perspectives on teacher evaluation models. The chapter follows with standards-based teaching, the Danielson Framework of Teaching, and the Marzano Framework for Teacher Evaluations. The literature review examines the quality of teachers' instruction on students' learning and the Constructivist Teaching Approach and Standards-Based Teaching. The literature review also examines whether teacher evaluation protocols are based on standards-based protocols that can improve the quality of teacher instruction and ultimately impact students' academics gains. The theoretical framework of the thesis is based on a combination of the Danielson Framework of Teaching and the Marzano Framework for Teacher Evaluations. The literature review concludes with a summation of how public school districts could manipulate their current teacher evaluation protocols to improve classroom instruction and support systems for evaluation protocols.

2.1 History of Teacher Evaluations

The history of teacher evaluation is a crucial part of this study so that historical turning points and major influences on teacher evaluations and protocols can be determined for the future, as well as how they are perceived by both teachers and administrators. This dissertation also intends to compare past and present teacher evaluation models. Historical turning points and reviews will be utilized to ascertain their effects on public school education. The earliest data about teacher evaluation was found in the 1700s.

In the 1700s, there was no formal school or public education, and the education fields did not consider a need for public education study (Marzano, Frontier, & Livingston, 2011). As a result, the earliest data in education research was minimal and there were no significant supervision or teacher evaluation models.

During the mid-1800s, the Industrial Revolution brought forth a semblance of what is now a public school system. The only significant evidence was from *The Annual Report of the Superintendent of Common Schools of the State of New York* (Blumberg, 1985). This report did not address teacher supervision per se, but rather the necessity of efficient teaching paradigms.

The mid-1900s were dominated by two competing views of education: the views of John Dewey and Frederick Taylor. Dewey claimed that schools should be designed for civic practice and designed for students to contribute to democracy (Dewey, 1938, 1981). Taylor's ideas were born by observing factory workers' behaviors to improve production. According to Taylor (1911), these principles—used to improve factory workers production—could also apply to public school education. In 1929, the *Cubberley Book of Public School Administration* (1929) used Taylor's principles and pointed out Taylor's principles regarding the means by which factories could be used in public school education. Wetzel (1929) based his strategies on Taylor's principles, specific strategies, and behaviors; however, he kept himself away from the metaphor of schools as factories, while maintaining some of the precepts of this approach.

In 1946, after World War II, Elsie Coleman (1945) stated that the teacher is human, and, therefore, affected by his or her environment. This approach was a significant shift in teacher evaluation models. Until the mid-1900s, two core views of teacher evaluations were apparent: a

student-centered approach and a scientific view of management for K-12 schools (Marzano et al., 2011).

In 1950, according to Eskro Clemetsen (2000), teacher evaluations had been influenced by the political climate (2003): teacher evaluation was judged more on the moral and ethical values of the teachers, with teacher's approaches taken into account. The competitive spirit between the United States and Soviet Russia over the space war influenced some of this. *Sputnik* and the subsequent space race brought a new focus on math and science education. William Melchoir (1950) proposed supervision as individual meetings with teachers and classroom visitation for observation and study. Melchoir described some current components of teacher evaluation protocols. Matthew Whitehead (1952) pointed out areas of supervision and surveyed teachers as to their perceptions about supervision. Whitehead (1952) also mentioned administrator roles in observing effective teaching in the classrooms. From 1950 to 1980, the teacher evaluation models were mostly looked at through the prism of a clinical supervision model. Cogan (1973) and her student Goldhammer (1973) developed the five phases of the clinical model, a de facto structure of the teacher evaluation process. According to Duke (1995), Glickman (2001) and Goldhammer had a similar approach with current teacher evaluation models, including rubrics—not with scoring guides but with checklists.

During the 1980s, teacher evaluation models were refined and developed with clinical supervision and mastery teaching. The Hunter Model of Supervision, comprised by Madeline Hunter (1980, 1984) became a significant influence on teacher evaluations (Hunter, 1984). This model proposed drilling the skills as a means of achieving student. Thomas McGreal (1983)

relied on teacher experience, such as offering tenure for experienced teachers. Carl Glickman (1985) mentioned his supervision of instruction, suggesting the most important thing for teacher evaluation was improved instruction (Glickman, Gordan, & R. Gordaon, 1998). Fehr (2001) pointed out seven elements of a useful lesson used by many states for developing teacher evaluation protocols. A report from *A Nation at Risk: The Imperative for Educational Reform* greatly influenced all aspects of education (National Commission of Excellence in Education, 1983) and helped public schools accept accountability in student education and teacher evaluations. This report triggered public schools across the nation to develop a teacher evaluation protocol, which held districts and teachers accountable for academic progress (National Commission on Excellence in Education, 1983). Following *A Nation at Risk*, some school districts used performance-based teacher pay and included a student's individual achievement as part of teacher evaluations. Most of this initiative failed in six years because of budgetary cuts and lack of fairness claims about teacher evaluation protocols from school unions (Podgursky & Springer, 2007).

In the 1990's, standardized-based teacher evaluations (Danielson Framework of Teaching) were implemented, and Common Core State Standards (CCSS) were launched 2009. Common Core Curriculum emphasizes the need for a developed, trustworthy, and fair teacher evaluation practice (Moss, 2015). The research on an individual teacher's growth or performance informs a uniformed approach and indicates that standards-based and well-designed teacher-evaluation protocols may have a positive and ongoing effect on individual teacher growth (Papay, 2012; Taylor & Tyler, 2012; Tucker & Stronge, 2005).

During the 1990s, the Charlotte Danielson teacher evaluation model was one of the most comprehensive; however, this evaluation model was based only on evaluating instruction. Charlotte Danielson (1996, 2007) developed her framework for teaching models on four domains: Planning and Preparation, Classroom Environment, Instruction, and Professional Responsibilities. Danielson's four domains to improve classroom instruction became a milestone in the development of a focus on the standard-based teacher evaluation system, and currently adapted many school districts across the nation. Others have developed similar tools for evaluating teacher effectiveness (Moss, 2015). The Bill and Melinda Gates Foundation sponsored a Measure of Effective Teaching (MET) initiative to find out how teachers and administrators could use evaluation methods to improve their teaching skills. The MET initiative was based on two-thirds of American teachers, who had criticized the old evaluation protocol, which they felt was not giving the full picture of their classrooms (Measures of Effective Teaching (MET) Project, 2017). Danielson updated her Framework for Teaching Evaluation protocols in 2011 and 2013 to align with CCSS and MET.

The two legislative reforms—A Nation at Risk and the NCLB Act—were focused on students' academic achievements and held teachers and public school districts accountable to their students' academic performances. Both legislative acts indicated that competing with the global economy required public school education reform, and for the first time in the history of teacher evaluations, legislation mandated "highly qualified teacher" requirements for all public school districts. To meet the requirements of a "highly qualified teacher," the public school districts began offering professional development to improve their teacher's skills (Garth-Young, 2007; NCLB, 2001).

From 2000 onward, there has been a shift in the terminology and structure of teacher evaluations. Supervision transformed into the evaluation, and teacher behavior was connected to student achievement (Marzano et al., 2011). The shift in teacher evaluations got even more attention than the NCLB Act. The teacher evaluation protocols focused on instructional quality by improving instructional practice and raising student achievement (U.S. Department of Education, 2002). Another major legislation that made a marked impact on teacher evaluation protocol was the American Recovery and Reinvestment Act of 2009 (ARRA). The ARRA provided $4.35 billion for the RTTP and offered competitive grants to the states during the Obama administration. The application for grants required that applicants develop a teacher evaluation protocol and standards-based evaluation system that included student achievement data in the actual evaluation (U.S. Department of Education, 2009).

The Reauthorization of the Elementary and Secondary Education Act (ESEA, 2010) incentivized great teachers and leaders in every U.S. school. The ESEA Act indicates that schools should identify highly effective teachers and principals by student growth (U.S. Department of Education, 2010). The Every Student Succeed Act (ESSA) was authorized by the Obama Administration in 2015. One section offered several apparatuses of support for teachers: "Multiple Pathways to Teaching and Leading, Induction and Mentorship, Meaningful Evaluation and Support, Strong Teacher Leadership, Transformative School Leadership" (U.S. Department of Education, 2015, p. 4). The part about meaningful evaluation and support [ESEA sections 2101(c) (4) (B)(ii) and 2103(b)(3)(A)] indicates four components: continually improve instruction; meaningfully involve educators and other stake holders; be valid, reliable, and fair; and include multiple measures. These components are a more sophisticated element of the

teacher evaluation model by comparing the previous models (U.S. Department of Education, 2016). The ESEA Act is clearly indicated under multiple measures that evaluation must demonstrate student achievement/growth. The ESEA act required that State Education Agencies (SEAs) and Local Education Agencies (LEAs) must have a common and clear way of understanding student growth measures. So, instead of being measured by point-in-time achievement, LEAs now had to develop a plan to measure growth from the beginning to the end of the school year, such as the value-added model developed by the Ohio Department of Education. Teachers and LEAs get credit for student learning, including students who are not proficient on end-of-year, state-mandated standardized tests. This latest legislative act indicates the importance of meaningful evaluation, which includes student growth and support for teachers and principals.

In summation: The history of teacher evaluation models has been influenced with demand of legislative acts. There were three major impacts on teacher evaluation protocols: firstly, the Industrial Revolution, which resulted in the onset of the current public school model; secondly, the Nation at Risk Act (1983), which holds public school districts accountable; and thirdly, the NCLB Act, which required public schools to include student academic achievement in teacher evaluations as part of school-district protocols. Today, teacher evaluation models include the most comprehensive approach, including instructional quality and measuring of students' growth. This research aimed to explore more on teacher evaluation protocols with high emphasis on teacher quality of instruction and student academics gains.

2.2 School Principal Perspectives on Teacher Evaluation Models

a) Perceptions of principals' issues/concerns

According to Derrington (2011), school leadership roles, which allow for the right balance of autonomy and accountability, can have a positive impact on the teacher-evaluation system. The newest teacher evaluation systems bring new challenges and issues to solve, but they also have great potential for impacting student learning (Derrington, 2011). The role of the teacher in teacher evaluation models is as a more passive participant in the process. The school's priority must be changed so that the teacher's role goes from passive to active. School leaders must see the teachers as adult learners, resulting in teachers inevitably working harder as they will be actively engaged in the improvement of their own evaluation process (Derrington, 2011). The teacher evaluation protocol will be more productive when teachers actively involved in the development of the teacher evaluation protocol. Similarly, principals must also play an active role with new teacher evaluation protocols. As both teachers and principals are the two main stakeholders, their voices must be considered when developing new teacher evaluation processes.

Additional research about the perceptions of principals in Kentucky regarding their state's new teacher evaluation system indicates that principals wanted to voice their concerns about teacher evaluation systems (Dodson, 2015). The report of Kentucky principal perceptions indicated that the process of developing and rolling out new teacher evaluation systems required changes that people at any level were not always receptive to. In addition, some principals left their jobs because of low-leader satisfaction and increased emphasis on test scores in the new teacher evaluation system (Dodson, 2015; MetLife, 2013).

Principals and teachers criticize the effects of teacher evaluation on teacher hiring and tenure. Many educators have discussed the objectivity of evaluators. Research done by Reid (2017) on U.S. principals' interpretation and implementation of teacher evaluation policies found that they were concerned about whether their peers were evaluating teachers accurately. This study raised the issue of how important teacher evaluation scores were regarding employment decisions and tenure. The same study finding indicated that unclear scoring and evaluation protocols left an open door for favoritism in teachers' evaluation scores. According to Reid a most critical aspect of new teacher evaluation protocol was that of using evaluation scores to the make employment decisions. To address the subjective issue of teacher evaluation, this dissertation discussed more standards-based instruction and a more clearly defined teacher evaluation model. This study evaluated CS teacher evaluation protocol, and it is based on standards-based indicators with well-described rubrics. This study goal suggested a teacher evaluation model with standards-based indicators to eliminate as much as possible to help out with subjectivity between peer-principal scoring.

b) Time management

School administrators are over-loaded with many unpredictable daily jobs, and most of them cannot find time make a classroom observation more than two times per year per teacher. The research shows that many principals believe spending an adequate time in classrooms comes out of such issues. According to Derrington and Campbell (2015), principals were distressed in not finding enough time to communicate and make more frequent formal summative evaluations in the classroom. The new teacher evaluation models brought issues such as finding adequate time for principals and teachers to learn about that model. As Derrington and Campbell (2015)

confirm, studies on implementing new teacher evaluations indicate that principal training is essential for success in implementing a new teacher evaluation model in any public school district. The roles of principals are the most crucial element in implementation and success of teacher evaluation models. Full understanding of the new teacher evaluation models by the principal is essential. Inevitably, principals cannot reasonably judge unclear teacher evaluation protocols. As Derrington and Campbell (2015) state, understanding and supporting principals with district administrators, as well as the local state agency is crucial for implementing new teacher evaluation practices. There have been many types of research about the relationship between teachers' evaluations and students' achievement (Harris et al., 2014; Rockoff et al., 2010).

c) How teachers respond to teacher-evaluation feedback

Bush (2017) focused teacher perceptions about new evaluation model implementations by exploring how new teachers (less than five years of experience), mid-career teachers (between six and 14 years of experience), and seasoned teachers (more than 15 years of experience) responded to new teacher evaluations implemented by public school districts. Bush indicates that in all three categories, teachers commonly point out accountability of the teacher evaluation increased teacher's stress level and made them feel they wanted to leave their teaching careers. The teacher response to receiving feedback and establishing a new level of accountability by new and mid-career teachers was positive while seasoned teachers saw it as a negative. The new and mid-career teachers were also more positive and supportive about new teacher evaluations, which emphasized teacher accountability for student achievement and growth. The research study on assessing teachers, classrooms, and schools (Odden, Borman, & Fermanich, 2004)

indicated that principals' instructional leadership roles also impact student academic gains. This study supports principals' roles as instructional leaders so that proper training on teacher evaluations and time management can make a more lasting effect. Time management or inadequate times were significant barriers for effective teacher evaluations (Lavigne & Chamberlain, 2016; Range et al., 2011).

Lavigne & Chamberlain (2016) found that 46% of the participant principals agreed or strongly agreed that the PERA training enriched their capability to utilize student growth data as a measure of teacher effectiveness. The role of the principal with new teacher evaluations that included training on prepared classroom teaching and student's learning will not be eliminated (Lavigne & Chamberlain, 2016). The principal's role in properly understanding and utilizing scoring rubrics is another component of improved teacher evaluation protocols. To eliminate biases or less subjectivity on teacher evaluations, using a teacher evaluation protocol with detail and clear guidelines is important. Training principals for evaluation rubrics is as important as having more than one evaluator doing an observation for each individual teacher. The principal's role is as an instructional leader could be a fundamental solution. To make such roles in daily work as an instructional leader means giving up some other duties. This may mean principals need to delegate other duties so they have more time to spend in classrooms and have more meaningful conversations with teachers.

2.3 Standards-Based Teaching and Student Achievements

There continues to be a multitude of research on standards-based teacher evaluation practices and student achievement: (Danielson & McGreal 2000; Davis, Pool, & Mits-Cash

2000; Kimball, 2002; Milanowski & Heneman, 2001; Milansowski, 2004, 2011; Porter (2002),

Taylor, & Tyler, 2012). Standards-based teacher evaluations work toward practices and

improved instruction along with students' academics gains. The standards-based teaching is a

strong foundation for teacher evaluation protocols, which is based on standards-based domains.

According to Kimball, Milanowski, & Borman, (2004), research on examining the relationship

between teacher evaluation and student assessment results in Washoe County showed there was

a correlation between teacher performance scores and student achievement. Kimball et al.

measured the effects of teacher performance on student achievement; the outcome of research

was mostly positive and showed statistically significant growth in four of nine grade-test

combinations studied. This dissertation aimed to discuss more teacher evaluation protocols with

more emphasis by standards-based teaching domains contributing to students' academics gains

and to creating more meaningful conversations between teachers and evaluators.

Milanowski (2004) studied the relationship between teacher performance evaluation

scores and student achievement based on test scores, which was conducted in Cincinnati Public

Schools (CPS) in Ohio. This study used the 2001-2002 test scores and previous year's test scores

on math, reading, and science. The State of Ohio gives teachers and school districts value-added

modeling (VAMs) scores based on each student's growth. The VAMs compares the current

year's test scores with same students' previous year's scores. Milanowski's study offered a

correlation between standards-based teacher evaluation models and students' achievements. The

study uses 2001 and 2002 years in grade levels three through eight with teachers' evaluation

scores and their individual student growth. Milanowski's study findings indicated that the

correlation between the average math scores in grades three through eight was .43; reading was

.32, and .27 for science. The Milanowski study not only pointed out teacher evaluation scores and student achievement, but also mentioned teacher evaluation models that were based on standards-based modeling. Milanowski also references The Danielson Framework for Teaching, which is, again, based on standards-based teacher evaluation modeling.

Porter's (2002) research was on measuring content of instruction with state and school district correlation on NEAP testing. Porter studied multiple states and local school district content alignment on classroom instruction. This research aligns with standards-based teaching and teacher evaluation models. Porter indicated the need for more alignment between the teachers' content and the standardized tests that measure student success. There is a vertical and horizontal alignment between student achievement and content alignment with standardized tests. The research showed that the correlation between state teaching standards and state assessment was between .40 and .50 for the four states researched. This thesis is highlighting the importance of standards-based teaching, which is aligned with state teaching and assessments. The teacher evaluation model goal is to be the objective of this thesis and its correlation between standardized based teaching tools, as well as to measure the correlation between content teaching and student growth. Porter 's research found that teachers who use aligned curriculum with standardized testing improve their students' academic gains more than teachers who do not use aligned curriculum with standardized testing. The Porter study indicates that correlation aligning standards and student academic achievement for reading 0.4 and math 0.5.

In summation: Standards-based teaching-evaluation models focus on the quality of instruction delivered daily in classrooms. The approach also assists teachers and administrators

in following up on standardized tests. It is a clear-cut approach that follows yearly standards and, for example, makes sure that teachers would not spend more time on their favorite chapters. It is also very helpful in targeting a teacher's weaker skills and outlines potential individual improvement plans. Teacher evaluators make for very meaningful conversations and are geared at specifically targeting an individual teacher's areas that are most in need of improvement.

2.4 Teacher Evaluation Model Effects on Improving Teaching

The research done by Taylor & Tyler (2012) analyzed Cincinnati Public School (CPS) & Teacher Evaluation System (TES) during the 2000-2011 school years. This research found as teachers were evaluated throughout the school year, they were more effective in raising students' achievements. Sometimes, because of principals' busy schedules, teachers only received one evaluation per school year. Taylor &Tyler indicated that more than one evaluation throughout the same school year made a huge impact on students' academic gains. Taylor & Tyler mentioned the effectiveness on students' academic gains continued into the following year, even though the following year's teacher had not been previously evaluated.

In a study similar to Taylor &Tyler, Kane et al. (2011) investigated effective classroom practice by using student achievement data. Kane's research analyzed a correlation between Teacher Evaluation Scores (TES) and student academic gains. The TES with top-quartile practices (at least as measured by Cincinnati's Teacher Evaluation System) were teachers/students in the 50th percentile that gained three percentile points more in reading achievement. The gain in math achievement was two percentile points. The teachers with high TES students who began the year around the 50th percentile gained seven percentile points in

reading achievement and six in math. This research supports standards-based teacher evaluation protocols, and demonstrates that it has had positive effects on student achievement. The CS teacher evaluation protocol uses a sophisticated model, which included students' academic gains as a component of the protocols. The Taylor &Tyler and Kane, et al. research indicated the importance of multiple observations through the year and should be done by different observers. The CS teacher evaluation protocol suggested multiple observations should be done by different administrators.

In summation: The research on teacher evaluation systems demonstrates how it affects students' academic gains, and it indicates a clear correlation between teacher evaluation systems and students' academic gains. This study also aimed to support research on standards-based teaching and demonstrates effective teacher-evaluation protocols are crucial for effective classroom instructions

2.5 Danielson Framework of Teaching

This is one of the most commonly known standards-based teaching tools used for teacher evaluation protocol. This research investigates the most established instruments for evaluating teachers was, in fact, the Danielson Framework of Teaching (Benjamin 2002; Heneman and Milanowski 2003; Kane and Staiger, 2012; Song ,2006). Milanowski (2004, 2011) also showed that there is a correlation between standards-based teacher evaluation models and student achievements. The Milanowski research used TES data, and the TES protocol used the Danielson Framework of Teaching.

Monroe University's Model of Appropriate Practice (MAP) was founded based on using Charlotte Danielson's Framework for Teaching (Danielson, 1996). Bryant ,Maarouf, Burcham, & Greer (2016) researched examining teacher candidate rubrics (Monroe University) based on Danielson's Framework for Teaching by using the MAP, a locally developed pre-service teacher rubric. The study used the factor analysis to assess internal reliability and validity. Bryant, et.al (2016) study indicated that there was a reliability and validity between a 16-item rubric and four domains of the Danielson Framework for Teaching: planning and preparation; the classroom environment; instruction; and professional responsibilities. Bryant, et.al demonstrate that a revised Model of Appropriate Practice (MAP2) can be used more confidently by university faculty, clinical supervisors, and cooperating teachers as a valid and reliable instrument for teacher evaluation tools.

Viviano (2012) conducted research comparing and contrasting Charlotte Danielson's framework and National Board Certification. According to Viviano both had similar domains or protocols for teacher evaluation, but they differed on how a teacher could potentially earn a certificate in NBPTS and not in Danielson's framework. The comparison chart below illustrates the findings.
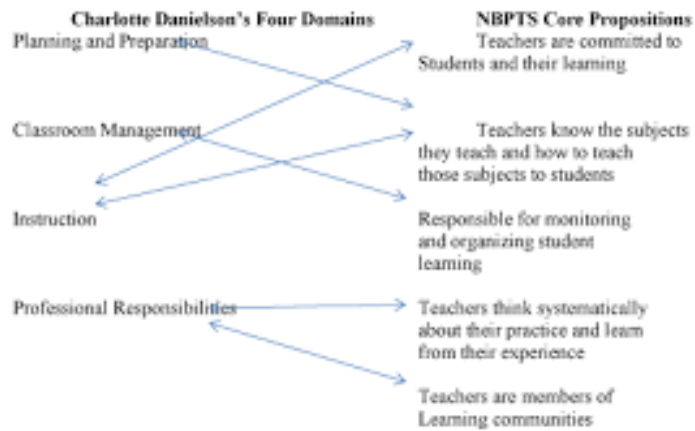
Figure 3: Vivano's comparison charts between Danielson Framework for teaching and NBPTS

Danielson's (2012) research on collaborating to improve teacher practice indicated several key areas pointed out by the evaluator and concludes that teachers are essential for effective teacher evaluation: 1) A constant definition of good teaching: this issue has been discussed in different research as a result of inconsistency of scoring (reference); 2) A focus on what matters: each domain has several sub categories and varieties targeted; 3) An atmosphere of trust: having detailed rubrics with each domain closed the doors on potential untrustworthiness; 4) Opportunities to engage in meaningful conversation: teachers and evaluators will have a chance to talk about areas that scored lower on the rubric; 5) Domains had multiple measures or evidence of student learning: teachers and evaluators agreed upon a framework for teaching that had clear measures in terms of students' academic gains by teachers (Danielson, 2012). The Concept Schools (CS) teacher evaluation protocol was developed based on the Danielson Framework for Teaching. The CS teacher evaluations consider multiple measures of performance, primarily the teacher's impact on student academic growth weighted by each evaluation as follows: Formal Evaluations (25%), Walkthroughs (10%), Professional

Responsibilities (15%), and Student Performances (50%). Below is the CS teacher evaluation
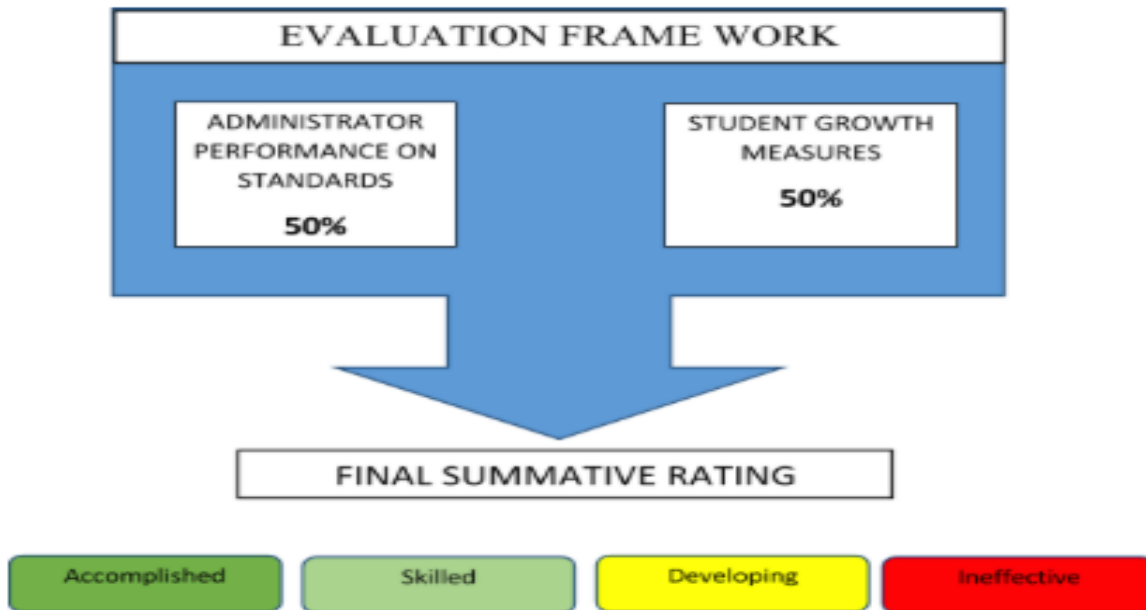
Framework:

Graph 2: CS Teacher Evaluation Framework

The CS teacher evaluations protocol is a combination of three types of evaluations: formal

evaluation, classroom walkthroughs, and a professional responsibility evaluation. The formal

evaluation has four domains. Domain one is planning and preparation, which includes both a

numerical score for each of the eight indicators and a written justification for the highest and

lowest scoring rubrics to all indicators. Domain two is instruction, which includes a numerical

score for each of the 24 indicators. Domain three is classroom management, which includes a

numerical score for each of the 14 indicators. Domain four is professional attributes, which

includes a numerical score for each of the four indicators.

The second type is the Professional Responsibilities Evaluation, which includes a numerical score for each of the 24 indicators. The third type is a classroom walk-through evaluation, which includes a numerical score for each of the nine indicators. Research on an analysis of the use of Danielson's (2007) framework for professional practice in a teaching residency program was done by Roegman, Goodwin, Reed, & Randolph, (2016). This study suggested key points related to a difference in scoring and the evaluator's role. According to Roegman et al. low score(s) were not necessarily observed as a mean of overall low scores; rather, sometimes teachers received low scores on certain indicator(s) that did not affect overall scoring, but resulted in improvement areas for teachers. This study also indicates that the role of an evaluator sometimes blocks potential feedback received by teachers. Teachers are more receptive to a coaching role rather than evaluator role. Also, the Roegman et al. study suggested that being better trained on rubrics for evaluators could eliminate scoring differentials. Harris et al. (2014) reported principals sometimes gave low ratings to teachers with high academic gains because of the principals' perceptions on evaluation rubrics and other subjective norms (Pogodzinski et al., 2015). Young, Range, Hvidston, & Mette, (2015) study on principals' beliefs about new teacher evaluation models indicated that three different evaluation systems based on teaching behaviors and strategies, had positive impacts; however, among three of them, the Danielson teaching evaluation system most accurately assesses the majority of teaching behaviors and strategies.

In Summation: This study evaluates CS teacher's evaluation protocols, which were developed based on the Danielson Framework for teaching. The CS evaluation protocols have

been used since 2011 by CS. The standards-based teaching and evaluation models have been used in more than 43 states in the U.S.

2.6 Marzano Framework for Teacher Evaluations

The Marzano Focused teacher evaluation model is based on standards-based rigor curriculum. The Marzano teacher evaluation model has four domain: 1) Standards-based planning, 2) Standards-based instruction, 3) Condition for learning, and 4) Professional responsibilities. The focused model has 23 items to measure overall effectiveness of four domains (Marzano, 2017).

Forner et al. (2012) studied leadership practices of effective rural superintendents in connection to Waters and Marzano's leadership correlates. Results indicated that seven superintendent practices within rural districts followed by Waters and Marzano (2006) and their effective leadership practices. The new evaluation systems hold teachers and school leaders accountable. The study pointed out these superintendents hold their principals and teachers accountable for their performance and some of them were removed from their positions. Marzano's (2008) research on using action research and local models of instruction to enhance teaching suggested that there should be ongoing feedback to teachers regarding their instructional strategies. He stated that not only should principals do teacher classroom observation, but   master teachers could also observe and give feedback to teachers. Data should be collected and analyzed for each teacher to improve the teacher's quality of instruction, which directly affects student achievement (Marzano, 2008). The new teacher's evaluation systems required all state and districts level initiatives to be applied to local classrooms. Marzano (2000)

reflected on how schools can make this happen in classrooms. He suggested that development of standards-based instruction had significant impacts on local schools. Marzano also mentioned that policymakers should be careful to decide on standards that match with their community values. The study Forner, et al. (2012) conducted with urban schools raised concerns with Marzano's system. The rural-area superintendents raised the bar that all students must attend four-year colleges; then they found that the student dropout rate increased. Many types of research have evaluated the two most common teacher evaluations. Both Danielson and Marzano's teacher evaluation systems suggested that teacher evaluation systems must acknowledge and reward teacher growth (Danielson, 2012a; Marzano, 2012). To make this happen, teachers' roles are essential in evaluations, as they must play an active role in continuous improvement.

2.7 How to Evaluate Teacher Quality Instructions and Effect on Student Learning

The researcher believes that there are high correlations between standards-based daily instruction and student academic gains. Darling-Hammond (2000) indicates that a quality teacher is the most weighted instrument on student's academics gains in the classroom. Teacher quality of instruction cannot solely be measured with instructional delivery, but also with students' academic gains. Danielson indicates that teacher effectiveness is needed for analysis to improve student achievement (Danielson, 1996). Because the teacher has the most significant impact on student achievement, local educational agencies and local districts have focused on improving their teacher performance (McCaffrey, Lockwood, Koretz, & Hamilton, (2003). The teacher evaluation protocols that have the most comprehensive tools for teacher improvement also play a

crucial role in student academics gains. Teacher quality is the most important school-based factor

that impacts student achievement (McCaffrey et al., 2003).

2.8 Constructivist Teaching Approach and Standards-Based Teaching

This thesis explores the correlation between standards-based teaching and the

constructivist approach. According to Gordon (2009), "A constructivist approach in education

believes that students actively create, interpret, and reorganize knowledge in their own ways," (p.

738). Moreover, the constructivist theory interprets "learning as an interpretive, recursive,

building process by active learners interacting with the physical and social world," (Fosnot,

1996, p. 30). Standards-based teaching approaches utilize follow-up steps so that each standard

builds upon the previous one. This is a similar approach to the constructivist learning method.

Both approaches aim to have the teacher apply and practice the concepts learned. According to

Gordon understanding and applying the concept is also related to learner memorization and

regurgitating the information as well. The constructivist approach argued that the learner has a

more passive or receiver role. Gordon (2009) and many scholars agreed that learners need to be

in a more active role or even take the lead in their learning. Moreover, New Generation Science

Standards (NGSS), now accepted in more than 20 sates, promotes the idea of the active role of

learning and not delivering traditional lecture-style instruction learning. Individual educators'

points of view—such as how s/he "views the role of the learner, the role of the teacher, and the

conditions one considers crucial for learning" (Bullard, 2003, p. 158). The researcher believes

that the constructivist approach is not different from standards-based learning approaches. The

most critical point is in how the teacher applies constructivism as a theory of learning into

sustainable instructional strategies that could illuminate this epistemology for teacher candidates (Holt-Reynolds, 2000; Kroll, 2004; Mintrop, 2001; Richardson, 2003).

2.9 Closing

This thesis explores the CS teacher evaluation protocols. The CS teacher evaluation protocol is based on Danielson's Framework of Teaching and students' academics gains. The literature review of this thesis explores and analyzes other research on teacher evaluation protocols. The purpose of this thesis is to explore current literature and CS teacher evaluation protocols to recommend the GSA district improve the current teacher evaluation protocols. The teacher evaluation system is one of the dominant mechanisms to improve daily classroom instructions and students learning. This study realized that to improve the quality of instruction, the teacher evaluation protocol must be utilized efficiently to assist in teachers and to best tap in to their potential. To the contrary, this study recognized that improving quality of instruction has additional impacts on teachers' morale, salary, and continued education.

Chapter 3: Methodology

The purpose of this study is to collect and analyze data from a K-12 school district to make an in-depth analysis of individual teacher growth. The study creates a model for a K-12 school district to analyze individual teacher performance. This study explores the GSA school K-12 district service in St. Louis, Missouri. The GSA school district has used the CS teacher evaluation model since 2001. Teacher growth was measured based on the CS teacher evaluation model. The CS evaluation model has two parts, and each part is weighted equally. The first part of the CS evaluation model is based on the Danielson Framework, which has four domains: planning and preparation, instruction, classroom management, and professional attributes. The second half of the CS teacher evaluation is based on student academic achievement. The study makes an in-depth analysis of each teacher's evaluation scores specifically focusing on the previous three years of evaluation data with students' standardized test scores.

3.1 Research Questions

As stated in Chapter 1, the following questions guided this study:

- How do principals reflect upon the CS teacher evaluation model to encourage and support each teacher's growth?

- To what degree do teachers believe the use of the CS teacher evaluation model will contribute to their professional development as a teacher?

- To what degree do teachers believe the implementation of the CS teacher evaluation model helps them create improvement plans for

their classroom practices?

- What are the perceived advantages and disadvantages, if any, of

  the use of the CS teacher evaluation model used at the K-12 GSA

  District?

This study used both quantitative and qualitative research methods. The study was designed to collect data from teachers and administrators to seek their perceptions of teacher evaluation protocols at their schools. Researchers conducted interviews and analyzed students' test scores and teacher evaluation scores to find out the teacher and student growth from the previous years. Mixed methods is frequently used together in social science as both quantitative and qualitative methods to support and provide strong evidence that can potentially contribute to the advancement of educational research (Creswell, 2002, 2003). Mixed methods research has become popular, and it may begin to be considered as a stand-alone research design (Creswell, 2002, 2003; Greene, Caracelli, & Graham, 1989; Tashakkori & Teddlie, 1998, 2003). This stand-alone approach has been considered a new methodology. "The emergence of mixed methods as a third methodological movement in the social and behavioral sciences began during the 1980's," (Tashakkori & Teddlie, 2003, p.697). It suggested that mixed methods, which are a combination of qualitative and quantitative data, might have a potential to contribute to social sciences research (Creswell, 2002, 2003). Mixed method approaches can be helpful to eliminate biases for some educators who only rely on numerical data.

3.2 Research Design

This study used a concurrent mixed methods design. There are two kinds of the concurrent methods: 1) Triangulation design which uses both quantitative and qualitative data results and makes an interpretation of the data.
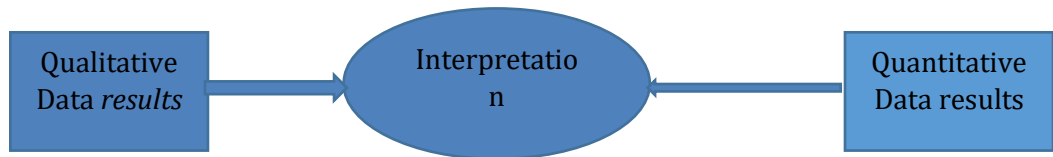
2) Embedded Design uses both data results and interpretations through a qualitative approach (Creswell & Clark, 2007).

Merriam (2016) states, "Researchers can use qualitative and quantitative components together to yield a richer understanding of the subject under study," (p.48). In determining the research design, the researcher strives to analyze the components of CS teacher evaluation protocol in the GSA district since 2011. A comprehensive analysis of data—including interviews, student test scores, and teacher surveys and evaluation scores—may result in an eloquent and descriptively rich account.

The researcher is the only data collector. The researcher's goal is to reach all math and reading teachers and administrators in the GSA district. As Merriam (2016) states, "There are two reasons for selecting a wide sampling: 1) document diversity and 2) identify the common pattern," (p.257). The researcher used maximum variation sampling

to select interview candidates within a bounded system. Such sampling procedures enable the researcher to hear voices from different backgrounds and grade levels, as well as their involvement in the Professional Learning Community (PLC). All participants were invited to be part of a research study and provided with a consent form allowing the collection of data using human subjects. All participants were informed that they could withdraw their consent to be a part of the study at any time. Participants who agreed to participate in the study were asked to sign an informed consent form, acknowledging their participation will be voluntary. Data was not collected from math and reading teachers and administrators who wished to be excluded from the study.

3.3 Selection of Site and Participant

The site chosen for this study is the GSA district because it has a STEM-focused college preparatory curriculum, and it is in its seventh year of implementing CS teacher evaluation protocols. Also, the GSA district was honored as the 2015 Missouri Charter School District of the Year. Also in 2013, Stanford University's Charter Organization Management Studies recognized Concept Schools, the district's management organization, as a top organization. Furthermore, the researcher, who is an administrator in the district, intrinsically values STEM-focused education and has been conducting teacher evaluations for about ten years. Finally, because the district includes three schools—elementary, middle, and high school—there is a broader pool from which to collect data. In total, the three campuses serve 1,400 students in grades K-12. Because this study addresses the effect of teacher evaluation scores on student academic gains, the researcher will recruit both math and reading teachers and administrators from each

campus of the GSA district so that the researcher can access more data for better prediction. The following criterion was applied to participant selection:

- Gender representation,

- Subjects (only math and reading teachers),

- Minimum of three years of teaching,

- Representation from different ages and teaching degrees

The researcher contacted the district superintendent for approval to have all three schools in the GSA District participate in the study.

3.4 Participation and Positioning of Researcher

The researcher is an employee of the GSA school district. As such, the researcher's position must be considered. The credibility of qualitative research is determined by instrument construction. In qualitative research "the researcher is the instrument," (Patton, 2001, p. 14). The researcher is an assistant principal in the GSA school district, and therefore has "insider" status. Potential implications of such status include the possibility of participants' interview statements reflecting what they believe the researcher wants to hear, rather than their actual values and beliefs. Additionally, observation data faces the same threat—the potential for humans to perform differently when they feel "under the microscope." As a result, data will be cross validated by analyzing data for emerging codes and themes stemming from multiple participants' interviews, observations, and documents. The researcher, as an administrator at the GSA high school, deeply values STEM-focused education, data-driven instruction, and

standards-based instructions, which can also serve as a benefit to this study as the researcher has a more experienced and synthesized approach in interpreting findings.

3.5 Multilevel Educational Model

One of this study's goals is to evaluate students' academic gains by using individual teacher evaluation scores and students' test scores to predict future year teacher evaluation scores and students' test scores. To find out that relation, Structural Equation Modeling (SEM) was used in this research study. Structural Equation Modeling is a statistical technique that uses a confirmatory methodology to analyze structural theory on phenomenon (Byrne, 2001). The statistical analysis includes estimating fit indices, errors, and model parameters ran by Analysis of Moment Structures (AMOS) (Arbuckle & Wothke, 1999).

The second part of the data analysis focused on longitudinal study. This part of the study aims to show the same group of students' tests scores three years in a row in relation to different teachers' evaluation scores. For longitudinal study, Analysis of variance (ANOVA) is used for data analysis. Analysis of variance is a collection of statistical models and their associated estimation procedures used to analyze the differences among group means in a sample (Diez, Barr, Cetinkaya-Rundel, 2017). The Statistical Package for Social Sciences (SPSS) was used to calculate descriptive statistics, Levene's Test of Equality of Error, Tests of Between-Subjects Effects, Between-Subjects Factors, Estimated Marginal Means of subjects' factors and missing data analysis.

Structural Equation Modeling has several advantages over traditional multivariate analyses. The process of SEM begins with relationships among variables under study by displaying such relationships with graphical representations. Graphical representations facilitate examining complex associations among latent and observed variables. Second, SEM procedures emphasize confirmatory aspects of data analysis rather than an explanatory approach. Most multivariate procedures are explanatory in nature, which leads researchers to invest more time to find out how interrelations among variables explain the phenomena under study. However, SEM is a powerful tool for inferential statistics. Third, SEM allows one to analyze different aspects of a statistical model simultaneously by examining direct and indirect effects as well as error variances parameters. Traditional multivariate procedures fail to include influences of error variances because the mathematical model used ignores such error that may result in inaccurate conclusions. Finally, model construction of SEM includes latent and observed variables. Such characteristic of SEM demonstrates the real effects of observed variables over unobserved or latent variables.

3.6 Data Collection

This study aims to collect data from 1,250 students nested within 50 teachers, who teach math and reading subjects in GSA K-12 district selected for this study. All the data—interview subjects, teacher evaluation scores, students' test scores, and students' GPA—for this study was collected from grades K-12 from the 2012 – 2018 school years.

Part One – Interview: The researcher interviewed seven teachers and six administrators to find out the answer on the effect of the CS teacher evaluation model on teacher and

student growth. The interview took approximately 30 minutes of participants' time. The subjects elected to participate in a semi-structured interview. The researcher used an audio recorder to record interviews and to explore follow up questions. The subjects were selected from GSA school district, which is also where the researcher works as a school administrator. After IRB approval, the researcher distributed the participant consent forms to interview participants and give brief information about the study via email along with interview questions.

Part Two – Data Mining: The researcher used the GSA district teacher evaluation scores, students' GPA, and test scores from the following examinations: NWEA, MAP, and EOC. The teachers' previous year's evaluation scores and students' test scores were used to create a nonlinear regression model to predict the upcoming year's scores for both teacher and students. Approximately 50 teachers and their students' data was collected and analyzed. Additionally, the researcher analyzed and reviewed annual teacher survey data from the last three years to determine teacher reflections on evaluations and more.

To maintain confidentiality, the researcher was the only individual with access to interview data and data from GSA district. Participants' responses were identified by interview numbers (i.e. Interview #1, Interview #2) and subject names associated with the interview number remained in a separate, passcode-protected file. Students' identifier removes by GSA district data personal. Teacher's evaluation data identifier removes by district data personal.

Outcome Variables and Predictors: This research used two outcome variables, which are: 1) Teacher evaluation scores, and 2) Students' academics gains.

The individual teacher evaluation scores prediction: The teacher evaluation scores are a combination of three observations: formal evaluation, classroom walkthroughs, and professional responsibility evaluation. Each teacher receives a minimum of two evaluations from different evaluators throughout the same school years. The data collected cover three consecutive years during the years between 2012 – 2018 school years.

Teacher-Level Predictors: The teacher-level predictors that were used in the data analysis are (a) Teacher Formal Evaluation from classroom walkthroughs and (b) Teacher Professional Responsibility Evaluation. Teacher demographic information (gender and race) along with education level codes as a dichotomous variable (0 and 1) were also used.

Students' Academics Gains Based on GPA and Standardized Tests: NWEA, MAP, EOC, and ACT scores. Student GPA is the cumulative grade point average for all courses taken by a student during the school year.

Student Academic Gain Predictors: The student-level academic gain prediction was based on each teacher's evaluation scores and the students' test scores (NWEA, MAP, EOC, and ACT) and GPA. Student demographic information [race, gender, SES] will be analyzed as well.

3.7 Validity and Reliability

To establish internal validity, the researcher uses triangulation, including member checks for each participant, multiple types of data collection, and multiple methods of data collection. Regarding member checks, the researcher follows up with each participant to debrief the extrapolated themes from interview data. The internal validity of qualitative research is the extent that the interpretations and concepts have shared meanings between the participants and the researcher (McMillan & Schumacher, 1997). In order for the researcher's findings to be validated, participants have had to agree with the extract themes. Regarding multiple methods of data collection, the researcher compares findings from interviews with teacher survey data.

Merriam (2016) notes that reliability refers the possibility of whether results can be replicated. More specifically, Merriam (2016) says, "the more important question for qualitative research is whether the results are consistent with the data collected" (p. 251). The researcher will collect and analyze a variety of data, and though the human behavior is not static, this researcher may have the results to be consistent and dependable, as well as enough data that results could be applied to other districts and even individual schools seeking to improve their teacher evaluation protocols.

3.8 Limitations of the study

The credibility of qualitative research is determined by an instrument construction, in qualitative research, "the researcher is the instrument," (Patton, 2001, p. 14). The researcher is an assistant principal in the GSA school district and therefore has "insider" status. Potential implications of such status include the possibility of

participants' interview statements reflecting what they believed the researcher wanted to hear rather than their actual values and beliefs. Additionally, observation data faced the same threat—the potential for humans to perform differently when they feel "under the microscope." As a result, data was cross validated by analyzing data for emerging codes and themes stemming from multiple participants' interviews, observations, and documents.

Another limitation is the teacher's students will not be the same student population every year. The data collected each teacher's students' test scores and GPA for three consecutive years. Each teacher will have a different group of students every year. To address this issue, the researcher also analyzed a longitudinal study to compare the teacher effect on the same group of students.

Chapter 4: Introduction

Qualitative methods of data analysis offer ways of categorizing, examining, comparing and contrasting, and interpreting meaningful patterns or themes (Moss, 2015). Qualitative data analysis is an interactive and reflexive process, which means that the process begins with an interview, not necessarily after the interviews are completed (Stake, 1995). As Stake suggests, the researcher begins his or her data analysis at the time of the interview. It might sound complicated that data analysis begins as an interview process, but it is important to note that the researcher should not do in-depth analysis until all data is collected. Seidman (2006) suggests that researchers should avoid any in-depth analyses until all interviews are completed. He states: "The researcher must come to the transcript with an open attitude, seeking what emerges as important and of interest from the text. The interviewer must come to the transcript prepared to let the interview breathe and speak for itself," (p.117).

There are different ways to analyze qualitative data:

1. **Thematic analysis**: Sometimes called interpretative thematic analysis. The first step in this process is to read through each transcript and try to make sense of the interview data.

   The second step is to find out what is said as group—or find a repeated pattern between each participant group (interviewers)—coding is essential to make the connection between main and subgroup data.

2. **Narrative analysis**: Participants' stories (narratives) are analyzed and retold (rewritten) using a framework that makes sense to readers. Often, people participating will not initially tell stories in chronological order. The researcher needs to put the story in sequential order, where both the story and emerging themes can be included. The transition between themes is also important.

3. **Discourse analysis**: This is the analysis and understanding of the response of participants. The researcher should read the data fully and not simply respond and analyze but ask why the participant responds the way they do and find out the reasons for criticism of the process. He or she needs to uncover the issues with the reporting.

4. **Semiotic analysis**: The study of the sign, sign systems, and their meaning. It goes further than analysis of theme does and more in-depth: a process of signification or connotation. The aim of this is to find any omitted or overlaid themes by others.

Thematic analysis in this dissertation study aims to analyze the qualitative data. It is the simplest categorizing strategy for qualitative data. Boyatzis (1998) wrote in *Transforming Qualitative Information* that thematic analysis is a process of "encoding qualitative information," (p. vii).

4.2 Preliminary Set of Codes

The researcher utilizes Braun and Clarke's (2012) six-phase method for thematic data analysis, including, "Phase 1: Familiarizing Yourself with the Data;" "Phase 2: Generating Initial Codes;" "Phase 3: Searching for Themes;" "Phase 4: Reviewing

Potential Themes;" "Phase 5: Defining and Naming Themes;" and "Phase 6: Producing

the Report."

In Phase 1, the researcher adjusted himself to the data by transcribing the audio

interview, re-listening to the audio interview for transcription accuracy and carefully

combing all transcript documents to share with the interviewer's participant for validity.

In Phase 2, the researcher began an initial coding by mining the transcribed interview.

The interview transcribed teachers' and principals' responses. The initial themes and

categories during the interviews were confirmed during the transcription process. The

researcher began the initial coding and focused on the research questions, seeking

understanding of the relationship between teacher evaluation scores and student

standardized test scores. Table 4.1 provides an overview of the procedures that were

organized by each research question and related interview questions. Research question 1

and its interview question were provided with the objective of each interview question.

The entire list of interview questions was provided in Appendix K.

Research Question 1: How do principals reflect upon the CS teacher evaluation model to

encourage and support each individual teacher's growth?

Table 4.1: Overview of Interview Questions

Interview Questions	Objective(s)
Do you believe that is your districts envisioned on an individual teacher growth	To find out teachers and principals perception on teacher growth.
To what extent, if at all, has the CS teacher evaluation model impacted your teachers' growth?	To find out the possible impact of the CS teacher evaluation model on professional growth.

| What specific part of the CS teacher evaluation model, if any, has helped teachers grow most? | To identify what specific parts of the CS teacher evaluation model have helped teacher's growth? |

In Phase 3, the researcher further analyzed the codes from Phase 2, and created transcript line numbers and reworded, with indirect quotes in one column and initial codes in the adjacent column for both groups (See Appendix L). The table 4.2 provides a summary of preliminary set of data derived from interview transcripts. The entire list of preliminary data is provided in Appendix L.

Table 4.2: Preliminary Data Sets

Transcript	Codes
1-10 Districts envisioned on an individual teacher growth?	Growth (has to be done, coach you, caught you)
11-17 The CS evaluation tool and teacher growth	"Here's what you did or didn't do" tool, walkthrough observation
18-24 District vision for individual teacher growth	Professional development opportunities

The coding was organized as single-spaced pages of codes for the teachers' perspective about teacher evaluation scores and student test scores. The same coding process was done for the principals' perspective on teacher evaluation and student tests scores. In Phase 4, the researcher extracted the codes from Phase 3, and continued to form an interpretation, which resulted in identifying three initial themes from a teacher's perspective. The researcher created another document that included initial themes in separate columns from a principal's perspective. Underneath each theme, the researcher included the paraphrased transcript and line numbers. Richards and Richards (1998)

asserted that "theory construction is the main task of qualitative research," (p.170), and

Miles and Huberman (1994) maintain that, "just naming and classifying what is out there

is usually not enough. We need to understand the patterns, the recurrences, the whys,"

(p.31).

In Phase 5, the researcher reflected further on the initial themes of teachers' and

principals' responses, and revised them for clearness and specificity. The researcher also

looked into transcript data that brings out date with another theme and/or removed the

transcript data that is considered unrelated at this part of the inductive process. Table 4.3

provides a summary of the processes that were used to create themes. Research question

1 and its related interview questions are provided as an example. The entire list of

interview questions is provided in Appendix M.

Table 4.3: Emerged Themes Related to the Research Questions

Research Question	Themes
Research Question 1: How do principals reflect upon the CS teacher evaluation model to encourage and support each individual teacher's growth?	1) Whether Concept Schools Teacher Evaluation Model (CSTEM) has an effect on individual teacher growth; 2) Whether evaluation expectations are about what is or is not positioned; 3) Whether evaluation items are coached; and finally 4) Whether evaluation items create dialogue between teachers and principals

In Phase 6, the researcher was involved in the final phase of analysis, as noted in

Braun and Clarke (2012), "writing and analysis are thoroughly interwoven in qualitative

research—from informal writing of notes and memos to the more formal processes of

analysis and report writing," (p.69).

Throughout the thematic coding process, the researcher involved in caring inductive analysis truly utilizes what was in the data itself as a means for developing codes. Once the codes were derived, the researcher engaged in more of a combined inductive-deductive analysis, generating themes based on ideas from the outside (yet still relevant to the data), and then carefully placed the data with the relevant themes. Braun and Clarke (2012) suggest, in reality, "coding and analysis often uses a combination of both approaches. It is impossible to be purely inductive, as we always bring something to the data when we analyze it, and we rarely completely ignore the semantic content of the data when we code" (pp. 58-59).

One of the ways to ensure the internal validity of the qualitative data analysis is triangulation through use of a member check on the extrapolated themes; multiple sources of data collection, interview, and confirming interview themes with subjects (Merriam, 2016, p. 245). For the reliability of this study, the results must be consistent with the data collected (Merriam, 2016, p. 251). Also, if a study is done on a different "expert educator," results may be replicated. That means human behavior is not a statistic and additional qualities and expertise might bring forth other area of expertise.

4.3 Qualitative Findings

The qualitative data analysis of this study is focused on teacher and administrators' perceptions on the current CS teacher evaluation model. This study aims to explore both teacher and administrators' insights into current evaluation models in order to find out whether the current teacher evaluation model was satisfied with both

sides, and moreover to find out the current teacher evaluation models on teachers' and students' growth. The sample population of this study is teachers and administrators from K-12 grade levels in the public-charter school in St. Louis, Missouri. The sample of interview candidates includes seven teachers, two with less than five years teaching experience, three mid-career teachers (teaching experience between six to 14 years), and two seasoned teachers (more than 15 years of experience) at the elementary, middle, and high school level. The administrator sample comprised elementary, middle, and high school levels in the same public-charter school district. The researcher's need for a diverse selection of participants is highly recommended. This study considers diverse participants and uses the level of experience when considering the responses. Several research studies show differences in the perceptions of new teachers and veteran teachers (AL- Rawajfih et al., 2010; Jiang, Sporte, & Luppescu, 2015; Yin, 2014).

Data collection begins with eight interview questions to select participants. The first step is using a Google Doc. Form and participants use Google Voice recorders to answer the interview questions. Firstly, participants have the chance to respond to the questions via Google Voice recorder. Secondly, participants followed up with face-to-face meetings with interviewers regarding their responses and follow up questions. An individual's response was combined into one word document after face-to-face follow up meetings. The teacher responses and administrators' responses are collected in a two-platform document. The interview questions focus on open-ended questions regarding CS teacher evaluation models and are followed up with questions or probes to allow for

participants to elaborate or describe something in more detail (Rubin & Rubin, 2004) to address the nature of the questions themselves.

University of Missouri – St. Louis IRB approval was gained before the interview to conduct this study. Data was gathered in June 2018 to answer the research questions. A total of 16 individual interviews were transcribed and evaluated for this study.

Research Question 1: How do principals reflect upon the CS teacher evaluation model to encourage and support each teacher's growth?

There are four main themes that emerge: 1) Whether CSTEM has an effect on individual teacher growth; 2) Whether evaluation expectations are about what is or is not positioned; 3) Whether evaluation items are coached; and finally 4) Whether evaluation items create dialogue between teachers and principals.

Theme 1.1: Evaluation expectations are more about what is or is not positioned. All participants of the study had common concerns about CSTEM and had very clear rubrics, but did not necessarily believe it would lead to individual teacher growth. A study on whether teacher evaluation improves teaching by Taylor, E. S., & Tyler, Taylor, E. S., & Tyler, J. H. (2012) shows that teachers are more effective at raising students' academic gains when they are evaluated every year. The fact is that many public schools do not evaluate teachers more than one time in a given year. The study on teacher evaluations improving teaching, mentions that teacher evaluations need to be done more than one time and during a testing year. To see the effect of teacher evaluations, teachers should be evaluated more than one time during the same year that students are given

standardized tests. The Taylor et al. study suggests that "micro-level" evaluation feedback had a more significant impact on teacher performance and improvement on individual teacher performance than final overall evaluation scores. One of the subjects mentioned that "I haven't seen CSTEM create dialogue. Unfortunately, the teachers read the results and accept or decline." It is curricula evaluations that open a creative dialogue rather than overall feedback on about 50 itemized evaluation tools. The Taylor et al. study suggests that the effects of ongoing teacher evaluation with more critical feedback has more significant impact on teacher improvement.

Theme 1.2: Evaluation items should not have coaching or reflective practice. It is important for teachers to see or use the teacher evaluation model (TEM) as a tool for their professional growth. The TEM should involve reflection and coaching practice. A subject mentioned that "I can't say that many teachers use the evaluation as a measure for growth. When a teacher receives a low point, more often than not, they simply don't accept the score." A study about teacher evaluation fostering real growth by Ritter, G. W., & Barnett, J. H. (2016) indicates that evaluations can provide a focus for professional development along with the feedback from evaluators, which might encourage self-reflection and meaningful conversations focused on classroom practices. A subject noted that "Our evaluation tool doesn't seem to be used as a growth tool, rather as a 'here's what you did or didn't do' tool." Several researchers indicate that traditional teacher evaluations are inadequate, both for differentiating between more and less proficient teachers and as a basis for guiding improvements in teaching skills (Danielson, 1996; Gallagher, H. 2004, Medley & Coker, 1987; Peterson, 2000). The role of TEM must be

explicatory by all stakeholders. There are common practices by both sides, such as a checklist of items that need to get done. The TEM is not always necessarily comprehensive enough to meet teachers' knowledge and abilities. As much previous research has advised, teachers' expectations for their students' overall achievement would not necessarily be picked up by the TEM, which addressed teachers' knowledge and skills (Ashton & Webb, 1986; Dembo & Gibson, 1985; Lumpe, Haney, & Czerniak, 2000; Ross, 1998; Soodak & Podell, 1998; Tschannen-Moran, Hoy, & Hoy, 1998).

Theme 1.3: Evaluation items should create a dialogue between teachers and principals. The theme regarding creating dialogue between the evaluators and teachers emerged as a dominant theme. Words or expressions open a dialogue and is mentioned by 100% of the subjects. Data analysis revealed 44 common words and phrases categorized under understanding low-income schools, including words. Evaluation items should create dialogue towards teachers and principals to help for individual teacher growth. A subject suggests "I don't think the evaluation tool in and of itself has contributed to teacher growth. I think growth comes through the formative conversations that occur throughout the year." Research shows a correlation between teacher evaluation scores as it relates to students' growth, which indicates the significance of timely feedback. The Milanowski & Gallagher (2001) research suggests that the quantity of feedback that teachers receive will be perceived as an opportunity for growth, even though it carries high stakes (Milanowski & Gallagher, 2001). It is important for evaluators to spend time after each evaluation and open doors for two-way dialogs. Another subject also mentioned not having open dialogues. She noted that "Our

evaluation tool doesn't seem to be used as a growth tool, rather as a 'here's what you did or didn't do' tool. I would like to meet with teachers after observing and speak with them about what areas they are strong in and what areas need growth. I would also like to see us do more 'drop in' type of observation, so that teachers are more natural in their formal evaluations. Just like students, 'the more something has been addressed, the less we fret over it.'"

The walk-through component of teacher evaluations is suggested from interview subjects as an efficient way of creating more open dialogues. The walk-through evaluations are less than ten items while other evaluations have more than 30 items on it. This evaluation can help evaluators to give more specific feedback on more open-dialogue times. The subject indicates, "Using the walk-throughs is a good model for helping the teachers to grow. The more you make time to get in the classroom and teachers feel supported when you come in, then teachers will work towards their goal of achieving success in their class." Even the perfect TEM is itself not enough to cause growth. It is about how people run the system. The educator approach expected from TEM will heavily determine the success of the TEM. One of the subjects reflected upon the importance of post-evaluation conferences. She mentions, "I have found value from administrators in the post-evaluation conferences. Having the one-to-one conference offers the teacher and administrator to clearly communicate the evaluation experience. It clarifies and reinforces both the constructive comments and suggestions about the class lessons." A study done by Smith, Eric (2017) on the relationship between veteran secondary school teacher perceptions of evaluation feedback and self-efficacy of

instructional practice findings indicates that "a successful evaluation process should promote specific feedback in relation to observed teaching practices and emphasize the importance of valuable feedback, as perceived by teachers," (page 10). The same study finding also mentions that constructive feedback is a more strongly correlated predictor with teacher self-efficacy. The open two-way dialogue has the potential to improve teacher self-esteem, which will increase the quality classroom instructions.

In Sum: The reflective practice, or looking to evaluation process as something that "has to be done" or is "done to them," will only be beneficial when both sides have the mindset of purpose and goals towards the evaluation tool and is all about growth. It requires a mental shift on evaluation practice, and ultimately should be seen as an evaluation process that is a "coach you" and not a "caught you!" process.

The dialogue starts from both teacher and administrator if the evaluators' roles towards mentoring should have the potential to improve professional growth. It is important to have an open and constructive channel of communication and dialogue with the teacher in order to discuss strengths and weaknesses of said teacher and offer some suggestions for betterment. Likewise, a teacher who is willing to hear his or her strengths and weaknesses in order to be a better teacher will push for the administrator to open up that constructive channel of communication and dialogue. For any teacher evaluation model to be effective, the model needs to create a professional dialogue, but the key is whether or not the teacher is willing to take advantage of the opportunity.

Research Question 2: To what degree do teachers believe the use of CSTEM will contribute to their professional development as a teacher? There are two main themes that emerge: 1) The CS teacher evaluation model offers professional development tools; 2) The CS teacher evaluation model gives clear guidance as to what a teacher can do to improve.

Theme 1.1: The CS teacher evaluation model offers professional development tools.

The teacher evaluation models need to be purposeful, such as in empowering teachers to find the right professional development opportunities themselves. A subject reflects upon the opportunities CSTEM provides for professional development. He notes, "[The] evaluation process is communicated with teachers on what is being evaluated and how you will be evaluated. There are many opportunities through this evaluation process that allows for teacher to grow and improve on areas they need and ample opportunity to get feedback from administrators and colleagues. Teachers can also access resources or attend workshops that would support their growth in a particular area." Past research on the purpose of teacher evaluation indicates accountability and professional development or summative and formative purposes (Isore, 2009; Stronge, 2006). The expectation of the teacher evaluation model needs to be clear by evaluators and evaluatees. A subject mentions that to understand the teacher evaluation model as a new teacher who needs professional development. She said, "I took the Concept Schools teacher evaluation model as the expectations of my school administrators. Various professional development

sessions and staff meetings throughout the year also helped me to understand administrators' expectations." To increase effectiveness of any new teacher model for any given school district, training and specific professional development on the new teacher evaluation model is a must. Hogan, S.J. (2017) studies the effects of the Marzano Teacher Evaluation Model on a teacher's performance, which correlates with the focus from Domain 1: Classroom Strategies and Behaviors and its alignment to previous and current professional development opportunities (Marzano, 2011).

Theme 1.2: The CS teacher evaluation model gives clear guidance on what teachers can do to improve. The most advantageous part of CSTEM is what defines the specifics regarding what the evaluators are looking for in teaching practices. Research regarding the determination of the teacher evaluation models finds that teacher training and development appears to progress the teaching skills and encourages the pedagogical development of teachers (Mills and Hyle, 1999; Simões, 2000; Huber, 2002). One of the subjects reflects on CSTEM as more constructive and conducive to a teachers' growth. He states, "The strength of the Concept Schools teacher evaluation model in our GSA school district is that it feels more supportive than critical. I think it is important that teachers see evaluations as a chance for growth rather than a chance to be criticized." The ultimate role of professional development in education is to improve both teachers' skills and students' academic gains. The teacher evaluation model has a high potential for educators to determine teachers' professional development area. Research done by Tomonari, (2012) suggests that it is important to find professional development that creates or supports active change in the classroom. It is a very common error by

educators to not follow up and experiment whether or not the professional development (PD) led to successful change. Often, suggested professional development must be broken down into smaller steps. As one of the subjects reflects on this very point, he mentions, "I often reflect on my teaching practices, yet the CS teacher evaluation model breaks down the practice into specifics. I can then see what needs more work for improvement." The key role of professional development on teacher effectiveness is mentioned in the research. A teacher's professional growth is considered significant in the educator's life because it helps them to acquire and/or improve their teaching skills (Marlene, Fernando, & Santos, 2015). To facilitate and continue education in the teaching profession remains crucial for a students' academic achievement. As one of the subject notes, "The CS teacher evaluation model has helped me to set measurable goals by inspiring me to improve my evaluation scores every semester and every year." Another teacher goes on to say, "[The] CS teacher evaluation model should be studied in groups at the beginning of the school year instead of reminding teachers before the formal evaluation. Since I take the model as a guide, it has to be taken seriously from the beginning of the year. In the summer training sessions, certain time periods should be dedicated to going over the model and how the model should be used to guide teaching." As Icel's (2018) study on STEM policy implementation finding indicates that PD is another factor that can affect motivation. The need for PD is made clear by many of the study's subjects and is held out by the research. To see the effect of teacher evaluation model PD training is, indeed, necessary.

In Sum: Targeted or needs-based PD plans for teachers have more potential in an area of improvement. Instead of making a one-person decision, both teacher and principal can work on the details of choice, such as taking classes, going to different workshops or other PD opportunities provided by different organizations such as EdPlus, Solution Tree, Mo Teacher Association, etc. Creating a culture of a school-wide effort for improvement ensures all staff notes the logistics of their individual PD plans during the first month of school, so that every staff member can take advantage of the PD funding fairly. This could also be under the umbrella of already scheduled PD days.

Research Question 3: To what degree do teachers believe the implementation of the CS teacher evaluation model helps them create improvement plans for their classroom practices?

1) The CS teacher evaluation model offers a reflection of my teaching practice; 2) The rubric of CS teacher evaluation is clear on the expectations.

Theme 1.1: The CS teacher evaluation model offered reflects my teaching practice. The CS evaluation model is specific when it comes to teaching and instruction. The domain of instruction contains 24 items. This domain is even more detailed with more items compared to other domains. A subject remarks, "The specific aspect of the CS evaluation model that has helped me grow most is the breakdown of all aspects being evaluated. Seeing these rubrics and reviewing them help me to focus on some of the most important areas of teaching." To improve the quality of teaching practices, educators not only look to improve the teacher evaluation models but also other revenues such as

continued professional development and the heart of a successful educational reform movement (Ball and Forzani 2009; Fenstermacher and Richardson 2005; Gore 2001; Grossman and McDonald, 2008). Past research indicates that quality teaching plays a key role in promoting K-12 students to academic gains (Ball and Forzani 2009; Gore 2001; Grossman and McDonald, 2008; Rink, 2006). One subject mentions, "CS teacher evaluation is very comprehensive and can be used as a guide in setting teacher expectations." The search on standards-based and well-designed teacher-evaluation protocols has a positive and continuous effect on individual teacher growth (Papay, 2012; Taylor & Tyler, 2012; Tucker & Stronge, 2005). To help teachers with quality of teaching practices, the teacher evaluation model needs to utilize more dynamic interaction among teachers and principals. To eliminate the tension of ratings with a clear rubric will increase the process of open dialogue. Another subject mentions, "It is difficult to choose one part over another one since the whole model was extensive and helpful. If I really have to choose a part, the areas that I need improvement were more helpful. Besides, the Instruction part, part B, was helpful in giving applicable directions."

Theme 1.2: The rubric of CS teacher evaluation is clear on the expectation. The rubric of CS teacher evaluation is clear on the expectations of all four domains. Each domain is focused on different parts of teacher evaluations. The teacher formal evaluation has four domains: A-Planning and Preparation, B-Instruction, C-Classroom Management, and D-Professional Attributes. Each domain has different items with specific rubrics. Evaluators and evaluates access the items with well-explained rubrics. A subject mentions, "The CS model supports the expectations of the administrators regarding my

teaching practices by specifically understanding the various details required in different areas. They are very clear and detailed; so that teachers know what the administrators are observing when they walk into the classroom." The researchers Harris et al. (2014) and Pogodzinski et al. (2015) mention the importance of evaluation rubrics. The evaluator's perception on TEM rubrics must be objective and not based on subjective norms. The challenge of teacher evaluation ratings can be practical with clearer rubrics. Some studies mention the challenges related to the consistency of the ratings (Kimball and Milanowski, 2009). The most critical aspect of TEM is the rubrics. Another subject points out that "The CS TEM definitely defines the specifics regarding what the administration is looking for in my teaching practices." The research in the TEM raises concerns as to the fairness of the evaluators and rubrics. According to Pogodzinski, Umpstead, &, Witt (2015) the new teacher evaluation models raise tensions between the teachers and administration. The clear-cut expectation of rubrics will not only dissolve the tension between evaluators and evaluatees but also create a friendlier environment for two-way dialogue. The teacher evaluation model needs to engage in conversations on the most important aspects of teacher evaluation and teaching practice. As research done by Huber, S.G., & Skedsmo, G. (2016) indicates, combining more purposes into one teacher evaluation model might diminish the possible successes of the teacher evaluation models. Wydo, D.A.'s (2016) study on A Grounded Theory Exploration of the North Carolina System (NCEES) and its Effects on teaching practices and teacher leadership findings indicates an overall effect of NCEES on teaching practices cannot be determined by principals or teachers when identifying specific improvements. A teacher evaluation

model needs to target very specific areas of teaching so that it can point out specific improvement areas for teachers.

In Sum: The delivery of instruction is the core of quality teaching and will aid teachers of all subject areas to reduce any potential classroom management issues directly. This part focuses on some of the vital issues of teaching, such as planning, objectives, motivating students, instructional strategies, differentiation, cross-curricular planning, and assessment. Improving any of these areas will make the teacher a better one.

Research Question 4: What are the perceived advantages and disadvantages, if any, of the use of CSTEM used at the K-12 GSA District?

The CS teacher evaluation model had both weaknesses and strengths as reflected by all subjects. Three main themes emerged based on interview data collected from all participants: 1) There are too many items and it is unrealistic to incorporate every strategy being evaluated. 2) The same and consistent model that is applied to different subjects are taught differently. 3) It is very comprehensive and can be used as a guide in setting teacher expectations.

Theme 1.1: There are too many items and it is unrealistic to incorporate every strategy being evaluated. The number of total items in all four domains of formal evaluation recalls the issue raised by subjects. The formal evaluation of the CSTEM has four domains: A-Planning and Preparation (8 items); B-Instruction (24); C-Classroom Management (14); and D-Professional Attributes (4), which makes total of 60 items to be

covered in 45 minutes. A subject points out, "I believe the weakness lies in not breaking down the evaluation tool so that each teacher can focus on a particular section of skills rather than all the skills." Both evaluators and evaluatees raised concerns about the number of items on the evaluation.. Within 45 minutes of a class period, it is a difficult task to complete all items for evaluators as well. The research was on standards-based rubric and detailed rubrics show positive impact on teacher growth. The role of well-designed teacher-evaluation protocols with standards-based rubrics has a positive and ongoing effect on individual teacher growth (Papay, 2012; Taylor & Tyler, 2012; Tucker & Stronge, 2005).

Another subject also mentions the challenges of too many items for those evaluated but also for the evaluators. She states, "Because the CS model is 8 pages of details, I think it is impossible for an administrator to fairly assess the teacher on all of the details in a short observation of 5 to 10 minutes. I think a series of observations would provide a more accurate evaluation of the educator's skills as a teacher to reflect on." The classroom walkthrough has nine items, but with the requirement to cover to all four domains (60 items) of formal evaluations. This can raise concerns regarding fairness of evaluations. The most critical aspect of TEM is rubrics. The research in the TEM raised concerns for fairness of the evaluators and rubrics. According to Pogodzinski, Umpstead, &, Witt (2015), the new teacher evaluation models raise tension between teachers and administration.

Theme 1.2: The same and consistent model is applied to different subjects, which are taught differently. A study on physical education teacher perceptions of teacher evaluation findings indicates that teacher evaluation systems are not tailored toward noncore subjects (Norris, J., van der Mars, H., Kulinna, P., Amrein-Beardsley, A., Kwon, J., & Hodges, M., 2017). Past research on teacher evaluations indicates that traditional teacher evaluation models programs are based on core subjects (Darling-Hammond, Wise, & Klein, 1999; Loup, Garland, Ellet, & Rugutt, 1996). The core subjects are on the radar of legislators, such as with the NCLB Act, and focus on reading and math skills of students. Another subject identifies special teachers such as music, art, and physical education teachers. Evaluation items for these subjects may not align with core subject items, and evaluators are mostly trained in core subject areas. She states, "I do feel that the administrators have the necessary training to evaluate me fairly according to the model. On the other hand, I don't always believe they have enough training or experience in music to fully understand what is necessary in the music classroom to be successful." Researchers Halverson, Kelley, and Kimball (2007) suggest that some teachers sensed their evaluators lacked educational content knowledge and were not qualified to evaluate them on instructional content decisions. One of the participants also clearly indicated the need for differentiating rubrics to align with special subjects. He notes, "As one of the improvement areas, I would develop alternative evaluation rubrics for different areas/subject matters, such as Physical Education, Special Education, Music, Computer, etcetera. A second improvement area would be developing some evaluation models focusing on certain issues more based on teacher needs of improvement, such as

classroom management, improving teacher-student relationships, more hands-on activities, and etcetera."

Theme 1.3: It is comprehensive and can be used as a guide in setting teacher expectations. The subjects' responses stated a common strength of the CSTEM was a consistent rubric for all K-12 teachers, standards-based items, and help with self-reflection. One of the subjects says, "I see the CS model as a consistent tool to grade all educators district wide, as equally and fairly as possible. All teachers have a clear understanding of what is expected in lessons, clubs, and overall relationships with school families and the community." Having a consistent evaluation tool along with a consistent rubric can eliminate subjectivity between evaluators. As study of Harris et al., (2014) and Pogodzinski et al., (2015) study mentions the importance of evaluation rubrics. The evaluator perception on TEM rubrics must be objective, not based on subjective norms. To help teachers form clear expectations, it is important to give specific goals or improvement areas. As one of the subjects stated, targeted improvement areas can be more helpful. He mentions, "[The] CS teacher evaluation model is a very comprehensive model. Being a comprehensive model, teacher expectations are well defined in the model. This gave me an opportunity to evaluate in what areas I can excel and in what areas I need to improve myself." The CS scoring items on the evaluation form provide a guideline for the teachers on what to look for and evaluate themselves before the administrator's official classroom visits. Those items measure quality of instruction, classroom management, the methods of delivery, etc., which are all carefully picked up based on different evaluation methods currently out there. So, it is important the teacher

pays attention to what's being asked through these rubrics as they can better focus on their weak areas and improve as they drill on those items. Research regards teacher skills and its effects on a student's academics gains, which indicates that to improve student learning, teachers will need to increase their skills (Corcoran, 1995; Darling-Hammond, 1999; Darling-Hammond & McLaughlin, 1995).

In Sum: The items on the evaluation rubrics are very spread out to measure different aspects of teaching and learning. Too many items on rubrics cause unrealistic goals and it incorporates every strategy being evaluated as mentioned in theme one. The CS teacher evaluation model is well designed for core subjects: math, reading, science, and social studies, as participants mentioned and discussed in theme two. The consistent model is applied to different subjects, which are taught differently. It is important to develop alternative evaluation rubrics for different areas/subject matters, such as Physical Education (PE), Special Education (SE), Music, Computer, etc.

Table 4.4 Demographic information of interview participants

Interview Participants	School Type	Grade Level	Student Population	Gender	Race	Years at STEM School
Teacher #1	Urban	K-5	430	Female	White	7
Teacher #2	Urban	6-8	250	Female	White	5
Teacher #3	Urban	6-8	250	Female	White	3
Teacher #4	Urban	9-12	250	Male	White	7

Teacher #5	Urban	K-5	400	Female	White	4
Teacher #6	Urban	6-8	250	Female	White	5
Teacher #7	Urban	6-8	250	Female	White	3
Administrator #1	Urban	6-8	250	Male	White	7
Administrator #2	Urban	6-8	250	Male	White	7
Administrator #3	Urban	6-8	250	Female	African American	5
Administrator #4	Urban	6-8	250	Male	White	18
Administrator #5	Urban	9-12	250	Male	White	20
Administrator #6	Urban	9-12	250	Male	White	25

4.4 Quantitative Data Analysis

The quantitative data analysis of this dissertation focuses on teacher evaluation scores and its relation to students' academic gains. The data analysis begins with the collection of data, which included a combination of each teacher's formal evaluation scores, classroom walk-though evaluation scores and professional evaluation scores for at least three consecutive years. The collection of data also includes students' standardized test scores for three consecutive years as well. One of the research goals is to find out the

relation between teacher evaluation scores and students' academic gains. To find out that relation, structural equation modeling (SEM) was used in this research study. The statistical analysis included estimating fit indices, errors, and model parameters ran by Analysis of Moment Structures (AMOS) (Arbuckle & Wothke, 1999).

The second part of the data analysis focused on longitudinal study. This part of the study aims show the same group of students' test scores three years in a row in relation to different teachers' evaluation scores. For the longitudinal study, analysis of variance (ANOVA) was used for data analysis. Analysis of variance is a collection of statistical models and their associated estimation procedures used to analyze the differences among group means in a sample (Diez, Barr, Cetinkaya-Rundel, 2017). The Statistical Package for Social Sciences (SPSS) was used to calculate descriptive statistics, Levene's Test of Equality of Error, Tests of between–Subjects Effects, Between-Subjects Factors, Estimated Marginal Means of subjects factors, and missing data analysis.

Structural equation modeling (SEM) has several advantages over traditional multivariate analyses. The process of SEM begins with relationships among variables under study by displaying such relationships with graphical representations. Graphıcal representations examine complex associations among latent and observed variables. Second, SEM procedures emphasize confirmatory aspects of data analysis rather than an explanatory approach. Most multivariate procedures are explanatory in nature, which leads researchers to invest more time to find out how interrelations among variables explain the phenomena under study. However, SEM is a powerful tool for inferential

statistics. Third, SEM allows one to analyze different aspects of the statistical model simultaneously by examining direct and indirect effects, as well as error variances parameters. Traditional multivariate procedures fail to include influences of error variances because the mathematical model used ignores such errors that may result in inaccurate conclusions. Finally, model construction of SEM includes latent and observed variables. Such characteristic of SEM demonstrates the real effects of observed variables over unobserved or latent variables.

4.5 Sample Size and Minimum Sample Size

The selection of sample and its size is a necessity in statistical analysis to obtain reliability and validity of the particular analysis. To eliminate the Type II error (failing to accept a true population model), it is crucial to meet minimum sample size criteria in a statistical data analysis process. Researchers Shaw and Ke (2005) use different ways of determining sample sizes. For instance, they use the ratio of the number of subjects to the number of variables (e.g. 5:1, 10:1, and 20:1, etc.), the ratio of the number of variables to the number of factors, or the commonalities among the measured indicators (Sakiz, 2007).

Sample size estimation is an important procedure to meet the minimum required sample size. In the current study, a 5:1 ratio was used to examine commonalities among variables. Commonality refers to correlation between an item and a factor. More specifically, it is "the portion of the variance of that variable that is accounted for by the common factors," (MacCallum, Widaman, Zhang, & Hong, 1999, p.85). The higher

commonality is desirable because it reduces the necessity of larger sample size. Moreover, larger sample size is needed, as more latent factors are included in the model. It is also important to note that higher value of p/f reduces required number of sample size.
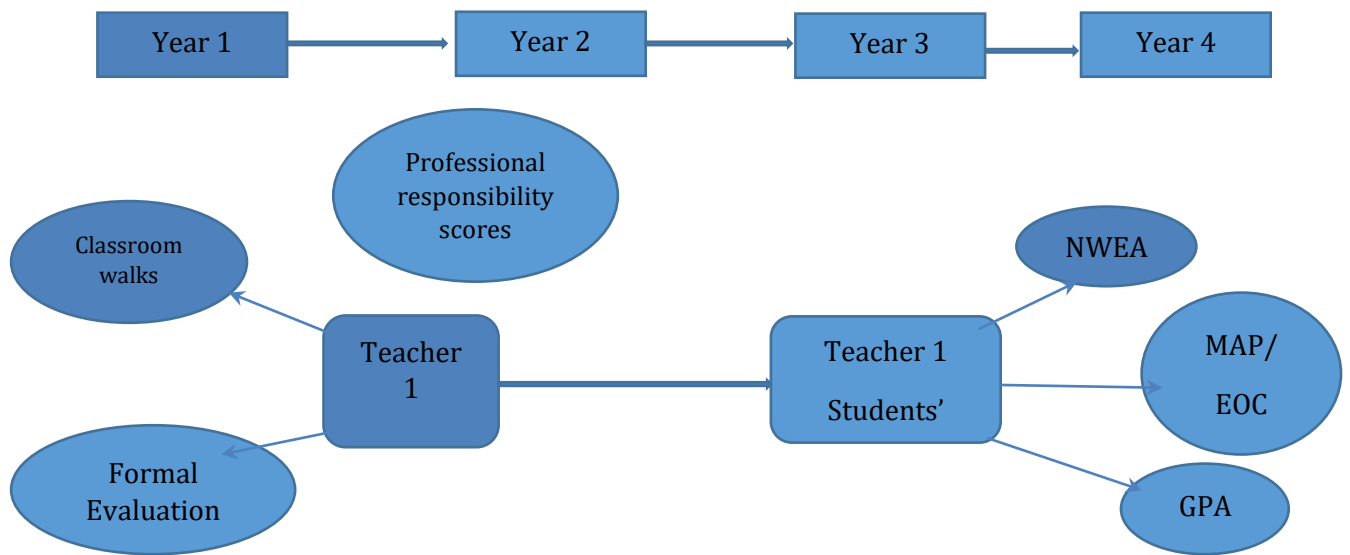
The Figure 4.1 is the Hypothesis Model of this research study.

The research study used Analysis of Moment Structures (AMOS) and created a graphic representation of the model. The hypothesis of the model is that if the teacher's evaluation score increases, then a student's standardized test scores will increase as well.

The participants selected had at least three years of experience, including students' test scores on the NWEA, the EOC and MAP, and teacher's evaluation scores model will predict the individual teacher's students' test scores and teacher evaluation scores.

Figure 4.2 below only shows year-two and year-three teacher evaluation scores and their effects on students' standardized test scores.
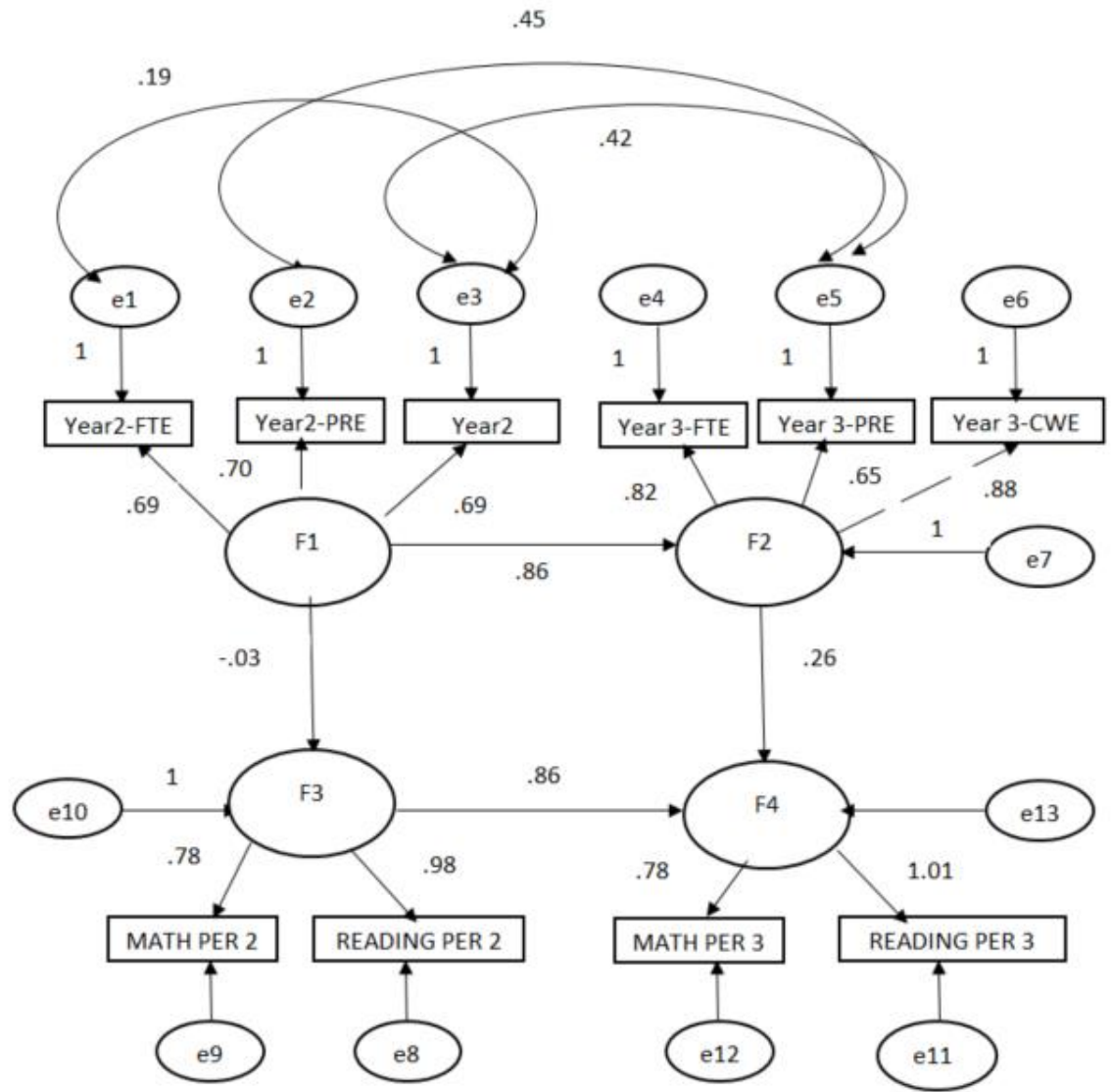
Figure 4.2: Standardized path coefficients and residual variances of the variables in the hypothesized structural model. F1: Year-Two Teacher evaluation scores; F2: Year-Three Teacher evaluation scores; F3: Year-Two Students' standardized test scores; F4: Year-Three Students' standardized test scores.

The graphic representation on Figure 4.1 and in table 4.5 indicates a significant

relation between year-two teacher evaluation scores (F1) and year-three teacher

evaluation scores (F2). The teacher evaluation scores include; FTE-Formal evaluation (60 items), CWE-Classroom-walkthrough (9 items), and PRE-Professional responsibilities evaluation (24 items). The positive direct effect of year-two (F1) evaluation scores on year-three (F3) evaluation scores was $\beta = .86$, $p < .01$. The year-two teacher evaluation scores (F1) on students' standardized math (MATH PER) and reading (READ PER) scores on year two (F1) was a negative effect ($\beta = -.03$, $p < .01$), so there is no direct and positive effect of year-two teacher evaluation scores (F1) on students' math and reading standardized test scores. The year-three (F2) teacher evaluation scores had a positive, significant direct effect ($\beta = .26$, $p < .01$) on students' math and reading standardized test scores (F4). Specifically, students' standardized test math and reading scores in year two (F3) and year four (F4) test scores had a positive positive direct effect ($\beta = .858$, $p < .001$). The second-year teacher evaluation scores (F2) had no direct effect on year-two (F3) test scores ($\beta = -.03$, $p < .01$), but students' tests scores (F4) had significant gains ($\beta = .858$, $p < .001$).

Table 4.5 Unstandardized and Standardized Path Coefficients along with Standard Errors of the Tested Models

			Estimate	S.E.	C.R.	P	β
F2	<---	F1	1.014	.282	3.592	***	.856
F3	<---	F1	-3.896	22.768	-.171	.864	-.029
F4	<---	F2	35.980	11.490	3.131	.002	.259
F4	<---	F3	1.059	.116	9.139	***	.858
Year2TFE	<---	F1	1.000				.691
Year2PRE	<---	F1	1.248	.344	3.624	***	.696
Year2CWE	<---	F1	1.030	.244	4.220	***	.686
Year3TFE	<---	F2	1.000				.818
Year3PRE	<---	F2	.879	.199	4.426	***	.648
Year3CWE	<---	F2	1.466	.246	5.960	***	.881

READPER2	<---	F3	1.000				.977
MATHPER2	<---	F3	.806	.115	7.036	***	.778
READPER3	<---	F4	1.000				1.009
MATHPER3	<---	F4	.647	.090	7.228	***	.778

Note: TFE: Teacher Formal Evaluation; PRE: Professional Responsibility Evaluation; CWE: Classroom Walk-through Evaluation; READPER: Standardize Reading Score; MATHPER: Standardize Math Score

4.6 The Structural Model of the Study

The hypothesized model of the study provided an adequate fit to the given data (χ^2 [44.10 df, N = 28] = 44.10, p < .05, CFI = 0.942, TLI= 0.906, RMSEA = 0.114 (with 90% CI lower bound = .039 and upper bound = .0176)). The fit index of the model is provided in Table 4.6

The Fit Indices

Table 4.6 The Fit Indices for the Full Model of the Study.

Model	χ^2	DF	CMIN/DF	CFI	TLI	RMSEA
Model 1 (Figure 4.2)	44.1	28	1.574	.942	.906	.114

Note. CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root-mean-square-error of approximation; ns =non-significant.

Goodness-of-fit is in the structural model. The literature recommends any multivariate analysis of the model looks for significance of the index in the fit indices (Byrne, 2001). Another research study suggests what should be included in fit indices that (a) use different assessment techniques, (b) are not sensitive to sample size, and (c) take degrees of freedom (df) into consideration (Bollen and Long, 1993). This research study used the following fit indices: Chi-square (χ 2) and CMIN (Minimum discrepancy

index), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error Approximation Index (RMSEA).

Chi-square, or CMIN, measures the difference between the sample and the restricted covariance matrix, with the assumption that the residual discrepancy between them is equal to zero. According to this index, $p > .05$ indicates a good fit.

Comparative fit index relates the hypothesized model with the independent (null) model. Research recommends that the value of CFI range from 0 to 1.00. For fit indices, the recommended value for CFI is between .95 and 1.00. In general, the value of CFI shows reliability with the values of NFI (Normed Fit Index) and IFI (Incremental Fit Index) (Byrne, 2001). For that reason, only CFI has been taken into account for the research studies.

Tucker-Lewis Index is another fit index reported in this research study. Since the number of total observed variables is equal to or fewer than 10 (Kline, 2005), it is important to report the TLI. Like CFI, the TLI value close or above .95 is treated as acceptable within large sample sizes (Hu & Bentler, 1999).

Root Mean Square Error Approximation also reports in the fit indices of this research study. According to Browne & Cudeck (1993) and Byrne (2001), RMSEA is the most effective index available to calculate the difference between the population covariance matrixes, as if it were known, and restricted model covariance matrix and estimate the potential error. According to Hu & Bentler (1999), RMSEA values

suggested < .06 as good fit, and between .08 and .10 indicates mediocre. So, this study's RMSEA values are .114, or mediocre.

4.7 Students' Tests Scores in Relation to Different Teachers' Evaluation Scores

This part of the quantitative data analysis focuses on the same group of students (90 students) within three consecutive year's teacher evaluation scores. The teacher evaluation scores cover four categories: Accomplish Skills, Developing, and Improving. The scale of 0 out of 5 was used to determine each category: Accomplish 4.7 and above, Skills between 4.25 and 4.69, Developing between 3.5 and 4.24, and Improving below 3.5.

The sample group of students chosen for this study has different teachers each year. Students' test scores converted to Z scores to have consistency between each group of tests. NWEA and EOC scores use different scales in terms of identifying students' proficiency on tests. There are two steps taken to converting all scores to Z scores: 1) K-8 students' NWEA standardized test scores were used and all were converted to z scores, and 9-12 students' EOC standardized test scores were used and all were converted to z scores; 2) All z scores were also converted to Z scores again. The statistical analysis done by SPSS to calculate descriptive statistics, Levene's Test of Equality of Error, Tests of Between–Subjects Effects, Between-Subjects Factors, Estimated Marginal Means of subjects factors, and missing data analysis.

Table 4.7 below explains descriptive statistics of longitudinal study. There are a total of 384 teacher evaluation scores, which included 74 Accomplish (A), 170 Skills (S),

and 140 Developing (D). The mean score falls in between Accomplish (A) at 56.6074

and Skills (S) at 47.3374. These scores were the average of three consecutive years of

teacher evaluations and indicate the performance of teachers; the highest level is

Accomplish (A) and lowest level is Developing (D).

Table 4.7 Descriptive Statistics

TL	Mean	Std. Deviation	N
A	56.6074	29.78152	74
D	50.6253	28.32672	140
S	47.3374	28.27230	170
Total	50.5794	28.70665	384

Table 4.8 Levene's Test of Equality of Variances explains equal variance across

samples is called homogeneity of variance. The null hypothesis was rejected based on

Levene's test. The variable needs to be used from the same sampling, so significant needs

to be greater than 0.05 to show homogeneity of variance. The Levene's test indicates that

homogeneity assumption was not violated and had a significant score of .883, greater

than 0.05, so this is good and can be used on data analysis.

Table 4.8. Levene's Test

F	df1	df2	Sig.
.125	2	381	.883

Tests the null hypothesis that the error variance
of the dependent variable is equal across groups.
a. Design: Intercept + TL,

The results in table 4.9 indicate that Corrected Model p = .080; and between subjects TL,

p = .080. Teacher level has no statistically significant influence on students' test scores

$((F\ (2,384) = 2.55, p = .08)$. So, either the most effective evaluation scores (Accomplish) or the lowest average teacher evaluation scores (Developing) had no significant effects on students' standardized test scores.

Table 4.9. Test of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	4160,827[a]	2	2080.413	2.545	.080	.013
Intercept	900266,009	1	900266.009	1101.274	.000	.743
TL	4160,827	2	2080.413	2.545	.080	.013
Error	311458,548	381	817.477			
Total	1297996,274	384				
Corrected Total	315619,375	383				

a. R Squared = .013 (Adjusted R Squared = .008)

In table 4.9 and figure 4.10, both subjects' factors shows evaluation scores of of Accomplish 4.7 and above, Skills between 4.25 and 4.69, Developing between 3.5 and 4.24, and improving below 3.5. There were no improving below 3.5 below scores. It was a total of 74 Accomplish, 170 Skills, and 140 Developing numbers of teacher evaluation scores collected for analysis. The Estimated Marginal Means in **SPSS GLM** (Figure 4.9) also explains mean response for each factor, adjusted for any other variables in the model.

Table 4.10 Between-Subjects Factors

		N
TL	A	74
	S	170
	D	140
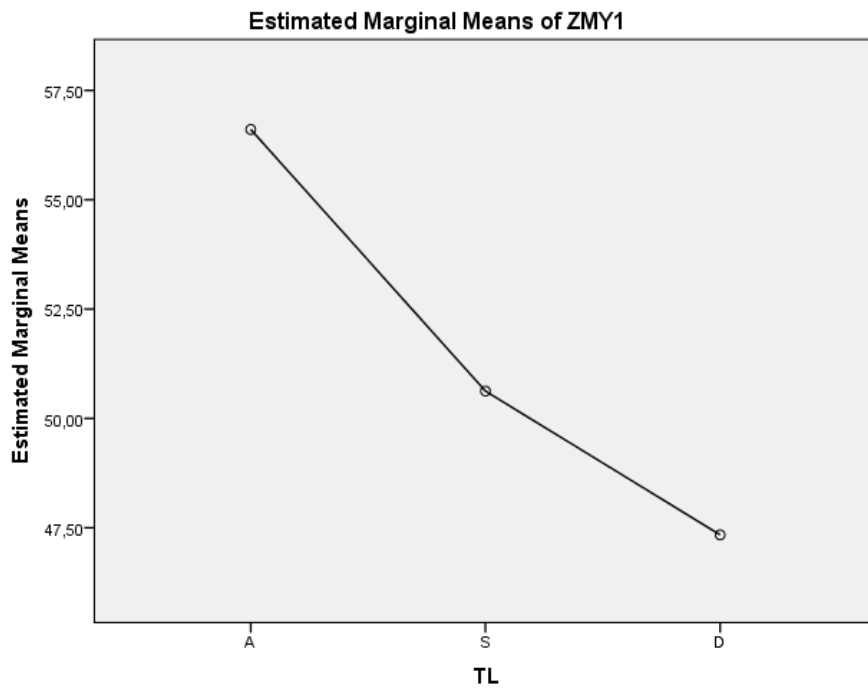
Figure 4.2 Estimated Marginal Means of subjects' factors TL

Chapter 5: Conclusions and Recommendations

5.1 Introduction

This chapter reviewed an overview of the dissertation study. The chapter started with the research questions and then continued with a summary and discussion of the research study. The findings of this present study were explained in relation to the current literature and the theoretical frameworks that guided the research study. The chapter ended with recommendations of evaluation models for future policy implementation, practice, study, and a closing statement.

The samples for this qualitative study were seven K-12 schoolteachers and six principals who worked in the GSA Charter public school district. The quantitative portion of the sample was collected from over 50 teachers' evaluation scores of data and their students' standardized test scores for a minimum of three years. Gender representation was considered in the study, including both teachers and principals with eight female and five male participants from different subject areas: English, Mathematics, Social Studies, Fine Arts, and an elementary school teacher focus on all areas of the curriculum. The experience level of the candidates interviewed included two new teachers (having less than five years teaching experience), three mid-career teachers (with teaching experience between six and 14 years), and two seasoned teachers (more than 15-years' experience) spanning all three levels—elementary, middle, and high school. The administrators' sample was comprised of elementary, middle, and high school levels in the same public-charter school district with teachers. The current literature suggested that having a diverse

participant selection is highly recommended. This research study was conducted during the 2017-2018 school year.

5.2 Research Questions

The following four questions guided the study:

1.   Research Question 1: How do principals reflect upon the CS teacher evaluation model (CSTEM) to encourage and support each teachers' growth?

2.   Research Question 2: To what degree do teachers believe the use of CSTEM will contribute to their professional development as a teacher?

3.   Research Question 3: To what degree do teachers believe the implementation of CSTEM helps them create improvement plans for their classroom practices?

4.   Research Question 4: What are the perceived advantages and disadvantages, if any, of the use of the CSTEM used at the K-12 GSA District?

5.3 Summary and Discussion of the Findings

The public school districts have begun giving more attention to the teacher evaluation models after a recent policy change on federals grants. The most recent educational policy in the 2010s, Race to the Top (RttT), encouraged public school districts to apply for federal grants based on student and teacher performance. Many of states across the U.S. have established a new approach to teacher evaluations (Attiento, Lare, & Waters, 2006). After completing numerous evaluations, the researcher

discovered a need for a new method. There is a need for a methodical approach to give constructive feedback to teachers.

5.4 Research Question 1

Research Question 1 examined: How do principals reflect upon CSTEM to encourage and support each teacher's growth? Out of 13 participants (teachers and principals), only three of the teachers and three principals indicated that CSTEM had a positive impact on teachers' professional growth. Nine of the 13 teachers and principals indicated the current teacher evaluation models are not helping individual teachers' growth. The finding of this study is aligned with current research on teacher evaluation models and effects on teacher growth. An initiative sponsored by the Bill and Melinda Gates Foundation, A Measure of Effective Teaching (MET), was devised to analyze how teachers and administrators could use teacher evaluation methods to improve their teaching skills. The MET initiative was based on two-thirds of American teachers, who had criticized the old evaluation protocol, which they believed was not giving the full picture of their classrooms (Measures of Effective Teaching (MET) Project, 2017). The author of one of the most comprehensive teachers' evaluation models updated her "Framework for Teaching Evaluation" protocols in 2011 and 2013 to align with CCSS and the MET project.

Some researchers and participants in this study believed that teacher experience with evaluation models were positive regarding their individual growth. These research studies indicated that the majority of teachers reported the teacher evaluation protocol

assisted their professional growth and improved students' academic gains (Astor, 2005; Colby, 2001; La Masa, 2005; Donovan & Bransford, 2005; Tuytens & Devos, 2009; Moss, 2015; Milanowski & Borman, 2004; Kimball et al., 2004).

The CS evaluation model has two parts, and each part is weighted equally. The first part of the CS evaluation model is based on the Danielson Framework, which has four domains: planning and preparation, instruction, classroom management, and professional attributes. The second half is based on student academic achievement. There were some studies that specifically examined the teacher evaluation models, which had a connection with the Danielson Framework. Both studies, the first year of REACH (Recognizing Educators Advancing Chicago) conducted by the University of Chicago (2013) and the public school district in the state of New Jersey conducted by Moss (2015), were based on teacher evaluation protocol with the Danielson Framework. Their results show that school leaders and teachers asserted that the teacher evaluation model supports their growth and professional development. These studies' findings and other studies indicate that the teacher evaluation models need to move toward a standards-based approach. The Framework for Teaching is the most common evaluation model in the U.S. and has been adopted as the single model, or one of several approved models, in more than 20 states. In 2011, the model was chosen by the New Jersey State Department of Education as one of the approved models for teacher evaluation (Danielson Group the Framework, n.d.). As some participants in this study, the results from the New Teacher Project (2010), and teachers in Pennsylvania asserted, the constructive feedback helped them to grow as professionals. As pointed out, finding one theme about evaluation

expectation is more about "what he/she did or didn't do." The role evaluation should not just be to evaluate teacher competency but to assist teachers' growth. As one of the participants suggested, "I believe we want our teachers to grow and would like them to, but I think we have work to do in this area regarding the potential in the evaluation tool and overall professional development plans. I am not sure we have a communicated vision for the evaluation process and purpose. I think our teachers see the tool and process as something that 'has to be done' or is 'done to them.' I believe that the public school district should talk to their teachers about the purpose, process, and goal of the evaluation process: growth. It should be clearly understood and seen that the evaluation process is a 'coach you' not a 'caught you!'" According to Stronge (2006) and Charlotte Danielson (2011), principal evaluation should be about not only evaluating teacher competency but also assisting with professional learning opportunities.

Participants of this study also indicated that CS evaluation items have not had coaching or reflective practice. Other researchers have found that teacher evaluation protocols harmed dialogue between teachers and school leaders, and risked poisoning otherwise productive working relationships among school professionals (Barth, 1990; Horng & Loen, 2010). The study's finding indicated that teacher evaluation protocol helps them to open dialogue with their supervisor. It is essential for teachers and principals to utilize the teacher evaluation model (TEM) as a tool for their professional growth. The TEM should have reflective and coaching practice. I believe teacher evaluation scores can drive a teacher's yearly target goals. As mentioned in chapter 4, teacher evaluation items should create a dialogue between teachers and principals. The

theme regarding creating a dialogue between the evaluators and evaluatees emerged as a dominant theme. To open a dialogue about teacher evaluation protocols, continued training and professional development are necessary. The CS teacher evaluation model combines teacher evaluation protocols and student standardized test scores. The evaluation scores by themselves cannot be the only professional development tool. The public-charter school district needs to evaluate scores and develop an agreement with the individual teacher for professional development opportunities. There were only a few participants who acknowledged that the current CS evaluation model supports them in growth, but the majorityindicated that it does not help, aligning with more current research.

5.5 Research Question 2

Research Question 2 examined: To what degree do teachers believe the use of CSTEM will contribute to their professional development as a teacher? Almost all of the participants, teachers, and principals, believed CSTEM is supportive of teachers' professional development. The rubric of the CS teacher evaluation was clear on the expectations of all four domains. The formal teacher evaluation has four domains, which focus on; A-Planning and Preparation, B-Instruction, C-Classroom Management, and D-Professional Attributes. As Charlotte Danielson (2011a, b) wrote, "If we want teacher evaluation systems that teachers find meaningful and from which they can learn, we must use processes that not only are rigorous, valid, and reliable but also engage teachers in those activities that promote learning, reflection on practice, and professional conversation," (p. 38). The evaluation protocol itself cannot create dialogue and

conversation; both teachers and principals' perception are the key factors. The evaluation scores can be a good source to start a conversation about teacher professional development and growth. As reflected in theme one in the findings section, "The CS teacher evaluation model offers professional development tools." Past research indicated that this is an essential aspect of feedback as a powerful resource to enhancing teachers' instructional skills (Danielson and McGreal, 2000; Marzano, 2008; Jeralds, 2012). Also, there was a different perspective of feedback in regards to the teacher's experience level. According to Bush (2017), teacher perceptions about new evaluation model implementations, shows that new and mid-career teachers were more open to feedback as support finding of this research. I believe that ongoing professional development and feedback are the fuel for teachers' growth. Marzano's (2008) enhanced teaching suggests that there should be ongoing feedback to teachers regarding their instructional strategies. Also, Icel (2018) indicated that professional development is the crucial aspect of the implementation of the new policy.

Participants of this study indicated in a common theme, "The CS teacher evaluation model gives clear guidance on what a teacher can improve." Giving clear guidance or specifically targeted feedback can improve a teacher's skills. This finding also aligns with current literature. Much of the research indicates that the crucial role begins with specific feedback. The entire pool of teacher participants noted that CSTEM breaks down the practice into specifics. I can then see what needs more work for improvement. I believe that like the constructivist approach, giving a small piece of the area for improvement, along with feedback, facilitates the teacher's growth. The critical

step comes after giving feedback and then providing enough time and resources so that the teacher will connect them and develop a solution for improvement. Danielson (2012), McGreal (2000) & Jeralds (2012), and Darling-Hammond (2014) noted that teachers are desperately looking for constructive feedback to improve their teaching skills and practices. Again, research and this study supports that teacher training and development appear to progress the teaching skills and encourage the pedagogical development of teachers (Mills and Hyle, 1999; Simões, 2000; Huber, 2002). The CS teacher evaluation model should be studied in groups at the beginning of the school year. The current practice at GSA public-charter district is that the evaluation rubrics are shared with the staff at the beginning of the year. There was no training session for new teachers. One of the participants indicated, "Since I take the model as a guide, it has to be taken seriously from the beginning of the year." The GSA district has a summer teacher institute every year. There should be time solely allocated for the CS teacher evaluation protocols, and specific time periods must be dedicated to presenting the model and how the model should be used to guide teaching.

In summary, all participants of this study and the current research agree that feedback creates an open a dialogue between evaluators and evaluatees. The open dialogue is the first step of the teacher's professional development opportunities. A mind shift of the teacher evaluation being implemented as a tool for assisting teachers, not a means for penalizing, is prudent. The findings of this study were firm with Acheson & Gall, 2003; Beers, 2006; Blasé & Blasé, 2001; Irvin and colleagues, 2007; Moss, 2015. All of these researchers also noted that feedback must be given in a non-threatening

setting and an atmosphere. To create an atmosphere of trust during the post-evaluation meeting is a critical aspect of open dialogue after teacher evaluations.

5.6 Research Question 3

Research Question 3 examined: To what degree do teachers believe the implementation of CSTEM helps them create improvement plans for their classroom practices? All participants had a positive attitude toward CSTEM. The CS evaluation model is detailed in regards to the teaching and instruction section of the evaluation. The domain of instruction, which details targeted goals of teacher instruction, combines 24 items of evaluation. This domain contains the most items compared to the other domains. As one subject said, "The specific part of the CS evaluation model that has helped me grow most is the specific breakdown of all aspects being evaluated. Seeing these rubrics and reviewing them helped me to focus on some of the most important areas of teaching." The findings of this research question and research about the role of rubrics for teacher evaluation support one another. The research on standards-based and well-designed teacher-evaluation protocols has positive and continuous effects on individual teacher growth (Papay, 2012; Taylor & Tyler, 2012; Tucker & Stronge, 2005; Moss, 2015). They improve classroom practice and align with teacher instructional skills and professional development. As much past research points out, there is a correlation in the quality of teaching in the classroom and students' academic growth (Ball&Forzani, 2009; Gore 2001; Grossman & McDonald, 2008; Rink 2006).

Since technology changes and improves every day, this should be reflected in the classroom practice as an area of ongoing improvement. Not only does technology affect instruction, but the group of students is always changing. Therefore classroom practice should as well. The instruction domain also includes how technology is used in the classroom. Participants in the current study responded very positively to the teaching and instruction part of CSTEM, and they give the impression that the standards were reasonable and credible, also reflecting good teaching along with clear expectations. As one of the subjects said, "It is difficult to choose one part over another one since the whole model was extensive and helpful. If I had to choose a part, then I would pick the instruction part as helpful in giving appropriate guidance for improved instruction." Even though some participants did not see that CSTEM helped them grow as a teacher, they all agreed the teaching and instruction domains gave them a guide to change and improve their practice. I believe that is because the rubric of CS teacher evaluation is clear on the expectations for teaching and instruction protocols. All participants of this current study indicated the clear expectation of instruction items. A participant of the study commented, "The CS model supports the expectations of the administrators regarding my teaching practices by specifically understanding the various details required in different areas. They were very clear and detailed so that teachers know what the administrators are observing when they walk into the classroom." The participant's comment also shows that knowing what is being observed gives them more confidence regarding evaluations and evaluators. This confidence can also help to create a positive atmosphere and open dialogue avenues for both sides. The teachers saw CSTEM not only helping them identify

the areas in need of change but also areas for improvements to their classroom teaching practices. As is discussed during the data analysis and finding section, the clear rubric dissolves the challenge of a teacher evaluation rating issue. According to Castetter (1996) and Strong (1991, 1997) evaluation ratings sometimes create a trust issue between teachers and school leaders as well. Much of the research shows this to be an issue with the evaluation rating. This rating issue has a potential to block open dialogue between teachers and administrators. The research indicated the challenge of consistency in ratings as a problem in several studies (Harris et al., 2014; Pogodzinski et al., 2015; Kimball & Milanowski, 2009). The current research noted that improving teacher classroom practice has a crucial role in students' academic growth. The finding of this study contrasted with Danielson and McGreal (2000). Their study showed that teachers felt targeted or victimized by evaluators trying to catch the teachers in a negative light. It is important for teachers to look at the teacher evaluation protocols as a tool for them to improve their classroom teaching practices.

5.7 Research Question 4

Research Question 4 examined: What are the perceived advantages and disadvantages, if any, of the use of CSTEM at the K-12 GSA District? The weaknesses of CSTEM are many: There are too many items, making it unrealistic to incorporate every strategy evaluated; the same model is applied to different subjects, which are taught differently; the number of evaluation items and time to cover in one single classroom period. These disadvantages have all been on the radar of other researchers. Moss (2015) did a study on the Danielson teacher evaluation model, which demonstrated that it was

tackling too many rubric items for evaluators in a single classroom period and suggested "evaluation should be based on only a few of the attributes or that the non-applicable rating should be used more often." Some of the principals suggested time issues, especially spending appropriate amounts of time on each item. Even the most highly trained and rigorously certified school evaluators can fail to conduct meaningful observations if they do not have enough time. The time management findings were in contrast with Derrington & Campbell (2015) and Range and colleagues (2011) study. Their study explained that principals were distressed in not finding enough time to communicate to provide feedback and having to make more frequent formal summative evaluations in the classroom to be thorough.

The finding of this study and some research agreed upon non-core subject evaluations, poor evaluation instruments, and lack of time for effective evaluation systems (Donaldson & Donaldson, 2012; Donaldson, 2009; Horng & Loeb, 2010; Toch & Rothman, 2008; Donaldson, 2009). I believe that the number of rubric items and poor evaluation instruments for individual courses is a need for improvement area in the CSTEM. Five out of 13 participants in this study especially noted the need for an improved CSTEM for non-core subject areas. A study on physical education teacher perceptions of teacher evaluation findings indicated that teacher evaluation systems were not tailored toward non-core subjects (Norris, van der Mars, Kulinna, Amrein-Beardsley, Kwon, & Hodges, 2017).

After the NCLB Act, local school districts began to receive annual school report cards from states' education departments. Local school districts' annual report cards with low test scores caused districts to find innovative ways to mask their problems. The NCLB Act required students to be proficient in both math and reading content areas. Recently, more than two-thirds of the states made substantial changes to teacher evaluations in local school districts. Incentives motivated the main driving force for this dramatic change in teacher evaluation through federal programs, NCLB waivers, Teacher Incentive Fund, and RttT. Changing teacher evaluation models to include students' performance was the key in applying for grants made available by these federal programs for the states (Bornfreund, 2013). The NCLB act also changed science classes offered in secondary schools (Icel, 2018). The issue of evaluation protocol for special subjects is not new. Teacher evaluations indicated that traditional teacher evaluation models are based on core subjects (Darling-Hammond, Wise, & Klein, 1999; Loup, Garland, Ellet, & Rugutt, 1996). This study's findings and current literature strongly encourage creating or adjusting current core subject-focused evaluation models to accommodate for special subject evaluation protocols. A participant of the study suggested, "One of the improvement areas I would implement is developing alternative evaluation rubrics for different areas/subject matters, such as Physical Education, Special Education, Music, Computers." It is obvious that there is a need for a new teacher evaluation protocol for special subject teachers.

Some teachers give a more specific example such as bellwork (warm-up) expectations to all subjects. The bellwork is one of the rubric items of the instruction

domain. This activity cannot consistently be expected in all lessons and content areas. Some other teachers refer to note taking or other writing strategies as one of the instruction rubric items. This kind of activity is not applicable to physically engaged subjects as well. Special Education teachers raised their concerns and said, "We cannot practically include writing and note taking in all lessons." These perceptions follow with research done by Milanowski and Heneman (2001). Their research indicated when evaluatees did not trust their evaluator's competence, they feared receiving an undeserved, negative assessment. I believe that trust between teachers and principals is an essential aspect to open dialogue. Six out of seven teacher participants agreed that the evaluators had the necessary training and practice to evaluate them accurately and fairly. Milanowski and Heneman's (2001) study indicates that trusting their evaluator has the experience to evaluate is crucial. In some interviews there were two weaknesses referenced: (a) the need for evaluators to be trained with particular subject-content knowledge, and (b) the time demands of evaluators to focus on some items. The simple solution could be that a district can utilize their current experienced teachers' pool and train them as evaluators.

The finding of this study indicated the strength of the CS evaluation model to be comprehensive and can be used as a guide in setting teacher expectations. All of the teachers strongly like the scoring and rubrics because they are detailed and precise. The Danielson Framework of Teaching and the CS teacher evaluation require evaluators to conduct multiple observations (minimum of two each year) and pre- and post-conferences with teachers each year. The participant's responses emerged that the CS

teacher evaluation is comprehensive and incorporates valued instructional strategies that match with the Missouri teaching standards. Some teachers and principals praised the evaluation items for being standards-based. The interview participants' reflection and research regarding standards-based teacher evaluation has a positive impact on students' growth (Danielson & McGreal, 2000; Davis, Pool, & Mits-Cash, 2000; Kimball, 2002; Milanowski & Heneman, 2001; Milansowski, 2004, 2011; Porter, 2002; Taylor & Tyler, 2012). The strongest aspect of CSTEM is that the bar is set at the highest expectation of instruction. Every evaluation item in the model is well defined; it gives clear guidance to the teacher on how to improve their teaching.

More research is still being conducted on standards-based teacher evaluation practices and student achievement: The classroom management domain is the core of quality teaching, and more research will help teachers of all subject areas reduce any potential classroom management issues indirectly. Classroom management is a common issue in urban schools. The instruction domain focuses on some of the vital issues of teaching, such as planning, objectives, motivating students, instructional strategies, differentiation, cross-curricular planning, and assessment. Improving any of these areas will make the teacher a better one. The CS teacher evaluation is a combination of three types of evaluations: The Formal Evaluation, Classroom-Walkthrough Evaluation, and Professional Responsibilities Evaluation Some of the teachers indicated that the classroom-walkthroughs evaluation has fewer rubric items and helps evaluators with more time to focuses on items. Teachers saw this as a critical evaluation tool for their

growth. Most of the participants perceived the CS teacher evaluation model as more supportive than critical.

The teachers at GSA charter-public school district have a comprehensive teacher evaluation model. Most of the teachers feel like CSTEM has some components of the whole teacher approach. There are some specific target items on teacher formal evaluation domains, including planning and preparation, such as classroom displays of student work (projects, presentation, paper), and classroom rules and/or procedures. An instruction, such as the teacher is clearly stating the objective(s) and essential question(s) of the lesson, Data-Driven instruction, and assessments, is used to address individual student needs and instructional goals. The teacher then has the opportunity to practice and reflect on standardized testing. The specific interview questions regarding test preparation and evaluation are light with this study's quantitative finding. The question was, "Do you feel that the half of the CS teacher evaluation model based on your student academic achievement had a positive influence on your test prep planning? Why or why not?" All of the teacher participants did not believe the CS teacher evaluation model had a positive influence on their test prep planning. The quantitative data analysis explores the relationship between teacher evaluation scores and students' academic achievement. The researcher used the GSA district teacher evaluation scores and student tests NWEA, MAP, and EOC scores and included GPAs. The teachers' previous years' evaluation scores and students' test scores were used to create a nonlinear regression model to predict the upcoming year's scores for both teachers and students. Around 50 teachers and their students' data were collected and analyzed. The data analysis showed no

significant findings between year-one and year-two teachers' evaluation scores and students' academic growth. Incidentally, the only significant finding was between year-two and year-three teachers' evaluation scores and students' academic gains. Overall, there were no significant relationships between teachers' evaluation scores and students' academic achievement. This finding aligned with some of the research studies, which note that there is no significant relationship as well. Student learning requires comprehensive action by all stakeholders. Some of the targeted items such as teachers' positive tone in class and hanging student projects on classroom walls can help to create a positive learning environment in districts. Some teachers and principals liked that part of the Professional Responsibilities evaluation. This particular evaluation focuses on a broad span of responsibilities inside and outside the classroom environment. For example, outside the classroom, evaluating pieces such as updating database assignments and grades on a regular basis, communication with parents, attending meetings, completing weekly lesson plans, using available technology resources, making a home visit, and encouraging coworkers are all obtainable goals. These are some of the significant items from the Professional Responsibilities evaluation, which contribute to the individual schools and GSA district continuously growing professionally, and showing professionalism to all stakeholders.

5.8 Recommendations for Teacher Evaluation Model

1) Support and training can funnel the teacher's motivation.

Reform initiatives or the implementation of new policies have the potential to fail without support and training. Icel's (2018) study on STEM policy implementation findings indicated, "Professional development such as summer workshops for preparing science teachers is crucial," (page 12). During the new implementation of the teacher evaluation model, staff motivation and providing staff with resources and training can fuel up the successful implementation.

The role of support is sometimes overlooked. Icel's (2018) findings indicate, "The support is also essential to continuing motivation during the implementation process," (page 12). Public schools have varied teacher experience levels. Therefore, each teacher responds to the new teacher evaluation model differently. The past research on teachers' beliefs and relation with new implementation shows who believed research should seek to enhance our understanding of the relationships between teacher beliefs and education reform (Tobin, Tippins, and Gallard, 1994).

2)   Perception of Evaluators and evaluatees on teacher evaluation model.

It is essential to understand different perceptions and the range of variety in professionalism among teachers and principals. Research demonstrates that when teacher evaluation models are supported by the teachers, they are more effective in improving teaching practices and ultimately student learning (Donovan & Bransford, 2005; Mielke & Frontier, 2012). Eliminating disconnects during the implementation of the new teacher evaluation model through continued support or specialized training is necessary. As Icel (2018) argued, to improve the success of implementation and integration, staff

motivation, administrative support, and professional development are the most influential elements of the process (p.12).

5.9 Recommendations for Further Research

The role of teacher evaluation scores on individual teacher and student academic growth were discussed in this study. Having a discussion and researching another evaluation system is essential. This will also help to discover good teaching practices, which can create a culture of learning and improve teaching practices and student outcomes. This study's findings and current literature also support each other.

Below some areas of improvement for further study:

1.   The number of participating teachers and principals from which data were collected limited the data collected for this study. It is necessary to increase the number of sample participants' pool of teachers and principals from other Concept Managed schools in the Midwest.

2.   A study on utilizing teacher evaluation scores to predict each teacher's evaluation scores and their students' academic gains for the upcoming year, respectively. This study will do a pilot study (focus group) with 10 teachers. The evaluation scores of focus group teachers and their students' test scores (MAP/EOC/NWEA and GPA) will evaluate and create a specific professional development plan through the year with the focus group.

3.   The teacher interview pool can be increased so more teachers represent each school level (K-5, 6-8, and 9-12 grade levels represented with at least five teachers).

4.   The urban charter school faces mobility not only with their student body but also their staff. Having the same evaluators might increase the reliability and validity of the evaluation scores.

5.   Even though the entire teacher participant pool in this present study agreed on their evaluator's competency in the use of CSTEM, adequate training of evaluators and evaluatees would increase the success of teacher evaluation.

6.   This study has the potential to help develop a model for school leaders and teachers to predict teacher evaluation scores. The purpose of this predictive score is that it would create meaningful individual teacher growth or improvement plans each year. This research model will allow school leaders to facilitate growth in teacher performance and student achievement by compression of predicted scores and actual scores.

5.10 Recommendations for Policy Implementation

The comprehensive evaluation systems, such as CSTEM, supported in mandated policy, indicates both a national and state commitment to evaluation practices as a means to improve teachers in the schools. Recommendations for school policy include:

1.   Many Local Educational Agencies are moving along with new teacher evaluation protocols. The success of the new model is dependent on continuing communication and feedback at all levels.

2.   The useful teacher evaluation model can help to identify poor teaching practices. The results of the evaluation score can result in targeted policies of a new teacher's and struggling teachers' development programs.

3.   The evaluation scores from the past can be used in critical decisions about which teachers require more or less attention. Since time-management is a big issue for evaluators, this can eliminate some of the evaluations each year, and could be better used on teachers in need of more improvement.

4.   Many states have already adopted student academic growth as a factor. An analysis of teacher evaluation scores and their students' academic gains can improve teaching and learning standards in the state.

5.11 Recommendations for Practice

1.   To continue to have trust and confidence in evaluators, using expert teachers, especially in specialized subject areas. Trained, expert teachers in special subjects' evaluation would help the non-core subject teachers receive more meaningful feedback. This approach would put value in the importance of a professional community in schools.

2.   Encouraging the most current training tools for evaluators and evaluatees in classroom observation and evaluation procedure. Incorrect classroom evaluations can create mistrust between two sides.

3.   Teachers have criticized in-service professional development days. As research indicates, in-service days have lacked clear focus and purpose. By looking at evaluation

scores and feedback of teachers on these dates, it could be considered an agenda item for in-service days.

5.12 Closing Statements

A comprehensive teacher evaluation model is vital for improving the individual performance of teachers and creating an atmosphere of learning for K-12 school districts. The most current teacher evaluation model, like CSTEM, is a tool to provide all stakeholders with more detailed information about the individual teacher's classroom practice and their students' academic achievement. Incentives motivated the main driving force for this dramatic change in teacher evaluation through federal programs, NCLB waivers, the Teacher Incentive Fund, and RttT. Changing teacher evaluation models to include students' performance was the key in applying for grants made available by these federal programs for the states (Bornfreund, 2013). The findings of this study were evident in the responses of the seven teachers and six school principals, who noted to come out with more meaningful evaluation results, create an open dialogue after each evaluation, provide valuable meaningful feedback, and let the teachers come on board for constructive conversations about their practice to guide improvements in classroom instructional practices, professional growth, and student growth. It is essential that the teachers feel positive about the evaluation model. This positive, trust-based attitude about the evaluation model could open the door to more meaningful conversations about instructional skills and teaching practices that help to promote yearly improvement plans, and also increase the opportunity for more engagement in their professional development plan. The trust of confidence in evaluators is vital to continuous dialogue. As findings of

this present study explained, CSTEM is well designed for core subjects: math, reading, science, and social studies. The same model cannot apply to different subjects, which are taught differently. It will be essential to develop alternative evaluation rubrics for different areas/subject matters, such as Physical Education (PE), Special Education (SE), Music, Computer, etc.

Targeted or needs-based professional development plans are needed for teachers that could have more potential in an area of improvement. Instead of making a one-person, decision both teacher and principal can work on the details of choice such as taking classes, going to different workshops, or other professional development opportunities. The teacher and principal interviews in this study suggested that the role of the teacher evaluation model should be more towards individual teacher growth, coaching practice, and creating a dialogue between evaluators and evaluatees. The CS evaluation model suggested that pre-and post-meetings before and after each evaluation are needed. I believe this is also an underlying issue regarding the principal's time-management and not finding the time for pre- and post- meetings. As past research indicated, principals were distressed in not finding enough time to communicate and make more frequent formal summative evaluations in the classroom (Derrington & Campbell, 2015; Lavigne & Chamberlain, 2016; Range, Scherz, Holt, & Young, 2011).

The teacher and principal of this present study mentioned that instruction is the most critical domain of the CS evaluation model. Past research also supports the role of instruction in teacher evaluation. Standards-based teacher evaluation models work toward

practices and improved instruction along with students' academics gains (Porter, 2002; Taylor & Tyler, 2012). The delivery of instruction is the core of quality teaching, and it will help teachers of all subject areas to reduce any potential classroom management issues directly. This part focuses on some of the vital issues of teaching, such as planning, objectives, motivating students, instructional strategies, differentiation, cross-curricular planning, and assessment. Improving any of these areas will make the teacher better.

A model like CSTEM has the potential to improve as a formative teacher growth protocol. The CS teacher evaluation model is a combination of three specific standards-based rubrics items: Formal evaluation, Classroom-walkthrough, and Professional Responsibilities and requires multiple ratings at least two times each year by two different evaluators. It is imperative not to evaluate a teacher with summative evaluation protocols. Since the summative evaluation models are based on a single standard, this approach also might send the wrong message to the teachers that the evaluation's purpose is not growth but tenure.

The CS teacher evaluation model has a potential boost in teacher classroom practices and skills. However, there are some areas of the evaluation that still need improvement, such as individual teacher perception. The issue, such as not having post-conference or open dialogue, is not necessarily with the model but more about the time-management of principals. The school districts should make a priority of creating more time for principals, which will develop a school culture of trust that supports teachers to be aware of their needs and provide opportunities for improvements. The mind shift on

struggling teachers to need an improvement plan can make huge impacts in education

(Mielke & Frontier, 2012). This mind shift will help early career changes in the teaching

field and teacher shortage issues. A teacher evaluation protocol must be liked by the

teacher to improve their skills during their teaching career. The ownership by the teacher

will open a positive environment in schools that increases teaching classroom practice

and the ultimate goal of student learning.

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Appendix A: CS Formal Evaluation Rubric

Teacher Formal Evaluation Rubric

A - PLANNING AND PREPARATION (10%)

A.1 - Class starts on time. (1%)

5 - Instructional lesson and student focus begins immediately at the bell with no lost instructional time.

4 - Instructional lesson and student focus begins within two minutes of the bell.

3 - Instructional lesson and student focus begins within three minutes of the bell.

2 - Instructional lesson and student focus begins within five minutes of the bell.

1 - Instructional lesson and student focus takes longer than five minutes to attain.

A.2 - Classroom is neat, organized and free of physical hazards that threaten safety. (1%)

5 - Uses room arrangement and displays to create a total environment for learning and is free of any potential hazards.

4 - Organizes classroom furniture, materials, and displays to support lesson goals and is mostly free of any potential hazards

3 - Organizes furniture and materials but with few displays or only somewhat clear of potential hazards / Shows some organization but
the classroom is not very neat and not clear of potential hazards

2 - Has conventional furniture arrangement, few displays, hard-to-access materials, and potential hazards outweigh the organization.

1 - Classroom is sloppy, cold, and uninviting. Is an "accident waiting to happen."

A.3 - Classroom rules and/or procedures are posted. (1%)

5 - Are easily visible, colorful, and created by the teacher or students themselves.

4 - Are large and visible but are standardized, store bought variety.

3 - Are small, e.g. A4 size, but visible.

2 - Are not visible or accessible to most students.

1 - Are not posted at all.

A.4 - Class progress charts/records/student recognitions are visibly maintained with student confidentiality. (1%)

5 - Are easily visible and show student recognition.

4 - Are somewhat visible and show student recognition.

3 - Are partially visible or small and not intended for student recognition.

2 - Are visible but small and/or not current and updated.

1 - Charts are not posted.

A.5 - Classroom displays student work (projects, papers, presentations, etc). (1%)

5 - Student work is abundant, posted with commentary, and is used as motivation.

4 - Student work is posted to celebrate their progress.

3 - Only the best work is posted as an example for others.

2 - Only a few samples of the best work is posted.

1 - No student work is posted.

A.6 - Student desks are effectively arranged to engage all students. (1%)

5 - Arrangement reveals clear forethought according to the lesson at hand.

4 - Arrangement is appropriate for the lesson, but not conducive for the students or traffic.

3 - Arrangement is neat but without regard to the lesson.

2 - Arrangement is somewhat disorganized and inconsistent.

1 - Arrangement or purpose is not evident.

A.7 - The teacher prepares the instructional supplies and equipment in advance. (1%)

5 - Teacher is prepared and organized.

4 - Teacher is organized, but some additional preparation occurs.

3 - Teacher is mostly organized, but there are some interruptions.

2 - Teacher is not organized and frequently has to stop the flow of the lesson.

1 - Teacher is disorganized and the flow of the lesson is disrupted.

A.8 - The class schedule (goals, activities, assessment, etc.) is clearly presented in writing visible to students. (1%)

5 - The class schedule is written and is clearly visible to all students.

4 - The class schedule is written, but not clearly visible to all students.

3 - The class schedule is not thoroughly written or is confusing.

2 - The class schedule is evident, but not put in writing.

1 - No class schedule is posted, presented, or evident.

B - INSTRUCTION (50%)

B.1 - The teacher uses warm up activity (bell work, bell ringer, anticipatory set, etc). (1%)

5 - Is given in a timely fashion and is tied to the day's lesson.

4 - Is timely but not tied to yearly plans.

3 - Is appropriate but too much time is spent on it.

2 - Is neither appropriate or timely.

1 - There is no bellwork.

B.2 - The teacher links prior lesson(s) to current one through prior student knowledge. (1%)

5 - Strongly links and ties through prior student knowledge the previous lesson to the day's lesson thoroughly.

4 - Appropriately links to the previous lesson using prior student knowledge

3 - Briefly mentions the previous lesson but with a average connection to prior student knowledge.

2 - Mentions the previous lesson but with a weak connection to prior student knowledge

1 - No mention of a previous lesson is made.

B.3 - The teacher clearly states the objective(s) and/or essential question(s) of the lesson. (2%)

5 - Objectives and essential questions are not only presented orally but posted in the classrooms as well and referenced throughout the lesson

4 - Objectives and essential questions are not only presented orally but posted in the classrooms as well, but not referenced throughout.

3 - Objectives and essential questions are mentioned, but not until well into the class period.

2 - Objectives and essential questions are evident, but are not referenced orally or do not match the lesson.

1 - Objectives and/or essential questions are not presented or mentioned at all.

B.4 - The teacher stimulates thought and interest in the topics (real world connections). (2%)

5 - Includes highly effective real-world connections to engage students and thought.

4 - Includes effective real-world connections to engage students and thought.

3 - Includes elements of real-world connections to varying effectiveness.

2 - Includes limited real-world connections with limited success.

1 - Includes ineffective or inadequate real-world connections.

B.***5 - The teacher includes the instructional strategy of collaborative learning (cooperative, small group, independent)(1%)***

5 - Includes highly effective collaborative learning strategies and assessments to engage students.

4 - Includes effective collaborative learning strategies and assessments to encourage learning.

3 - Includes elements of collaborative learning strategies and assessments to varying effectiveness.

2 - Includes limited collaborative learning strategies and assessments with limited success.

1 - Includes ineffective collaborative learning strategies and assessments.

B.6 - The teacher includes the instructional strategy of project-based or inquiry-based learning or other relevant strategies. (1%)

5 - Includes highly effective project-based or inquiry-based learning strategies or other relevant strategies to engage students.

4 - Includes effective project-based or inquiry-based learning strategies or other relevant strategies to encourage learning.

3 - Includes elements of project-based or inquiry-based learning strategies or other relevant strategies to varying effectiveness.

2 - Includes limited project-based or inquiry-based learning strategies or other relevant strategies with limited success.

1 - Includes ineffective project-based or inquiry-based learning strategies or other relevant strategies.

B.7 - The teacher includes multiple intelligence in their instructional strategy. (1%)

5 - Includes highly effective multiple intelligence strategies and materials to engage students.

4 - Includes effective multiple intelligence strategies and materials to encourage learning.

3 - Includes elements of multiple intelligence strategies and materials to engage students with varying effectiveness.

2 - Includes limited multiple intelligence strategies and materials with limited success.

1 - Includes ineffective multiple intelligence strategies and materials.

B.8 - Data-driven instruction and assessment is used to address individual student needs and instructional goals (1%)

5 - Uses highly effective data-driven instruction and assessment to meet student needs and goals

4 - Uses effective data-driven instruction and assessment to meet student needs and goals.

3 - Uses elements of data-driven instruction and assessment to meet student needs and goals with varying effectiveness.

2 - Uses elements of data-driven instruction and assessment with limited success.

1 - Uses ineffective data-driven instruction and assessment to meet student needs and goals.

B.9 - The teacher includes technology resources in their instructional strategy and delivery. (1%)

5 - Uses highly effective technology resources to effectively enhance their instruction.

4 - Uses effective technology resources to enhance their instruction.

3 - Uses elements of technology resources to enhance instruction with varying effectiveness.

2 - Uses elements of technology resources with limited success or enhancement.

1 - Uses ineffective technology resources or not used at all.

B.10 - The teacher involves students through open-ended questioning to encourage higher-level thinking and promote elaboration and assessment. (2%)

5 - Models and uses open-ended questioning and a range of techniques to effectively stimulate higher-level thinking.

4 - Models and uses open-ended questioning and a range of techniques somewhat effectively to stimulate higher-level thinking.

3 - Models and uses open-ended questioning and some techniques with limited ability to stimulate higher-level thinking.

2 - Uses little open-ended questioning and strategies and/or is ineffective to stimulate higher-level thinking.

1 - Does not elaborate with any open-ended questioning techniques. Interaction and elaboration are nearly absent.

B.***11 - The teacher explains directly and thoroughly with appropriate flow and sequence. (2%)***

5 - Explains material very clearly with effective flow and sequence.

4 - Explains material clearly with acceptable flow and sequence

3 - Explains material somewhat clearly with some flow and sequence.

2 - Explains material rarely with intermittent flow and sequence.

1 - Explanation is not direct and thorough and lacks flow and sequence.

B.12 - The teacher provides an opportunity to practice and reflect on standardized testing. (2%)

5 - Instruction models effective assessment and test-taking skills with student discourse.

4 - Instruction adequately models effective assessment and test-taking skills with student discourse.

3 - Instruction somewhat models effective assessment and test-taking skills with student discourse.

2 - Instruction weakly models effective assessment and test-taking skills. Student discourse is not included.

1 - No modeling or student discourse is present.

B.13 - The teacher provides differentiated instruction as appropriate. (2%)

5 - Designs lessons that address all learning styles, needs, and interests, especially special needs students.

4 - Designs lessons that target diverse learning styles, needs, and interests.

3 - Designs lessons that accommodate a diverse group without forethought.

2 - Designs lessons that only address the "middle" of the class.

1 - Designs lessons that do not reflect planning or understanding of the group.

B.14 - The teacher's instruction includes efficient note-taking or other writing strategies. (1%)

5 - Lesson pace emphasizes necessary time for note-taking and efficient writing strategies.

4 - Lesson pace has some time built into the lesson for note-taking and other writing strategies.

3 - Lesson pace leaves space for note-taking and other student writing but is imbalanced.

2 - Lesson pace allows brief instances for student writing strategies between instruction.

1 - Does not allow any time for note-taking or other student writing strategies.

B.15 - The teacher uses a variety of diagnostic evaluation and assessment techniques (1%)

5 - Consistently and effectively gauges students' understanding during instruction and learning.

4 - Frequently and effectively gauges students' understanding during instruction and learning.

3 - Adequately gauges students' understanding during instruction and learning.

2 - Ineffectively gauges students' understanding during instruction and learning.

1 - Does not gauge students' understanding during instruction and learning.

B.16 - The teacher uses a variety of evaluation techniques (formative, summative). (1%)

5 - Uses a variety of assessments to continually monitor students' learning.

4 - Uses a number of assessments to monitor students' learning.

3 - Uses some assessments to monitor students' learning.

2 - Uses a limited number of assessments to monitor students' learning.

1 - Does not show any clear assessment techniques.

B.17 - The teacher observes and provides feedback to students in independent or collaborative work settings. (1%)

5 - The teacher is constantly providing meaningful feedback to students in independent or collaborative work settings.

4 - The teacher frequently provides feedback to students in independent or collaborative work settings.

3 - The teacher provides some feedback to students in independent or collaborative work settings.

2 - The teacher provides inadequate or non-meaningful feedback to students in independent or collaborative work settings.

1 - The teacher provides little or no meaningful feedback to students in independent or collaborative work settings.

B.18 - The teacher exhibits accurate knowledge of subject area and infuses research-based information into practice.(1%)

5 - Demonstrates expert content knowledge and infuses research-based information into practice.

4 - Demonstrates good content knowledge and infuses research-based information into practice.

3 - Demonstrates average content knowledge and infuses research-based information into practice.

2 - Demonstrates limited content knowledge and infuses research-based information into practice.

1 - Does not have research-based content knowledge and does not infuse research-based information into practice.

B.19 - The teacher assigns homework orally and in writing that reflects the lessons learned. (1%)

5 - Clearly assigns relevant homework that reflects the lesson both orally and in written form (on presentation, homework board, etc.)

4 - Assigns homework in writing and verbally, but homework does not reflect the lesson concretely.

3 - Assigns homework in writing with no verbal mention or presentation.

2 - Assigns homework hurriedly at the end of the lesson/period. No presentation is made.

1 - Does not assign homework at all.

B.20 - The lesson observed aligns with weekly/daily lessons outlined in ConceptSIS. (1%)

5 - Observed lesson is significantly aligned with the weekly lesson and standards outlined in ConceptSIS.

4 - Observed lesson is well-aligned with the weekly lesson plan and standards outlined in ConceptSIS.

3 - Observed lesson is somewhat aligned with the weekly lesson plan and standards outlined in ConceptSIS.

2 - Observed lesson is not aligned with the weekly lesson plan and standards outlined in ConceptSIS.

1 - Does not utilize ConceptSIS or lesson cannot be found in ConceptSIS weekly plans.

B.21 - The teacher allows time for concluding (closing remarks, questioning, homework, upcoming activities). (2%)

5 - Allows time for concluding and summarizes the lesson and connects it to other material (upcoming work, real-life situations).

4 - Allows time for concluding and asks students to think about what they learned .

3 - Allows time for concluding and sums up what students should have learned.

2 - Does not allow enough time for concluding and rushes to close the lesson.

1 - Bell dismisses class or period ends without any summary.

B.22 - The teacher recognizes and addresses differences among students' level of ability and skill. (2%)

5 - The teacher not only recognizes and encourages student differences but addresses them individually and appropriately.

4 - The teacher frequently recognizes and encourages differences in ability and skill.

3 - The teacher sometimes recognizes and encourages differences in ability and skill.

2 - The teacher recognizes but does not encourage differences in ability and skill.

1 - The teacher shows no attempt at differentiating according to ability or skill.

B.23 - *The teacher makes crosscurricular links to instruction. (1%)*

5 - The teacher explains and illustrates how the content can be connected to other content areas.

4 - The teacher explains briefly possible cross-curricular connections.

3 - The teacher mentions but does not explain cross-curricular connections.

2 - The teacher alludes to but does not mention cross-curricular connections.

1 - There is no cross-curricular link made to content that warrants it.

B.24 - *Observed lesson displays functionality and usefulness. (2%)*

5 - The observed lesson displays a very high level or functionality and usefulness for the course of student learning.

4 - The observed lesson displays a strong level of functionality and usefulness for the course of student learning.

3 - The observed lesson displays an adequate level of functionality and usefulness with some repeated or reviewed content.

2 - The observed lesson was partially repetitive to what the students already know, therefore lacking usefulness.

1 - The observed lesson was clearly a one-time activity or review that lacks functionality and usefulness for student learning.

C - CLASSROOM MANAGEMENT (35%)

C.1 - *The teacher uses clear and complete directions to manage the classroom. (2%)*

5 - Is direct, specific, and consistent in giving directions and transitions.

4 - Use clear and complete directions and transitions.

3 - Directions or transitions are not strong enough to control the whole class.

2 - Directions or transitions are vague and leave room for some distruptions

1 - Has no directions at all.

C.2 - *The teacher uses proximity and/or proper cues to assist and monitor students as needed. (1%)*

5 - Constantly monitors the room through proximity or cues to support transitions and assist students.

4 - Frequently monitors the room through proximity or cues to support transitions and assist students.

3 - Sometimes monitors the room through proximity or cues to support transitions and assist students.

2 - Rarely monitors the room through proximity or cues to support transitions and assist students.

1 - Stays in one place and never moves around. No proper cues are used either.

C.3 - *The teacher is flexible and adjusts to class dynamics. (1%)*

5 - Is highly adaptive at modifying lessons to exploit teachable moments and correct misunderstandings.

4 - Is flexible about modifying lessons for teachable moments.

3 - Is overly focused on implementing lesson plans and may miss teachable moments.

2 - Is rigid and inflexible with lesson plans and teachable moments.

1 - Is not adaptable and is unaware of teachable moments.

C.4 - *Students maintained attention and focus during instruction and/or independent work settings. (1%)*

5 - All students maintain attention and focus during instruction and/or independent work settings.

4 - Most students maintain attention and focus and during instruction and/or independent work settings.

3 - Some students maintain attention and focus during instruction and/or independent work settings.

2 - Students are inattentive, disruptive, and/or occupied with non-essential work during instruction or work time.

1 - Student focus and attention is lost and disruptions are frequent and powerful.

C.5 - *Students obtain help by raising their hands or appropriate signals. (1%)*

5 - A clear procedure for signaling the teacher has been established.

4 - Most students raise their hands to obtain help.

3 - Students raise hands and occasionally call out.

2 - Students occasionally raise hands and call out inappropriately.

1 - There is no clear order established for student participation.

C.6 - *The teacher responds to students who signal properly. (1%)*

5 - Has established a clear method for responding to students.

4 - Responds to all students and corrects those who signal improperly.

3 - Sporadically responds to students who signal properly.

2 - Responds to the students who signal improperly.

1 - Is unaware of students signaling to participate.

C.7 - *The teacher engages all or most students. (2%)*

5 - Delivers a highly relevant lesson that motivate all students, both individually and collaboratively.

4 - Delivers a relevant, motivational, and engaging lesson for students, both individually and collaboratively.

3 - Delivers a somewhat relevant lesson that attracts some individual and collaborative student interest

2 - Delivers a lesson with irrelevant individual or collaborative engagement for most students

1 - Delivers a lesson that is dull; no one is engaged both from an individual and collaborative sense.

C.8 - *The teacher creates a classroom climate of care and community. (2%)*

5 - Teacher is exceptionally aware of classroom climate and the students operate productively with their peers.

4 - Teacher is effectively aware of classroom climate and community values are positively practiced by teacher and students with their peers.

3 - Teacher is aware of classroom climate and community values are positively practiced by teacher and students with their peers.

2 - Teacher is ineffective with classroom climate or positive student-peer interaction is low.

1 - Teacher does not promote a classroom climate and student-peer interaction is predominantly negative.

C.9 - The teacher fosters positive teacher-to-student relationships built on mutual respect. (2%)

5 - Interacts with many students personally and respect for diversity and community values are highly emphasized.

4 - Interacts with some students personally and positive respect for diversity and values is present.

3 - Interacts with students but a climate of mutual respect is not fully established.

2 - Is respectful to diversity and values, but doesn't engage students to build positive relationships personally.

1 - Does not promote community values or diversity and does not engage/avoids respectful interaction

C.10 - The teacher reinforces appropriate behaviors consistently and patiently. (2%)

5 - Appropriate behaviors are always reinforced consistently and patiently.

4 - Appropriate behaviors are mostly reinforced consistently and patiently.

3 - Appropriate behaviors are sometimes reinforced consistently and patiently.

2 - Appropriate behaviors are rarely reinforced consistently and patiently.

1 - Appropriate behaviors are not reinforced consistently and patience is lost.

C.11 - The teacher uses research-based motivational and engagement theories to handle behavior problems immediately and effectively. (2%)

5 - Has a highly effective, research-based, motivational and engaging discipline repertoire and can hold students' attention at any time.

4 - Has many effective research-based discipline "moves" and motivators and can maintain students' attention.

3 - Has a certain set of research-based engagement tools and motivators but with varying effectiveness.

2 - Maintains no control over one or two students, has few research-based discipline "moves" or motivators, or constantly struggles for students' attention.

1 - Maintains no control over classroom. Research-based motivational and engagement best practices are not attempted or in place.

C.12 - The teacher uses instructional time and transitions effectively. (2%)

5 - Expertly manages lesson and transitions so that no time is lost.

4 - Pacing is balanced and transitions are completed in a timely manner.

3 - Pacing is balanced but there are occasional gaps in the lesson or ineffective transitions.

2 - Pacing is not balanced, transitions are poor, and/or there are too many gaps in the lesson.

1 - A lot of instructional time is wasted or lost during the class and/or transitions are not attempted.

C.13 - *The teacher models the values of respect, dignity, honesty, responsibility, and teamwork. (2%)*

5 - Teacher constantly models the values of respect, dignity, honesty, responsibility, and teamwork.

4 - Teacher and students are fair and respectful to all students and upholds class rules and procedures.

3 - Teacher is fair and respectful toward most students but class rules and procedures are not consistently enforced.

2 - Teacher fairness and respect is clearly diminished and class rules and procedures possess little to no follow-through.

1 - Teacher is unfair or disrespectful and disregards class rules and procedures.

C.14 - *Students model the values of respect, dignity, honesty, responsibility, and teamwork, including classroom specific rules, expectations, and policies (i.e. P.E. uniforms or internet usage, etc.) (2%)*

5 - Students consistently model the values of respect, dignity, honesty, responsibility, and teamwork.

4 - Students are fair and respectful to teacher and adhere to class rules and procedures.

3 - Majority of student are fair and respectful, but some students do not follow class rules or procedures.

2 - Disrespectful student behavior outweighs the fairness, respect, and follow-through of the teacher.

1 - Student disrespectfulness and irresponsibility dominates the setting.

D - *PROFESSIONAL ATTRIBUTES (5%)*

D.1 - The teacher sets a positive tone. (1%)

5 - From the beginning a strong atmosphere for learning is established.

4 - An atmosphere for learning is established.

3 - Sometimes becomes monotone.

2 - Allows too many disruptions to create a positive learning environment.

1 - Strong feeling of negativity in the room.

D.2 - The teacher offers suggestions and criticism in a polite, considerate manner. (1%)

5 - The teacher offers suggestions and criticism in a polite, considerate manner.

4 - Fosters positive interactions among students and teaches social skills.

3 - Suggestions are offered plainly and straightforwardly.

2 - Often lectures students about the need for good behavior.

1 - Makes an effort to point out "bad" students/ does not offer any criticism and suggestions.

D.3 - *The teacher praises students. (1%)*

5 - Exceptional use of praise, both verbal or nonverbal.

4 - Very good use of praise, both verbal or nonverbal.

3 - Acceptable use of praise, verbal or nonverbal, but not both.

2 - Offers general or nondescript praise or criticism that is not imbalanced or inconsistent

1 - Offers no feedback or praise for good work.

D.4 - The teacher uses appropriate language and avoids slang. (1%)
5 - Always maintains correct and professional language.
4 - Almost always maintains correct and professional language.
3 - Usually maintains correct and professional language
2 - Sometimes uses vulgar or inappropriate language for age group.
1 - Teacher language is predominantly filled with vulgarity or slang.

Appendix B: CS Walkthrough *Evaluation Rubric*
G - CLASSROOM WALK-THROUGH EVALUATION (100%)
G.1 - LEARNING ENVIRONMENT: Classroom is safe and conducive for learning (1%)
5 - Classroom is exceptionally well-organized, contains many engaging and informational posters and contains no possible safety threats
4 - Classroom is very well-organized, though teacher doesn't fully capitalize off of all available wall space for engagement. There are no possible safety threats
3 - Classroom is generally organized, though informational material posting is lacking and there are some askew items that could pose a threat
2 - Classroom organization is weak, there are few or no engaging materials posted and there are many askew items that seem to pose a safety threat
1 - Classroom is exceptionally disorganized and/or there are many safety hazards
G.2 - LESSON OBJECTIVES: Learning outcomes and goals are clearly communicated orally and in written form (1%)
5 - The teacher has a clear, easy to read, posted objective and either explicitly states (if at the start of the period) or strongly implies (if well-into the period) the objective.
4 - The objective is both posted and verbally implied
3 - The objective is posted
2 - The objective is either (a) posted, though not clearly or (b) implied, though not with much clarity
1 - The objective is neither posted nor implied
G.3 - CONTENT PLANNING: Instruction is developmentally appropriate, accurate, and linked to previous or future learning (1%)
5 - The lesson clearly aligns with grade appropriate standards (as reflected in lesson plan) and the teacher makes clear reference to the lessons place in the continuum of learning
4 - The lesson aligns with grade appropriate standards (as reflected in lesson plan) and the teacher implies that the lesson fits within the continuum of learning
3 - The lesson aligns with grade appropriate standards (as reflected in lesson plan)
2 - The lesson provides useful content, but isn't clearly tied to grade appropriate standards
1 - The lesson is either substantially too simplistic or substantially too complex for the students
G.4 - STUDENT ENGAGEMENT: Students maintained attention and focus during instruction and/or independent work settings. (1%)
5 - All students maintain attention and focus during instruction and/or independent work settings
4 - Most students maintain attention and focus and during instruction and/or independent work settings.
3 - Some students maintain attention and focus during instruction and/or independent work settings.
2 - Students are inattentive, disruptive, and/or occupied with non-essential work during instruction or work time.

1 - Student focus and attention is lost and disruptions are frequent and powerful.

G.5 - INSTRUCTIONAL RIGOR: Lesson and activities are accessible and challenging for students (1%)

5 - The lesson clearly fell within the students' zone of proximal development -- was neither too challenging nor too easy for the students

4 - Students managed to participate in the lesson, but it was slightly too difficult or too easy

3 - The lesson was quite substantially too easy or too hard for students and this discrepancy between student ability and lesson difficulty hindered student performance

2 - The lesson was either so easy that students demonstrated disinterest or so hard to students struggled acutely to participate

1 - The lesson was entirely inaccessible to students due to its excessive or entirely lacking rigor

G***.6 - INSTRUCTIONAL QUALITY: Instructional Tools (including technology) and varied strategies reflect student needs and learning objectives. (1%)***

5 - The teacher uses a large array of Instructional tools and he/she utilizes each to the highest capacity -- including allowing students to interact with the technology

4 - The teacher uses an array of Instructional tools and he/she utilizes each effectively, interacting with the technology throughout the observed lesson

3 - The teacher uses more than one Instructional tool, though not as effectively as possible

2 - The teacher uses only one Instructional tool and he/she only interacts with the technology in a cursory fashion

1 - Instructional tool is used for a short segment of the lesson and not as effectively as it could be

G.7 - ASSESSMENT: Multiple methods of assessment (diagnostic or formative) are utilized to guide instruction (1%)

5 - The observer witnesses more than one method of assessment during observation and can clearly see how this assessment is used to inform instruction

4 - The observer witnesses the use of more than one assessment during instruction, though it is not immediately clear how the assessment will inform instruction

3 - The observer witnesses assessment, though there is only one type of assessment provided and there is no mention of previous assessments

2 - The observer witnesses assessment, but the assessment either isn't clearly tied to course standards or isn't administered in a reliable and useful fashion.

1 - The opportunity for assessment is missed or an assessment is given but it is unsound or unreliable

G.8 - CLASSROOM MANAGEMENT: Routines and procedures support learning goals and activities. Students show care and respect for their peers and adults. (1%)

5 - The classroom is exceptionally well-managed, routines and procedures are in place and students demonstrate exceptional respect and care for their environment

4 - The classroom is generally well-managed and there are routines and procedures in place by which most students abide

3 - The classroom is generally well-managed and here are routines and procedures in

place, but many students fail to abide by them

2 - Attempts are made at managing the classroom and there has been some attempt to establish routines and procedures, but much

off-task and rule-breaking behavior can be observed

1 - Off-task behaviors are common to the point that instruction is hindered by the disruption

G.9 - PROFESSIONAL ATTRIBUTES: Teacher sets a positive tone and is respectful to students. (1%)

5 - The teacher maintains an exceptionally positive attitude and demonstrates substantial respect for students -- including providing profuse praise

4 - The teacher maintains a positive attitude and praises students occasionally

3 - The teacher maintains positivity, but misses opportunities to praise the students

2 - The teacher is generally positive, but fails to distribute praise

1 - The teacher exhibits clear frustration or in another manner slips from positivity during the observed lesson

Appendix C: CS Professional Responsibilities Evaluation Rubric
E - PROFESSIONAL RESPONSIBILITIES (100%)
E.1 - The teacher updates database attendance daily. (3%)
5 - The teacher always updates database attendance daily.
4 - The teacher usually updates database attendance daily.
3 - The teacher adequately updates database attendance daily.
2 - The teacher rarely updates database attendance daily.
1 - The teacher never updates database attendance daily.
E.2 - The teacher updates database assignments and grades on a regular basis. (5%)
5 - The teacher always updates database assignments and grades on a regular basis
4 - The teacher usually updates database assignments and grades on a regular basis
3 - The teacher adequately updates database assignments on a regular basis
2 - The teacher rarely updates database assignments and grades on a regular basis.
1 - The teacher never updates database assignments and grades on a regular basis.
E.3 - The teacher communicates with parents on a regular basis both verbally and non-verbally with professionalism. (3%)
5 - The teacher always communicates with parents on a regular basis both verbally and non-verbally with professionalism.
4 - The teacher usually communicates with parents on a regular basis both verbally and non-verbally with professionalism.
3 - The teacher adequately communicates with parents on a regular basis both verbally and non-verbally with professionalism.
2 - The teacher rarely communicates with parents every on a regular basis both verbally and non-verbally with professionalism.
1 - The teacher never communicates with parents on a regular basis both verbally and non-verbally with professionalism.
E.4 - The teacher attends to assigned duties on a timely and consistent manner and with appropriate professionalism. (2%)
5 - The teacher always attends to assigned duties on a timely and consistent manner and with appropriate professionalism.
4 - The teacher usually attends to assigned duties on a timely and consistent manner and with appropriate professionalism.
3 - The teacher adequately attends to assigned duties on a timely and consistent manner and with appropriate professionalism.
2 - The teacher rarely attends to assigned duties on a timely and consistent manner and with appropriate professionalism.
1 - The teacher never attends to assigned duties on a timely and consistent manner and with appropriate professionalism.
E.5 - The teacher attends to all grade chair, staff, curriculum meetings and maintains regular and prompt communication with all related stakeholders. (2%)
5 - The teacher always attends to all meetings (staff, departmental, grade chair, data, etc.) and maintains prompt communication to all related stakeholders both verbally and non-verbally with professionalism.
4 - The teacher usually attends to all meetings (staff, departmental, grade chair, data,

etc.) and maintains prompt communication to all related stakeholders both verbally and non-verbally with professionalism.

3 - The teacher adequately attends to all meetings (staff, departmental, grade chair, data, etc.) and maintains prompt communication to all related stakeholders both verbally and non-verbally with professionalism.

2 - The teacher rarely attends to all meetings (staff, departmental, grade chair, data, etc.) and maintains prompt communication to all related stakeholders both verbally and non-verbally with professionalism.

1 - The teacher never attends to all meetings (staff, departmental, grade chair, data, etc.) and maintains prompt communication to all related stakeholders both verbally and non-verbally with professionalism.

E.6 - The teacher completes lesson/weekly plans on time in ConceptSIS that address curriculum, standards, skills and assessment. (5%)

5 - The teacher always completes lesson/weekly plans on time in ConceptSIS that address curriculum, standards, skills and assessment.

4 - The teacher usually completes lesson/weekly plans on time in ConceptSIS that address curriculum, standards, skills and assessment.

3 - The teacher adequately completes lesson/weekly plans on time in ConceptSIS that address curriculum, standards, skills and assessment.

2 - The teacher rarely completes lesson/weekly plans on time in ConceptSIS that address curriculum, standards, skills and assessment.

1 - The teacher never completes lesson/weekly plans on time in ConceptSIS that address curriculum, standards, skills and assessment.

E.7 - The teacher modifies instruction based on research, best practices, data, and collegial collaboration. (2%)

5 - The teacher continuously modifies instruction based on research, best practices, data, and collegial collaboration.

4 - The teacher modifies instruction to based on research to produce learning gains.

3 - The teacher implements satisfactory research-based instruction focused more on production than student gains.

2 - The teacher only applies some theories of learning to improve production or student gains.

1 - The teacher makes little or no consistent attempt to modify instruction based on research, data, or best practices.

E.8 - The teacher submits all Emergency (Substitute) Plans by school-set deadline. (1%)

5 - The teacher always submits all Emergency (Substitute) Plans on time.

4 - The teacher usually submits all Emergency (Substitute) Plans on time.

3 - The teacher adequately submits all Emergency (Substitute) Plans on time.

2 - The teacher rarely submits all Emergency (Substitute) Plans on time.

1 - The teacher never submits all Emergency (Substitute) Plans on time.

E.9 - The teacher reports to school on time and fulfills contractual working hours with appropriate professionalism. (2%)

5 - The teacher always reports to school on time and fulfills contractual working hours

with appropriate professionalism.

4 - The teacher usually reports to school on time and fulfills contractual working hours with appropriate professionalism.

3 - The teacher adequately reports to school on time and fulfills contractual working hours with appropriate professionalism.

2 - The teacher rarely reports to school on time and fulfills contractual working hours with appropriate professionalism.

1 - The teacher never reports to school on time and fulfills contractual working hours with appropriate professionalism.

E.10 - The teacher is prepared and in attendance for the parent teacher conferences and conducts themselves in a professional and polite manner. (1%)

5 - The teacher is always prepared and in attendance for the parent teacher conferences and conducts themselves in a professional and polite manner.

4 - The teacher is usually prepared and in attendance for the parent teacher conferences and conducts themselves in a professional and polite manner.

3 - The teacher is adequately prepared and in attendance for the parent teacher conferences and conducts themselves in a professional and polite manner.

2 - The teacher is rarely prepared and in attendance for the parent teacher conferences and conducts themselves in a professional and polite manner.

1 - The teacher is never prepared and in attendance for the parent teacher conferences and conducts themselves in a professional and polite manner.

E.11 - The teacher uses multiple data points to chart assessment of individual student progress and goals. (3%)

5 - The teacher uses highly effective multiple data points to chart assessment of individual student progress and goals.

4 - The teacher uses effective multiple data points to chart assessment of invidual student progress and goals.

3 - The teacher applies understanding towards using multiple data points to chart individual student progress and assessment.

2 - The teacher rarely attempts to chart assessment of individual student progress or does not use multiple data points to do so.

1 - The teacher does not attempt to chart assessment of individual student progress nor use multiple data points.

E.12 - The teacher uses available supplemental instructional resources and technology effectively. (3%)

5 - The teacher always uses available supplemental instructional resources and technology.

4 - The teacher usually uses available supplemental instructional resources and technology.

3 - The teacher adequately uses available supplemental instructional resources and technology.

2 - The teacher rarely uses available supplemental instructional resources and technology.

1 - The teacher never uses available supplemental instructional resources and

technology.

E.13 - The teacher offers two days of tutoring and at least one day of club with proper database attendance. (2%)

5 - The teacher always offers two days of tutoring and one day of clubs.

4 - The teacher usually offers two days of tutoring and one day of clubs.

3 - The teacher adequately offers two days of tutoring and one day of clubs.

2 - The teacher rarely offers two days of tutoring and one day of clubs.

1 - The teacher never offers two days of tutoring and one day of clubs.

E.14 - The teacher organizes, attends, and/or helps with extracurricular activities. (1%)

5 - The teacher always organizes, attends, and/or helps with extracurricular activities.

4 - The teacher usually organizes, attends, and/or helps with extracurricular activities.

3 - The teacher adequately organizes, attends, and/or helps with extracurricular activities.

2 - The teacher rarely organizes, attends, and/or helps with extracurricular activities.

1 - The teacher never organizes, attends, and/or helps with extracurricular activities.

E.15 - The teacher makes the required number of Home Visits. (2%)

5 - The teacher goes far beyond the required amount of Home Visits.

4 - The teacher completed 2 extra Home Visits beyond the required amount.

3 - The teacher has made the required amount of Home Visits

2 - The teacher completed less then the required amount of Home Visits

1 - Zero Home Visits were attempted or completed.

E.16 - The teacher dresses, speaks, and behaves in a professional manner respectful of all diversity. (2%)

5 - The teacher always dresses, speaks, and behaves in a professional manner respectful of diversity of all types.

4 - The teacher usually dresses, speaks, and behaves in a professional manner respectful of diversity of all types.

3 - The teacher adequately dresses, speaks, and behaves in a professional manner respectful of diversity of all types.

2 - The teacher rarely dresses, speaks, and behaves in a professional manner respectful of diversity of all types.

1 - The teacher never dresses, speaks, and behaves in a professional manner respectful of diversity of all types.

E.17 - The teacher supports and encourages co-workers in a professional manner respectful of all diversity. (3%)

5 - The teacher always supports and encourages co-workers in a professional manner respectful of diversity of all types.

4 - The teacher usually supports and encourages co-workers in a professional manner respectful of diversity of all types.

3 - The teacher adequately supports and encourages co-workers in a professional manner respectful of diversity of all types.

2 - The teacher rarely supports and encourages co-workers in a professional manner respectful of diversity of all types.

1 - The teacher never supports and encourages co-workers in a professional manner respectful of diversity of all types.

E.18 - The teacher has completed peer observation, mentoring, or prescribed professional development with proper reporting. (2%)

5 - The teacher has always completed peer observation, mentoring, or prescribed professional development with proper reporting.

4 - The teacher has usually completed peer observation, mentoring, or prescribed professional development with proper reporting.

3 - The teacher has adequately completed peer observation, mentoring, or prescribed professional development with proper reporting.

2 - The teacher has rarely completed peer observation, mentoring, or prescribed professional development with proper reporting.

1 - The teacher has never completed a peer observation, mentoring, or prescribed professional development with proper reporting.

E.19 - The teacher works to improve the quality and image of the school (PD, best practices, PR) (1%)

5 - The teacher always works to improve the quality and image of the school.

4 - The teacher usually works to improve the quality and image of the school.

3 - The teacher adequately works to improve the quality and image of the school.

2 - The teacher rarely works to improve the quality and image of the school.

1 - The teacher never works to improve the quality and image of the school.

E.20 - The teacher is flexible, ethical, professional, and cooperative in the face of change. (2%)

5 - The teacher is above and beyond flexible, ethical, professional, and cooperative in the face of change.

4 - The teacher is consistently flexible, ethical, professional, and cooperative in the face of change.

3 - The teacher is adequately flexible, ethical, professional, and cooperative in the face of change.

2 - The teacher is rarely flexible, ethical, professional, and cooperative in the face of change.

1 - The teacher is never flexible, ethical, professional, and cooperative in the face of change.

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E.21 - The teacher attends or promotes team-building or mentoring activities in the building. (2%)

5 - The teacher always attends or promotes team-building or mentoring activities in the building.

4 - The teacher usually attends or promotes team-building or mentoring activities in the building.

3 - The teacher adequately attends or promotes team-building or mentoring activities in the building.

2 - The teacher rarely attends or promotes team-building or mentoring activities in the building.

1 - The teacher never attends or promotes team-building or mentoring activities in the building.

E.22 - The teacher supports high achieving students by offering advanced study teams and activities (science fair, stem expo, robotics, spelling bee, spoken words, CYSP, art fair, math olympiad, etc.). (3%)

5 - The teacher goes above and beyond to lead multiple study teams or activities to support high-achieving students.

4 - The teacher leads more than one study team or activity to support high-achieving students.

3 - The teacher leads at least one or assists with multiple study teams or activities to support high-achieving students

2 - The teacher assists with at least one study team or activity to support high-achieving students.

1 - The teacher makes no attempt to support high-achieving students.

E.23 - The teacher adheres to deadlines setup by administration (data plan, improvement plan, etc…) (4%)

5 - The teacher completes (data plan, Improvement plans, etc…) before the required due date.

4 - The teacher completes (data plan, Improvement plans, etc…) on the required due date.

3 - The teacher completes (data plan, Improvement plans, etc…) 1-2 days after the required due date.

2 - The teacher completes (data plan, Improvement plans, etc…) 3-5 days after the required due date.

1 - The teacher completes (data plan, Improvement plans, etc…) 6 or more days after the required due date.

E.24 - The teacher updates activity logs on a regular basis. (2%)

5 - The teacher always updates database activity logs on a regular basis.

4 - The teacher usually updates database activity logs on a regular basis.

3 - The teacher adequately updates database activity logs on a regular basis.

2 - The teacher rarely updates database activity logs on a regular basis.

1 - The teacher never updates database activity logs on a regular basis.

Appendix D: The CS evaluation matrix

Evaluation Matrix

Evaluation Matrix		Teacher Evaluations Formal 25%, Professional 15%, Walkthrough 10%			
		4.75-5.00	4.25-4.74	3.50-4.24	0-3.49
Student Growth Measures	Most Effective 5	Accomplished	Accomplished	Skilled	Skilled
	Above Average 4	Accomplished	Skilled	Skilled	Developing
	Average 3	Skilled	Skilled	Developing	Developing
	Approaching Average 2	Skilled	Skilled	Developing	Developing
	Least Effective 1	Skilled	Developing	Developing	Ineffective

APPENDIX E: Informed Consent Form

Education Sciences and Professional Programs

204 Marillac Hall

314-516-5953

E-mail: davismatt@umsl.edu

Informed Consent for Participation in Research Activities

The CS Teacher Evaluation Model: Exploring Teacher and School Leader Perceptions and A Model for improving teacher and student growth.

Participant _____HSC Approval Number _____

Principal Investigator _Mustafa Icel   PI's Phone Number   651-xxxxxx

1.   You are invited to participate in a research study conducted by Mustafa Icel and Matthew Davis, Ph.D. The purpose of this study is to collect and analyze data from a K-12 school district to make an in-depth analysis of individual teacher growth. The study will create a model for a K-12 school district to analyze an individual teacher's performance.

2. a) Your participation will involve

☐   Answering interview questions regarding your experiences during teacher evaluation process and overall perception about CS teacher evaluation model.

We will contact you to respond a set of questions that reflect how you adapt yourself to reach academic goals in different environments. All interview participants will be asked to audio-record their response to the interview questions and then send back to the researcher.

20 participants will be involved in this research.

b) The amount of time involved in your participation will be around 30 minutes.

3. There is no anticipated risk associated with this research. There is a small chance you will experience some minor discomfort answering questions about your experiences with discrimination. You may choose not to answer any questions or to discontinue your participation.

4.   There are no direct benefits for you participating in this study. However, your participation will contribute to the knowledge about integration to foreign academia and

may help academic society to understand the difficulties of foreign academics based on data.

5.   Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time.

6.   By agreeing to participate, you understand and agree that your data may be shared with other researchers and educators in the form of presentations and/or publications. In all cases, your identity will not be revealed. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection). That agency would be required to maintain the confidentiality of your data. In addition, all data will be stored on a password-protected computer and/or in a locked office.

7.   If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Mustafa Icel –(651 xxxxxx) or the Faculty Advisor, Matthew Davis, Ph.D, (314) 516-xxxx. You may also ask questions or state concerns regarding your rights as a research participant to the Office of Research Administration, at 516-5897.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.

Participant's Signature   Date   Participant's Printed Name

Signature of Investigator or Designee   Date   Investigator/Designee Printed
Name

Appendix F: Interview Questions
A. Principal Interview
1.   Do you believe that is your districts envisioned on an individual teacher growth?
2.   To what extent, if at all, has the CS teacher evaluation model impacted your teacher's growth?
3.   To what extent do you think that the CS teacher evaluation model creates a professional dialogue between teachers and school administrators?
4.   What specific part of the CS teacher evaluation model, if any, has helped teacher to grow most?
5.   If you had the capability to modify any part of the CS teacher evaluation model to gain the maximum benefit for you as an administrator what would you modify?
6.   What do you see as the strengths of the CS teacher evaluation model as implemented at GSA school district?
7.   What do you see as the weaknesses of the CS teacher evaluation model as implemented at GSA district?

B. Teacher Interview
1.   To what extent, if at all, has the CS teacher evaluation model offered you the opportunity to reflect on your teaching practices?
2.   How if at all, has the CS teacher evaluation model offered you the opportunity to set measurable goals?
3.   Do you find value in the feedback you received from your school administrators in your post-evaluation conferences? Why or why not?
4.   When you teach a lesson that was previously evaluated using the CS teacher evaluation model, did you make the changes in your lesson that were recommended or agreed upon at your post-observation?
5.   What specific part of the CS teacher evaluation model, if any, has helped you the most to grow as a teacher?
6.   How would you describe how you teach during a class session that is being observed by a school administrator: do you teach as you normally do or do you perform an "enhanced version" to impress the school administrator?
7.   How, if at all, has the CS teacher evaluation model helped to define the expectations of your school administrators regarding your teaching practices?
8.   Do you feel that administrators have had the necessary training and practice to evaluate you accurately and fairly? Why or why not?
9.   Do you feel that half of the CS teacher evaluation model is based on your student academic achievement had a positive influence on your test prep planning? Why or why not
10.   If you had the capability to modify any part of the CS teacher evaluation model to gain the maximum benefit for you as a teacher, what would you modify?
11.   What do you see as the strengths of the CS teacher evaluation model as implemented at GSA school district?
12.   What do you see as the weaknesses of the CS teacher evaluation model as implemented at GSA district?

Appendix G: School's Permission Granted

GATEWAY SCIENCE ACADEMY OF ST.LOUIS
6025 Chippewa Street, MO 63109 Phone: 314-282-0534

GATEWAY SCIENCE ACADEMY
ST. LOUIS

4/16/2018

To Whom It May Concern,

I am writing this letter to inform you that Mr. Mustafa Icel has permission to conduct his research named below at Gateway Science Academy of St.Louis (GSA).

The CS Teacher Evaluation Model: Exploring Teacher and School Leader Perceptions and A Model for improving teacher and student growth

GSA School district will provide him full support in his research. Please let me know if you have any further questions.

Sincerely,

Engin Blackstone
Superintendent

Appendix H: IRB Approval

Office of Research Administration

University of Missouri St. Louis

One University Boulevard
St. Louis, Missouri 63121-4499
Telephone: 314-516-5899
Fax: 314-516-6759
E-mail: ora@umsl.edu

DATE:	May 3, 2018
TO:	mustafa icel
FROM:	University of Missouri-St. Louis IRB
PROJECT TITLE:	[1230562-1] The CS Teacher Evaluation Model: Exploring Teacher and School Leader Perceptions and A Model for improving teacher and student growth.
REFERENCE #:	
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
APPROVAL DATE:	May 3, 2018
EXPIRATION DATE:	May 3, 2019
REVIEW TYPE:	Expedited Review
REVIEW CATEGORY:	Expedited review category # 7

The chairperson of the University of Missouri-St. Louis IRB has reviewed the above mentioned protocol for research involving human subjects and determined that the project qualifies for expedited review under Title 45 Code of Federal Regulations Part 46.110b. The time period for this approval expires one year from the date listed below. You must notify the University of Missouri-St. Louis IRB in advance of any proposed major changes in your approved protocol, e.g., addition of research sites or research instruments.

You must file an annual report with the committee. This report must indicate the starting date of the project and the number of subjects to date from start of project, or since last annual report, whichever is more recent.

Any consent or assent forms must be signed in duplicate and a copy provided to the subject. The principal investigator must retain the other copy of the signed consent form for at least three years following the completion of the research activity and they must be available for inspection if there is an official review of the UM-St. Louis human subjects research proceedings by the U.S. Department of Health and Human Services Office for Protection from Research Risks.

This action is officially recorded in the minutes of the committee.

Appendix I: Certificate of Completion NIH

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **mustafa icel** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 08/29/2017.

Certification Number: 2464083.

Appendix J: Table. 4.1 An Overview of the Procedures Used to Collect Data

Research Question 1**:** How do principals reflect upon the CS teacher evaluation model to encourage and support each individual teacher's growth?

Sub-questions	Objective(s)
Do you believe that is your districts envisioned on an individual teacher growth	To find out that teachers and principals perception on teacher growth.
To what extent, if at all, has the CS teacher evaluation model impacted your teacher's growth?	To find out that the possible impact of the CS teacher evaluation model on professional growth.
What specific part of the CS teacher evaluation model, if any, has helped teacher to grow most?	To identify specific aspects of the CS teacher evaluation model that pointed out by teachers and principals to the teacher's professional growth.

Research Question 2: To what degree do teachers believe the use of the CS teacher evaluation model (CSTEM) will contribute to their professional development as a teacher?

Related Interview Questions	Objective(s)
To what extent do you think that the CS teacher evaluation model creates a professional dialogue between teachers and school administrators?	To find out that the culture of learning in school environment.
What specific part of the CS teacher evaluation model, if any, has helped you the most to grow as a teacher?	To find out that any specific domain of the CS teacher evaluation model helps teacher growth.
When you teach a lesson that was previously evaluated using the CS teacher evaluation model, did you make the changes in your lesson that were recommended or agreed upon at your post-observation?	To find out that ongoing culture of learning in school environment and the CS evaluation model whether create an opportunity for dialogue.
To what extent, if at all, has the CS teacher evaluation model impacted your teacher's growth?	To find out that overall impact of the CS teacher evaluation model on teacher growth.

Research Question 3. To what degree do teachers believe the implementation of the CS teacher evaluation model helps them create improvement plans for their classroom practices?

Related Interview Questions	Objective(s)
How, if at all, has the CS teacher evaluation model helped to define the expectations of your school administrators regarding your teaching practices?	To find out that overall impact of the CS teacher evaluation model on teacher classroom practice.
To what extent, if at all, has the CS teacher evaluation model offered you the opportunity to reflect on your teaching practices?	To find out that overall impact of the CS teacher evaluation model on teacher classroom practice.
What specific part of the CS teacher evaluation model, if any, has helped teacher to grow most?	To find out that any specific domain of the CS teacher evaluation model helps teacher growth.

Research Question 4. What are the perceived advantages and disadvantages, if any, of the use of the CS teacher evaluation model used at the K-12 GSA District?

Related Interview Questions	Objective(s)
What do you see as the strengths of the **CS teacher evaluation model** as implemented at GSA school district?	To find out that the strengths domain of the CS teacher evaluation model helps teacher growth.
What do you see as the weaknesses of the **CS teacher evaluation model** as implemented at GSA district?	To find out that the weaknesses domain of the CS teacher evaluation model helps teacher growth.
If you had the capability to modify any part of the **CS teacher evaluation model** to gain the maximum benefit for you as an administrator what would you modify?	To find out that the improvement area of the CS teacher evaluation model.

Appendix K: Table 4.2 Initial Coding

Transcript	Codes
1-10 districts envisioned on an individual teacher growth?	Growth-has to be done, coach you, caught you
11-17 the CS evaluation tool and teacher growth	"here's what you did or didn't do" tool, walkthrough observation
18-24 District envision individual teacher growth	professional development opportunities
25-34 evaluation tool envies teacher growth, area of the evaluation to focus on	Teacher growth, PD, professional development opportunities
35-44. I feel that the tool overall has some positives that could help with teacher growth	teacher growth, coaching practices
53-58 System is very comprehensive and it is all about teacher's reception about the system	needs improvement, willing to improve
59 - 64 There are many opportunities through this evaluation process that allows for teacher to grow and improve on areas they need and ample opportunity to get feedback from admin.,	Teacher growth, Feedback,
65-69 growth comes through the formative conversations that occur throughout the year	Post-evaluation, open dialogue
70-79 school district to spend plenty time to discuss all aspect of the evaluations	Time issue, principals don't have time
80- 89 There is many opportunities that would support feedback and follow-up to support teacher growth	Teacher growth, Feedback,
90 - 101 There should be more meaningful dialogue between teachers, and also between teachers and admins the walkthrough evaluations contribute to this growth	walkthrough evaluations, meaningful dialogue

102 - 108 training among admins to ensure fidelity with implementing, scoring, and using the tool	Training evaluators
109- 114 how the teacher is actually teaching and how the kids are responding and learning	Student academic growth, teaching practice
115 -127 it is more about how to communicate and what type of discussion take place before and after the evaluations. More time with first year teachers	Post-evaluation, open dialogue, New teacher evaluation
128 - 139 implementing every aspect of the tool and teaching was amazing and comprehend all different dimensions of teaching.	Domains of the CS evaluation
140 -147 The evaluation items are fine, it is the fidelity of the person's completing the evaluation to ensure that teacher receives feedback and support after the evaluation	Teacher growth, Feedback, meaningful dialogue
148 - 151, particularly for new teachers, it is overwhelming and unfairly asks them to focus on everything at once.	New teacher evaluation
151 - 160 pointing out areas needing improvement are the missing piece in what we currently have.	Feedback, meaningful dialogue, improvement area
161 –164 training for teacher regards the CS evaluation	Teacher training about evaluation
165 -171 not breaking down the evaluation tool so that each teacher can focus on a particular section of skills rather than all the skills.	Time issue, too many items to focus

Appendix L: Table 4.3. Emerged Themes Related to the Research Question

Research Question	Themes
Research Question 1. : How do principals reflect upon the CS teacher evaluation model to encourage and support each individual teacher's growth?	1) Whether Concept Schools Teacher Evaluation Model (CSTEM) has an effect on individual teacher growth ; 2) Whether evaluation expectations are about what is or is not positioned; 3) Whether evaluation items are coached; and finally 4) Whether evaluation items create dialogue between teachers and principals
Research Question 2. To what degree do teachers believe the use of the CS teacher evaluation model (CSTEM) will contribute to their professional development as a teacher?	1) The CS teacher evaluation model offers professional development tools; 2) The CS teacher evaluation model gives clear guidance as to what a teacher can do to improve.
Research Question 3. To what degree do teachers believe the implementation of the CS teacher evaluation model helps them create improvement plans for their classroom practices?	1) The CS teacher evaluation model offers a reflection of my teaching practice; 2) The rubric of CS teacher evaluation is very clear on the expectations.
Research Question 4. What are the perceived advantages and disadvantages, if any, of the use of the CS teacher evaluation model used at the K-12 GSA District?	1) There are too many items and it is unrealistic to incorporate every strategy being evaluated. 2) The same and consistent model is applied to different subjects that are taught differently. 3) It is very comprehensive and can be used as a guide in setting teacher expectations.