2-1-2016

Using Student Feedback to Enhance Teacher Evaluation

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EVALUATION**

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2015

DISSERTATION

Submitted in Partial Fulfillment of the

Requirements for the Degree of
Doctor of Education

Educational Leadership

The University of New Mexico

Albuquerque, New Mexico

December, 2015

Acknowledgments

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ABSTRACT

Teacher evaluation literature presents a history that reflects the increasing need to account for the role of the teacher in the classroom. Extensive research has identified a series of best teaching practices but not a means to know in what context they work best, nor why they do not work for some students. Recently, student surveys provide a snapshot into teacher practices as well.

This study held student conversations with underachieving and high achieving students to seek answers to the following two questions: What perspectives can students provide about what influences their achievement in the classroom? How do students' perceptions of their teachers' expectations, behaviors, and attitudes impact these students' success?

The specificity of the responses shows thoughtfulness and depth from each student, whether high achieving or underachieving, and offers additional validation that students know effective teaching. The data from twelve interviews suggest structured interviews should occur if the process is focused as an exploration of continuous teacher improvement undertaken with the practitioner and the observer. Further, the data suggest that underachieving students focus on needs for task completion, the opportunity to pass the class, and extra time to finish work. In addition, they see themselves as accountable and responsible for their own achievement as opposed to partnering in learning and success with their teachers.

Several questions arise from the dichotomies presented in the study which focus on understanding what students can be taught to close these achievement gaps. The study suggests structured student interviews provide data as accurate as a trained evaluator and the feedback and improvements students provide could improve teaching during a course. The data suggest that underachieving students have a different understanding of education than high achieving students do which points to a need for further research to determine how to target interventions or understandings to improve student achievement.

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Chapter One

Introduction

  The expectation of teachers to make a difference in the educational lives of students has increased considerably over the past fifty years. Mirroring this change, the accountability in teacher evaluation systems has become more demanding, complex, and informed by data and research so that it can assist in improving student achievement. By the late 1960's there were two distinct efforts to improve teaching, and thus, evaluation (Danielson & McGreal, 2000). In 1969, a group of researchers from Harvard led by Robert Goldhammer created a system which they called clinical supervision. In this program, teachers set goals and explained purposes for assessments. This method is typically called the first clinical model of teacher evaluation. Madeline Hunter introduced a system in the mid 1970's focused on "external criteria, purportedly based on empirical research in educational psychology, and emphasized the supervisor's role as objective observer" (Aseltine, Faryniarz, & Rigazio-DiGilio, 2006, p. 3). This work relied largely on "norm-referenced, machine-scorable, multiple choice tests of fairly low-level knowledge" (Danielson & McGreal, 2000, p.3). These observations were the first to create data and disseminate them to teachers (Aseltine et al, 2006).

  Systems now evaluate the quality of a teacher's judgment using multiple measures such as the ability to improve student achievement; the ability to plan lessons and learning; the skill to interact with peers professionally; and the ability to instruct, assess, and manage a classroom setting (Danielson, 2007).   One of the primary reasons is years of research, which indicates that teacher improvements in classroom activities correlates to student achievement as measured by standardized assessments (Dessoff, 2012). The data from these test scores create a current goal of teacher evaluation to

revise the system to support teachers who are honest and earnest about their needs to achieve growth on these assessments (Dessoff, 2012) and to remediate, discipline or remove from the profession those who are not.

The robustness of observation protocols presents many traits for an evaluator to detect and rate. As a result, to evidence the breadth and depth of a teacher's planning lessons and developing student learning, evaluators need to perform multiple observations (Aseltine, Faryniarz, & Rigazio-DiGilio, 2006; Danielson, 2007; Marzano, 2006). Simultaneously, educators must consider equity issues; specifically the opportunity, education, and achievement of each student in the room regardless of learning ability, ethnicity, race, or gender. Evaluation, then, attempts to determine the degree to which all students are achieving and their needs are being met. Prominent researcher in the field of education and teacher effectiveness, Robert Marzano, (2009) warns that "effective pedagogy involves a variety of interacting components" (p. 1) and cannot be distilled into a checklist of actions or behaviors. Even though his system consists of 41 observable traits, he sees them as a system that includes the totality of teaching and provides several opportunities of areas of focus instead of a list of requirements to be met.

The implicit contradiction in current evaluation systems is that even evaluators trained to observe the presence of what Marzano (2009) calls high yield teaching strategies and behaviors cannot determine their effectiveness for all students. He expresses his concern about the misuse of his extensive research on high-yield strategies, those instructional strategies that, when used with the right group at the right time in the correct way, will have the most significant effect on student achievement. Even with his

research that qualifies the limitations of these high yield strategies, many practitioners act and speak as if these strategies can be used at any time and under any circumstance. To mitigate that belief, Marzano (2009) added that specific and foundational questions still remain to be answered about these strategies, two of which lead to the problem this study seeks to address: "Are some instructional strategies more effective with students from different backgrounds? Are some instructional strategies more effective with students of different aptitudes?" (p. 1). These questions lead to a caution that the strategies are not a panacea that allows a teacher to pick a strategy on a given day because it will work well under any circumstance. The explanation showed that some strategies will have a positive, negligible, or negative effect, depending on the situation in which it is used, which led to Marzano's (2009) conclusion: "Until we find answers to the preceding questions, teachers should rely on their knowledge of their students, their subject matter, and their situations to identify the most appropriate instructional strategies" (p. 1).

Statement of the Problem

Marzano's qualification of his own research exists within the backdrop of the current environment of school reform which emphasizes finding the primary strategy, method, or system that will improve educational outcomes for students and close persistent achievement gaps between rich and poor, among ethnicities, and with those with learning issues. Current research in teaching practices is able to determine a list of practices of effective teachers, but "research will never be able to identify instructional strategies that work with every student in every class. The best research can do is tell us which strategies have a good chance of working well" (Marzano, 2007, p. 5). While there has been significant research to determine what specific qualifications, practices, or strategies yield the best learning; the work that remains is to ascertain under what specific

conditions and for which students (Goe & Stickler, 2008). Knowing and using these high-yield strategies are the science of teaching, but the art is using them correctly (Marzano, 2007). As a result, in today's accountability-driven environment, "initiatives to develop teaching quality and effectiveness must consider not only how to identify, reward, and use teachers' skills and abilities, but also how to develop teaching contexts that enable good practice" (Darling-Hammond, 2012, p. 4).

The evaluation system that New Mexico is using posits that an evaluator can observe teacher behaviors, talk with the teacher about the art of positively impacting students, and determine how effective that teacher is in creating an environment of high student achievement from these interactions. When this system is successful, it validates a complex evaluation system with several intents in Charlotte Danielson's (2007) framework: First, it seeks to honor the complexity of teaching. Second, it constitutes a language for professional conversation. Third, it provides a structure for self-assessment and reflection on professional practice. The comprehensive framework considers all phases of teaching—from planning to reporting achievement. Additionally, Danielson notes that the model is grounded in research and that it is generic enough to be used across levels and disciplines. This model allows for a process that provides for reflection to answer the questions Marzano says remain to be answered.

A prominent observation protocol and the one followed in many states undergoing educational reform, Charlotte Danielson's, discusses an "evaluation system that incorporates the perspectives of others" (Danielson & McGreal, 2000, p. 51). She believes that surveys from students can provide information that observation by professionals alone cannot. These surveys, she states, should be about the class, not the

teacher, and should discuss topics like how fairly students are treated in class and how clear expectations are for all students (Danielson & McGreal, 2000). In seeking these data, she is trying to limit students' using the feedback to harm a teacher personally but does not seek insight drawn from a student's personal experiences.

A reason to consider surveys is that a trained evaluator noting the best use of strategies at the best times does not yield achievement for all students. When Robert Marzano first published this work on evaluation, he was aware of that limitation. Therefore, this study will seek to add some insight into the questions Marzano (2007) asked at the time of his discovery: "Are some instructional strategies more effective with students from different backgrounds? Are some instructional strategies more effective with students of different aptitudes?" (p. 1) by asking the people who experience these instructional strategies firsthand, the students themselves.

Purpose of the Study

Teacher observation and evaluation provide a judgment as to what behaviors and actions are likely to lead to high student achievement. At the same time, it is clear that there is no certainty that these strategies lead to student achievement all of the time (Darling-Hammond, 2012; Marzano, 2007; Danielson & McGreal, 2000). The purpose of this research is to ascertain in a classroom I judge as highly effective what additional data students can provide to supplement the findings of an observer in Danielson's observation system, specifically for those who do not achieve. In general, I observe a teacher on a number of research-based traits that should lead to student achievement, believing that the better these traits are executed, the greater the positive effect on student achievement. Still, some students do not succeed. I am not suggesting the problem with students' achievement exists solely in the classroom and that this research can find the

silver bullet for those who are not achieving. There is a possibility that the barriers to achievement exist because of situations students face outside of the classroom. Therefore, I am going to ask these students about their experiences in the classroom and their reflections about what was effective and why to analyze students' perspectives about what additional barriers could exist for students in the classroom.

Domains two and three of New Mexico's iteration of Danielson's observation protocol (NMTEACH Observation Rubric) have ten observable traits with manifestations ranging from ineffective to exemplary. In this qualitative case study, I will ask students who are underachieving (defined as a grade of 75% or below). In addition, I will ask students who are achieving (defined as a grade of 85% or above) and are also in these categories, so there is a point of comparison for feedback from the student interviews. The questions I will ask students take the effective and highly effective statements of NMTEACH's Observation Rubric and turn them into questions that ask how students experience them and what effects these experiences have on the students. In addition, I will ask questions of teachers' and students' behaviors from the Bill and Melinda Gates Measure of Effective Teaching (MET) Project (2012b) research into student feedback that correlate to high student achievement. In total, the single-bound case study will seek what feedback students can provide regarding teachers' effectiveness and what patterns exist in terms of the traits that are most important to students to help them succeed. Finally, I will seek to show that if the goal of evaluation is to improve teachers' abilities to improve student achievement, then student feedback gained by talking with students may help students be successful.

The purpose of the research is to determine if and how student feedback could enhance teacher observation and provide additional feedback to improve teacher evaluation so as to improve teacher effectiveness. As an evaluator, I can observe the effective actions of teachers, but I am not able to determine if what looks like effective teaching is helping those most in need of instruction and if those achieving can provide a point of comparison to understand the struggle of those underachieving. Therefore, I want to talk with a cross section of students in this group to determine if there are teachers' behaviors or methods I am not observing and thus provide some understanding into closing the achievement gap. This qualitative analysis allows me to hear the stories and garner the perspectives of students who are not achieving as well as those who are and ask for their ideas and insights.

Research Questions

Some public schools are pursuing student survey feedback as an additional data point to determine teacher effectiveness (Sheehy, 2012; Butrymowicz, 2012; King, 2007). These self-completion surveys can have low response rates and thus provide a potential bias. In addition, self-completion surveys provide little means to understand the reasons for responses or to use additional observational data to supplement the responses (Queensland Government, 2003). That being said, these students do have an additional insight into the effectiveness of a teacher. Surveys offer some insight, but they do not provide the stories that focus on what matters to students; thus, the feedback provided from these surveys often lacks the intensity of the effect of teacher behaviors and actions and students' previous experiences. Interviews with students whom teachers are not helping through extant methods will highlight concerns, so this case study will interview

students in a rigorous, college-preparatory class that I observe to be highly effective so as to inform teacher evaluation and to ascertain how these two teachers' behaviors lead to current outcomes and can affect improved student outcomes. The research questions are: What perspectives can students provide about what influences their achievement in the classroom? How do students' perspectives of their teachers' expectations, behaviors, and attitudes impact these students' success?

Conceptual or Theoretical Framework

"Research has also shown that the best predictor of a teacher's effectiveness is his or her past success in the classroom. … The lesson is clear: to ensure that every child learns from the most effective teachers possible, schools must be able to gauge their teachers' performance fairly and accurately" (The New Teacher Project, 2010, p. 2). Once a school is able to evaluate teachers' effectiveness, it could determine which teachers are most effective in increasing student achievement and place them with the students who are most in need of effective teaching and begin to close the achievement gap.

Teacher evaluation is a central component of the Obama administration's American Recovery and Reinvestment Act, or ARRA, (2009) which maintains that a better teacher accountability and evaluation system could help states close persistent achievement gaps. Therefore, gathering feedback from those who underachieve and comparing that feedback to those students with similar characteristics who are achieving may well provide insight into what factors create the greatest impact in encouraging and deterring student engagement and achievement.

Despite the well-delineated set of expectations and rigorous evaluation system from Charlotte Danielson (2000), over 90 percent of teachers receive acceptable evaluations; therefore, in practice, the process is not a process at all; it is just a formality. To change this paradigm, evaluators need to create environments of discussion and exploration of practice to realize the goal of improvement of instructional practice. If implemented well, the process can become an exploration of practice in which the collaborator becomes a researcher to help the teacher explore new ideas (Wadsworth, 2002). Receiving feedback from students can add to the data a teacher receives to inform practice and differentiate instruction (Darling-Hammond, 2012).

Definition of Terms

Teacher Evaluation: A process in which a supervising person or persons observe and provide feedback to a teacher about the scope of teaching practice to stimulate meaningful professional development designed to improve teaching practice. This process includes the following elements: A reliable definition of good teaching, a communal understanding of the definition, skilled and trained evaluators, and a feedback loop that provides shared understanding of current performance and a sense of a direction to improve (Danielson, 2011).

Teacher Observation: A practice in which a trained evaluator uses "observation tools that are standardized and validated against student outcomes. Educators, mentors, and administrators can know that they are making comparisons on an even playing field when noting strengths and challenges across classrooms, and they can know that the behaviors they are observing and noting are directly related to student growth and development" (Stuhlman, Hamre, Downer, & Pianta, 2010).

Teacher quality: A conglomeration of traits, skills, and knowledge that an instructor brings to teaching. Research suggests these qualities are most effective in improving student achievement: "strong content knowledge related to what is to be taught; knowledge of how to teach others in that area (content pedagogy) and skill in implementing productive instructional and assessment practices; understanding of learners and their development, general abilities to organize and explain ideas, as well as to observe and think diagnostically; and adaptive expertise that allows teachers to make judgments about what is likely to work in a given context in response to students' needs" (Darling-Hammond, 2010, pgs. 2 - 3).

Teaching quality: An examination that looks at strong instruction, specifically informed by "the demands of the discipline, the goals of instruction, and the needs of students in a particular context" (Darling-Hammond, 2010, p. 3). Teaching quality combines teacher quality and "the context of instruction", which include the following: "the curriculum and assessment systems that support teachers' work, the "fit" between teachers' qualifications and what they are asked to teach, and teaching conditions" (Darling-Hammond, 2010, p. 3).

High yield strategies: "Classroom techniques that have research supporting their utility at enhancing student achievement" (Marzano, 2009, p. 1).

Underachievers: "Students who exhibit an observable discrepancy between expected achievement as measured by a comprehensive test of cognitive or intellectual ability and actual achievement as measured by class grades, teacher evaluations or standardized achievement tests" (Mohnacky, 2008). In this study, measurable underachievement is defined as students in a specific class with a grade of 75% or below.

High Achievers: Students who "earn high grades on assignments that challenge" (Mohnacky, 2008). In this study, high achievers are defined as students in a specific class with a grade of 85% or above.

Classroom Climate: The "perceived quality of the setting, which emerges in a somewhat fluid state from the complex transaction of many immediate environmental factors (e.g., physical, material, organizational, operational, and social variables)." (Adelman & Taylor, 2005, p. 1).

NMTEACH Observation Rubric: The list of qualities adapted from Charlotte Danielson's work by the Public Education Department of New Mexico in 2014 a trained evaluator will observe in a classroom observation. These ten qualities exist on a five point rubric ranging from ineffective to exemplary. The complete NMTEACH Observation Rubrics are in Appendix A.

Limitations

The primary limitations of the research are a direct result of the subjects studied. The umbrella of the study is teacher evaluation as a means to improve student achievement. The specific domains of the evaluation system are "Creating an Environment for Learning" and "Teaching for Learning." Research in teacher evaluation describes the need for multiple observations as a means to ensure the accuracy of teaching practices overall (Marzano, 2007), yet the most the researchers discuss as student feedback is information gathered from surveys (Sheehy, 2012; Butrymowicz, 2012; King, 2007). In addition, research in the area of best teacher practices suggests a high correlation of best practices to student achievement when used correctly at the correct time and under the correct circumstances. These correct times and circumstances are not yet known, so the scientific information about what is best still requires an art to

know when and where. Therefore, the impetus of the study, the lack of feedback from those most aware and conversant in what teachers do and the effects of their efforts, is its limitation: there is no research of speaking with students to ascertain what is working and not working and why.

In addition, I am seeking feedback from underachieving students who typically do not self-advocate. Underachieving students in the categories studied are likely to default to themselves to blame for their underachievement instead of reflect on the wholeness of the situation, blame others, lack knowledge of themselves as learners and struggle to discuss their abilities and needs, not know with whom to speak to get assistance, not have received coaching or teaching in self-advocacy, and be passive in their education because they do not believe they can enact meaningful change for themselves (Supporting Students with Disabilities, 2004). The limitations in gaining feedback from these students might require additional conversations or means to validate any feedback in order to encourage insight.

The qualitative research study is also limited by the restrictions of performing the study with the NMTEACH Observation Rubric, adapted from the work of Charlotte Danielson. This particular limitation is not that disconcerting, however; her researched practices are very similar to those of the other major researcher in this area, Robert Marzano, and seek to understand the dominant research-based effective practices in the field of education. Still, this particular issue is worth addressing for another reason as well. Teacher observation is predicated on research of best practices. Danielson and Marzano are very specific about these practices as the best teaching; however, they are unable to correlate a specific strategy with a specific outcome.

In addition, I believe that there is a limitation an observer has with multiple classroom observations, usually three or four a year. Simply, an observer sees that a teacher either can or cannot use high yield strategies effectively, and multiple observations show that a teacher is able to perform well multiple times. Unfortunately, neither option provides proof that a teacher is using best practices daily or that these practices yield the desired outcomes. The conversations I will hold will be at a specific time in which certain experiences could dominate the thoughts of the student because they are most recent, so I will need to focus students beyond the most recent activities of the class to the totality of experiences.

There are additional limits to this study. Teachers do not trust students' abilities to determine teachers' effectiveness; therefore, they will have a difficult time trusting student feedback as valid and meant to improve practice. One reason for this distrust is that the observation protocols have a very specific vocabulary that is not part of a student's lexicon, so students will need some clarification to focus on aspects of teaching and learning that need explaining. Another reason is teachers' belief that students wish to use evaluation to get back at teachers, even though recent research suggests students want teachers' best so that students can succeed at a high level (Birch, 2012).

In addition, observation, by its nature, is limited as a feedback tool to the number of and timing of observations. For example, if an observer were to observe six times in a year and see strengths in most skills within eight observation categories, is that an accurate portrayal of the teacher's instructional skills? Does it mean the teacher is weak in the remaining two categories, or is the finding a function of the timing or ability of the observer? The uncertainty of the answer to that question means additional valid feedback

must be found to provide teachers with a more comprehensive feedback that can help improve their teaching.

Delimitations

Although my focus is on underachieving students, I am not interviewing each of the students in this cohort; rather, I am attempting to interview six students total. In addition, I am interviewing a student with each characteristic who is achieving (a grade of 85% or above) to determine if these pairs offer distinct insights from each other and if the two groups as a whole generate important insights.

The second delimitation is my choice to interview students in only one class, but it is an honors, two-semester class, required of each junior. The rigor of the class is part of the school's college preparatory mission; thus, it requires each student to take this class. This specific class is team taught, and it asks students to perform various and varied student learning activities. The teachers work to provide for the specific development of and self-evaluation of twenty-first century skills, long-term collaborative research projects, individual skill and content-based assessments, field work, ACT testing, academic vocabulary development, and specific science skill building assignments. This situation provides many differentiated means to access learning with teachers available for tutoring, and assignments accommodated and differentiated as needed. Although the students will only discuss their experiences in one class, it is a class rich in differentiated opportunity and variety of skill and content development. Since this class provides a snapshot of highly effective strategies, it provides an opportunity for me to ask students in the same environment what is not working for them and why.

The additional delimitations arise from my previous role in the school as Principal and my role as evaluator and researcher. This role allows me to know that this classroom is highly effective. The reason I chose them is they requested the information as they seek additional insight into those who struggle in their class. They will sign a consent form with me that reassures them that this study is for research purposes. The students' names will remain anonymous as will their feedback, and the consent their parents' sign will allow them to leave the study at any time with no loss or punishment to them. The other obvious delimitation is interviewing students who are typically not asked to discuss classroom experiences. Since we are only at the beginning of research about the effectiveness and validity of student feedback, there is little expectation for meaningful feedback on instruction. The expectation that does exist says that students in more rigorous programs offer more meaningful feedback; therefore, my expectation is for students to provide some insight into instruction, specifically on a teacher's ability to communicate, use questioning techniques, use assessment, and engage students in learning. The literature has no direction on what, specifically, these students will say, but it does suggest that the observation protocol I use lists best practices that most students agree are the practices of successful teachers (King, 2007).

The Promise of Student Feedback

While there is limited study regarding the validity and reliability of student feedback, the little information that does exist is promising. One study evaluates students' ability to determine if their needs are being met by their teachers. This study included 51 principals from elementary, middle, and high schools and the summative evaluations of teachers by these administrators. The student evaluations produced

"virtually the same ratings" as principals did showing that student evaluation supported
the findings of experts (King, 2007, p. 3). In another study in Illinois, Linda Stroh
compared university professors' and high school classroom teachers' evaluations of the
performance of student teachers to student evaluations and found results that were very
similar (King, 2007).

Not only did students' evaluations calibrate well with those of experts; they also
offered additional information that helped with the overall evaluation. Students were
asked to list the teaching traits most important in helping students succeed. Students
most wanted teachers to give examples, to plan lessons, to know the subject matter, and
to know how students learn. This particular study correlates well with other surveys from
experts about important teacher traits. Another study in North Carolina yielded the same
results as those of students' expectations agreeing with best teaching practices (King,
2007). These are small studies, but they are leading to promising conclusions that
suggest students know what effective teaching is and can identify it when they experience
it.

In sum, these studies lead to the following conclusions that could use more study:

1) students are often good judges of what constitutes good teaching

2) student evaluation of teaching correlates well with other expert evaluations,
   and

3) students are sometimes better judges of the teaching necessary for high
   academic achievement than are principals or the teachers themselves (King,
   2007).

Significance of the Study

This study is significant because it is timely and it pursues insight where there has been little previously. First, current New Mexico school reform focuses on two improvements: Common Core curriculum and teacher evaluation. This study looks at an essential aspect of evaluation, teacher observation, in a highly effective classroom to determine why some students are not succeeding. What currently exists is an evaluator who observes and speaks with the teacher. Students rarely provide feedback through a survey.

This study wants to understand what is not working for students and what they can say about it by asking students directly about their experiences. There is very little research on student feedback in general and almost none on student interviews; therefore, this study seeks to use this methodology to determine what additional feedback these discussions could provide to improve evaluation in order to improve student achievement. The research question is cut in two halves: What perspectives can students provide about what influences their achievement in the classroom? This first question helps me understand what strengths and challenges the students bring with them that might influence anything they do in class. How do students' perceptions of teachers' expectations, behaviors, and attitudes impact these students' success? The second question looks closely at the effect of the students' experiences in the classroom by asking how students' perceptions of teachers' expectations, behaviors, and attitudes impact these students' success. While there has been significant research observing what teachers do and the effect on achievement, this study seeks the next step by asking students what is working and not for students who are and are not achieving. This work explores an as yet unexamined niche by asking the opinions and experiences of those in

the achievement gap. Since the goal of reform is ultimately to close this gap, I see this research as the beginning of an important direction in teacher evaluation.

Summary

Teacher evaluation is a major strategy in school reform because improving teacher performance has a strong likelihood of increasing student achievement. States are adopting different evaluation systems, and all of them include a teacher observation protocol because more effective teachers' instructional practices lead to higher student achievement. Evaluators are tasked to observe a number of categories of effective practice and determine how effective the practices are. Statistically, improving these practices could lead to the closing of the achievement gap, a persistent need in American education.

In my experience, however, there are still students who underachieve despite the presence of teachers' highly effective practices. I think it is imperative to ask the students who are not achieving about their experiences and compare their insights with those of similar characteristics who are achieving to determine what insights can be provided to teachers to help them be more effective. While there is currently very little research in the area of student feedback, the research that exists is promising. It has been shown to be as valid and reliable as the expert in the field and is the reason for my optimism in undertaking this research.

Chapter 2

Literature Review

Introduction

This chapter will explore what we know about robust teacher evaluations and observations leading to increased student achievement, what we know about student feedback informing this process, and what roles school and classroom climate play in influencing student engagement and achievement. This chapter will consist of five sections. The first will provide a brief history of teacher evaluation up to 1960, a time when significant ideas that inform current practices were introduced or implemented. It will provide a brief background that highlights the intense transformation this educational practice has undergone. The second section summarizes the past fifty years of evaluation systems and its focus on structured systems and discusses qualities of these specific systems. Despite a report to the contrary that began this period, research will show that teachers' practices can have a very positive effect in improving student achievement. The third section looks at reflective practices that help the evaluation process be successful. In doing so, it will point out that evaluation is a process that needs to be performed effectively in order to have a positive effect on teachers. The next section looks at the limited but promising research available about student feedback. It will show the reason for optimism for pursuing this particular type of study, even though there is little research performed in this area. The final section will analyze the effect of school and classroom climate on student achievement.

Teacher Evaluation up to 1960

The process of evaluating teachers traditionally reflects the history of education; what evaluators have sought in teachers mirrors what society has expected from

education at that time. As early as the 1700's, education was not a distinct academic discipline; instead, it relied on clergy or government to determine what should be taught and in what way. Without a structure, evaluation was as varied as the evaluators (Marzano, Frontier & Livingston, 2011).

It is important to note that evaluation did not begin with any formalized structure. The first documented attempt occurred in in 1792 when William Farish provided a quantitative mark to students' assessments. This action allowed for students to be ranked objectively and comparatively and for evaluation to occur because it was the initial step in developing psychometrics and pushed assessment toward factual evidence of learning. Interestingly, the effect of this work was felt most strongly in Great Britain, which reformed education and evaluation during this time. There were recommendations that students' attainments on examinations of reading, spelling, writing, and arithmetic should decide teachers' salaries (Hogan, 2007). Although the work by Farish is often seen as the beginning of program evaluation and by relation teacher evaluation, it is not work that directly influenced teacher evaluation in the United States for well over one hundred years. As a result, there is limited research available for much of this time period. Since the goal of this review is to focus on the work that influenced current practices and thinking about effective teaching practices, I will focus the review predominantly on this information.

The beginning of the 1800s focused on more complex school systems, specifically in areas of industrial growth, cities. These industrial organizations sought specialization, and schools also looked for teachers with abilities in specific disciplines. The Principal, the de facto evaluator, assumed administrative duties, and evaluating was one of them.

Initially, there was little training or education to help the people who were thrust in this role. This movement that began in large urban districts spread to suburban and rural areas. Although some clergy evaluators still remain today, by the mid-1800s teaching was beginning to be understood as more complex than clergy could supervise. The focus of evaluation became instruction, even though there was little training about the specifics of effective instruction. While some believed this training could occur in one day, this new focus signaled the onset of formal education and then "a comprehensive approach to developing teacher expertise" in the United States (Marzano, Frontier & Livingston, 2011, pgs. 12 – 15).

Some believe this focus began in earnest with the publishing of *The Search for Great Teachers* in 1896 by H.E. Kratz who asked about 2,400 students from grades two through eight in Sioux City, Iowa, to describe what best teachers do. He believed that he could determine characteristics and a benchmark from which to judge all teachers. The research, however, found the two best characteristics were helpfulness and personal appearance (McNergney & Imig, 2013), so its results are not a major influence on current work in this area.

The Period of Democracy versus Scientific Management

The latter part of the 19th century and early part of the 20th century were filled with two concepts of education that did not always agree. The first philosophy was explained best in the writings of John Dewey who saw democracy as a goal of human progress. As a result, the teacher does not exercise authority as "a manifestation of merely personal will; the teacher exercises it in … the interests of the group as a whole" (Dewey, 1936, p. 23). "He argued that schools should be organized in such a way that students can practice citizenship and further develop the ideals of democracy." (Marzano,

Frontier & Livingston, 2011, p. 16). This movement was filled with ideas like the belief that "the school was a fundamental lever of social progress and reform" (Ravitch, 2000, p. 58).

The scientific management movement began with Frederick Taylor. He believed that evaluators could determine the most important behaviors of teachers and measure these behaviors to improve teachers' production. "These tasks are carefully planned, so that both good and careful work is called for in their performance, but it should be distinctly understood that in no case is the workman called upon to work at a pace which would be injurious to his health. The task is always so regulated that the man who is well suited to his job will thrive while working at this rate during a long term of years and grow happier and more prosperous, instead of being over-worked. Scientific management consists very largely in preparing for and carrying out these tasks." (Taylor, 1910, p. 2). These ideas took root quickly in colleges of engineering and business and eventually in K–12 education.

Edward Thorndike took up the mantle of a scientific approach to education, and Ellwood Cubberley (1929) applied these ideas to education, comparing the management of schools to the management of factories: "Our schools are, in a sense, factories in which the raw products (children) are to be shaped and fashioned into products to meet the various demands of life. The specifications for manufacturing come from the demands of twentieth century civilization; thus, it is the business of the school to build its pupils according to the specifications laid down." (p. 338). Adding to Cubberley's ideology, William Wetzel "recommended three components as the basis for scientific supervision: the use of aptitude tests to determine the ability level of each child; the

establishment of clear, measurable objectives for each course; and the use of reliable measures of student learning" (Marzano, Frontier & Livingston, 2011, p.17). Although established eighty years ago, these three components of this movement remain expectations in the more research-based components of the second decade of the 21st century.

The Cubberley and Dewey movements were considered antithetical when instituted, although, today, that dichotomy is not as apparent. There is currently an emphasis on standardized tests in conjunction with a focus on the interpersonal development of the student who should have democratic values. "The two perspectives are not innately incompatible. One can use data for feedback but still maintain the goal of an education system that fosters democratic ideals. Nonetheless, the two perspectives were not described or perceived in a fashion that allowed for integration." (Marzano, Frontier & Livingston, 2011, p. 17).

Post–World War II

After World War II, teacher evaluation moved away from the scientific approach to look at teachers as individuals. As a result, evaluation emphasized both the development of teaching skills and the individual emotional needs of each teacher. As early as 1946, a successful supervisory model "included (1) democratic ideals, (2) opportunities for initiative, (3) understanding human limitations, (4) shared decision making, and (5) delegation of responsibility [and suggested] the school administrator … is gaining the courage to … utilize the force and creativity inherent in the democratic process" (Marzano, Frontier & Livingston, 2011, p. 20).

During this time, some researchers began to look at student achievement as a means of determining teacher quality. These people found no correlation between

teacher qualities and student learning. Domas and Tiedeman reviewed more than 1,000 studies of teacher characteristics in 1950 and could find no data to direct evaluators. Later researchers would suggest several reasons for the failure of these efforts. One of the problems was that the analysis focused on average measures and did not account for specific categorical differences. In addition, the achievement tests were typically not created to depend on a teacher's personal attributes like education, intelligence, gender, age, personality, or attitudes (McNergney & Imig, 2013).

When these efforts did not yield results that could improve teaching practice, efforts moved toward identifying effective teaching behaviors that could lead to increased student achievement. The goal was to describe clearly and unambiguously exact teaching behaviors and connect them to student learning, the same standardized tests that were questioned previously. Occasionally, researchers conducted experiments to link specific teaching behaviors directly to student learning. The hope of this work was that identifying specific behaviors could lead to meaningful evaluation that would witness the presence and frequency of said behaviors (McNergney & Imig, 2013).

As the evaluative role combined the scientific and democratic approaches after World War II, the list of duties was so onerous as to miss the spirit of the democratic ideal (Ravitch, 2000). The list of supervisory duties included the following: "the curriculum, teaching personnel, the teaching/learning situation, the emotional quality of the classroom, resources and materials of instruction, auxiliary functions including working with the school lunch service, attendance, distribution of textbooks, public relations, working with cooperative groups and agencies, … individual meetings with teachers, faculty meetings, business meetings, social meetings, workshops, other

committee meetings, … attending student placement conferences, observing in a
classroom, working with parents and principals, completing paperwork, meeting with
various school committees, attending student conferences, recruiting new teachers,
meeting with various professional organizations, doing demonstration lessons, and acting
as a resource to others in the organization" (Marzano, Frontier & Livingston, 2011, p.
20). Even though the performance of all of the tasks on the list of duties was
counterproductive to realizing the democratic ideal of shared governance, this period did
produce a strong sense that teacher observation needed to be one of the duties of the
supervisor, thus setting the stage for the modern emphasis on supervision as a
combination of the scientific and the behaviorist perspective (Danielson & McGreal,
2000).

Teacher Evaluation from 1966 to the Present

I recognize that some of the work previously mentioned of identifying teacher
behaviors occurred after 1966. While there is no natural break from the pre-modern
period to the modern period, I chose to split the analysis about the time of the Coleman
Report (1966) because it questioned whether teachers could have any significant effect on
student learning. This Federally-sponsored research looked into the effect of numerous
factors on student achievement, and it was specifically interested in reasons minority and
poor students did not achieve at the same levels as reasonably well to do White students.
This report called into question any effect teachers have in promoting or producing
student achievement (Kiviat, 2000).

The remainder of the period was filled with a series of systems that focused on
"supervision skills and classroom observation techniques" (Danielson & McGreal, 2000,

p.13). The period also saw the publishing of reports that questioned the effect of evaluation systems, especially because many of them did not implement with fidelity the research-based dictates of the more developed systems and ended with an explanation of the work of Charlotte Danielson who created the contemporary system and the one I will study that combines the teaching process and evaluation.

The Coleman Report

The emphasis on teacher supervision faced a hurdle with the release of the Coleman Report, which suggested that teacher evaluation is not that important because teachers do not strongly affect student achievement. The 1966 *Equality in Educational Opportunity* report, commonly called The Coleman Report, claimed that race and poverty predetermined success. Using data from over 600,000 students and teachers across the country, the researchers found that academic achievement was less related to the quality of a student's school, and more related to "the social composition of the school, the student's sense of control of his environment and future, the verbal skills of teachers, and the student's family background. As a work of sociology, the Coleman Report was full of subtleties and caveats, but the mass media and makers of policy focused on one prediction--that black children who attended integrated schools would have higher test scores if a *majority* of their classmates were white" (Kiviat, 2000). A painful outgrowth of the study "implicitly devalued the importance of the curriculum, teachers, and standards of learning" (Ravitch, 2000, p. 415). At the time, the results provided strong proof that schools and teachers make little significant difference in the academic achievement of students.

It is not surprising, then, that teacher evaluation through the 1960's was relatively casual with an emphasis on teacher traits like "voice, appearance, emotional stability, trustworthiness, warmth and enthusiasm" (Danielson & Greal, 2000, p. 13). Districts used a system that allowed administrators to record instances of good teaching and learning situations. Some of these included "desks in straight rows, legible teacher penmanship, and artfully designed bulletin boards" (Aseltine, Faryniarz, & Rigazio-DiGilio, 2006, p. 3). When looking for teaching practices, most district evaluators looked for what they considered good teaching. Typically, these practices were the same ones the administrators used when they were teaching. As a result, evaluation was mostly about the classroom environment and teacher enthusiasm. Although there are some correlational data that teacher enthusiasm connects to student achievement, there is no convincing evidence that this trait can act alone (Danielson & McGreal, 2000).

The Goldhammer Model

By the late 1960's there were two distinct efforts to improve teaching, and thus, evaluation. Clinical supervision, created by a group of researchers from Harvard led by Robert Goldhammer (1969), had teachers set goals and explain purposes for assessments. "The process involved a purposeful, symbiotic relationship between practitioner and resident, where observation and discussion drove both parties to higher levels of growth and effectiveness" (p. 54). Goldhammer (1969) developed a five part system of supervision meant to encourage supervisors and teachers to work together. The five parts are a pre-observation conference, a classroom observation, analysis of data, a supervision conference about the data, and a final analysis about the lessons of the entire process.

These five parts taken together as a whole imply that teachers continue professional development throughout their career, meaning they continually try to improve practice.

Clinical supervision devolved from Goldhammer's original concept that "what is to be observed is the holistic practice of teaching: the interaction of the teacher and student related to student learning. The five phases of the clinical supervision process were intended to be the vehicle to disclose effective instructional practices" (Marzano, Frontier, & Livingston, 2011, p. 21). Soon, the five phases became individual items to check off on a box, and the idea of collaborative dialogue disappeared. What might have caused the problem was Goldhammer's not listing specific effective instruction techniques because he did not believe the evaluator should have "any preconceived notions of what constitutes effective teaching" (Marzano, Frontier, & Livingston, 2011, p. 22). As Goldhammer (1969) said, "Since I have collected as many data as possible in order to alleviate unconscious selectivity, I must now, ex post facto, invent categories of some kind. I must organize the data into classes of one sort or another in order to talk about them. … Categories of behavior have no objective existence of their own; they do not exist independently in the real world; I make them up" (p. 95). While Goldhammer envisioned a system of rich dialogue without preconceived notions, his system disappeared, with the exception of the five phases, which provided a structure for future evaluation systems.

The Hunter Model

The second model of this time, Madeline Hunter's, focused on "external criteria, purportedly based on empirical research in educational psychology, and emphasized the supervisor's role as objective observer" (Aseltine, Faryniarz, & Rigazio-DiGilio, 2006, p. 3). She created a seven-step model of a lesson that soon became the standard of

evaluation at this time. The seven steps were the following: an anticipatory set to help students focus on what they need to learn, an objective and purpose that focus the teacher and the student on what is to be learned, an input portion for the lesson for what students need to learn to master the material, modeling for students' examples of what to do or how, checking for understanding before students try to apply knowledge, guided practice for teachers to have an additional means to check for understanding and students to ask questions, and an independent practice for students to showcase what they know (Wolfe, 1987, p. 70). This seven step behavioristic view became the prescription for teacher evaluation and was called "mastery teaching", a seven category prescription of each behavior or activity a teacher undertakes with each unit to be effective. It leads to "instructionally focused" staff development that is still in use today (Danielson & McGreal, 2000, p. 13).

The two post World War II methods responded to the Coleman Report, which suggested that teachers have little effect on the achievement of students. Much to Goldhammer's chagrin, his system, which he hoped would be collaborative, became prescriptive as evaluators wanted to know what good instructional strategies were so that these leaders could look for them in teachers' practice. Hunter's evaluation model created a mastery system that was even more prescriptive and provided a framework in which all teachers could work to be effective. Although it was not noted at the time, there was still an importance set from these models that "clearly confirmed the critical role that teachers play in student learning" (Danielson & McGreal, 2000, p. 14).

Glatthorn, McGreal, & Glickman

In the mid-1980s, three prominent alternative perspectives arose in reaction to mastery teaching. William Glatthorn suggested a teacher's career goals and personal decisions about development should inform evaluation. Thomas McGreal offered a range of options that were based on how much or how little experience a teacher has. He suggested that there were tiers of advisory programs for those who need help to continue employment or for those who need a standard evaluation. Carl Glickman agreed with others that the most important goal of supervision was to improve instruction and provided a multi-step system to do so. (Marzano, Frontier, & Livingston, 2011). Clearly this era saw substantive arguments against the rigid applications of the two previous models: clinical supervision and mastery teaching. This era also set the stage for an increased emphasis on teacher evaluation.

The RAND Study: A Look into Evaluation Practice

By this time, there were several models of evaluation, all claiming to be effective in improving teaching practices. The RAND Corporation commissioned a study (Wise, Darling-Hammond, McLaughlin, & Bernstein, 1985) to determine what practices were actually occurring in American schools. The report had two interesting findings: most systems were "didactic and formulaic in nature and supervisory and evaluative approaches that were more developmental and reflective were sometimes viewed as not specific enough to enhance pedagogical development. Indeed, the report stated that teachers were the strongest advocates for more standardized processes" (p. 16). The report found four other problems. Most people surveyed stated the following: "principals 'lacked sufficient resolve and competence to evaluate accurately,'' teachers resisted feedback, practices were random and lacked uniformity, and evaluators were not well trained (Wise et al., 1985, p. 22).

The study did make several suggestions that informed future evaluation systems. It suggested a "system must suit the educational goals, management style, conception of teaching, and community values of the school district" (Wise et al., 1985, p. 66). The commitment to the system needs to come from the top administrators and must "outweigh checklists and procedures" (p. 67). In order to ensure that it is committed, the district "must decide the main purpose of its teacher evaluation system and then match the process to the purpose" (p. 70). That purpose needs to be sufficiently focused to give the system "utility, which depends on the efficient use of resources to achieve reliability, validity, and cost effectiveness" (p. 73). The recommendations signaled a change from prescription to adaptability, and the study suggested districts must decide the purpose of evaluation to be thoughtful about how working with teachers helps the district meet its goals and fits its culture.

The Danielson Model

The RAND study caused educators to become more intentional about adopting quality frameworks that met the standards put forth in the study. Simultaneously, teachers "felt more pressure to help students attain more complex outcomes … [such as] critical thinking, problem solving, lifelong learning, collaborative learning, and deeper understanding" (Danielson & McGreal, 2000, p. 14). As a result, educators also began to study what those understandings look like, how to structure teaching and assess those understandings, how to predict misunderstandings and structure teaching to mitigate them, and how teachers will design lessons and units to evoke maximum understandings from students (Wiggins & McTighe, 1998).

The "seminal work on supervision and evaluation was published by Charlotte Danielson and was based on her work with the Educational Testing Service … and must

be the reference point for any new proposals regarding supervision and evaluation" (Marzano, Frontier, & Livingston, 2011, p. 35). Her work combines Hunter's behaviorist work about the teaching process with Goldhammer's work for supervising and created a complex process derived from cognitive learning theory (Marzano, Frontier, & Livingston, 2011 & Danielson & McGreal, 2000).

Danielson's model (written originally in 1996) also spoke in the language of the profession and provided a framework for self-assessment that was structured and reflective at the same time. It broke down into four levels of practice: planning and preparation, creating an environment for learning, teaching for learning, and professional responsibilities. It stated that the framework included "each of the 76 elements of quality teaching broken into four levels of performance (unsatisfactory, basic, proficient, and distinguished)" (Danielson, 2007, p. 69). The Danielson model provided sufficient specificity as a foundation to sustain school change, link curriculum and assessment, and enhance student achievement by improving teachers through evaluation (Marzano, Frontier, & Livingston, 2011; Danielson, 2002; Carr & Harris, 2001; Johnson, 2005; and Pollock, 2007).

The Turn of the Century

Subsequent to the presentation of the Danielson model, there was an increased emphasis on the teachers' abilities to cause student achievement. Therefore, teacher supervision (often called observation) has been replaced with evaluation (a judgment on effectiveness of practices) and teacher behaviors have become secondary to student achievement (the proven results of effective practice). As educators have become more adept at measuring student achievement, the possibility that a rigorous and comprehensive evaluation process could improve student achievement becomes exciting

for educational leaders and economists as well (Danielson & McGreal, 2000 &

Hanushek, 1994).

Two More Reports on Evaluation Practices

In spite of research as to the complexity of evaluation models and the promise of

their possibility to predict student achievement, in 2008, Toch and Rothman's report *Rush*

to Judgment offered an additional criticism of teacher evaluation. It stated current

supervisory and evaluative practices were "superficial, capricious, and often don't even

directly address the quality of instruction, much less measure students' learning" (p. 1).

They bemoaned a profession that looked more at inputs like formal credentials and not on

"instructional effectiveness and student achievement." Even though No Child Left

Behind required annual evaluations around teacher quality, "they found only 14 states

that required school systems to do annual evaluations of teachers." They also commented

on the sometimes perfunctory nature of these systems that "may not even reflect teacher

effectiveness in the classroom. Michigan State professor Mary Kennedy is quoted as

saying, "'in most instances, it's nothing more than marking satisfactory or

unsatisfactory'" (p. 2).

In 2009, another study that questioned the value of observations was published

titled *The Widget Effect* (Weisberg, Sexton, Mulhern, & Keeling, 2009) that provided

additional criticism of teacher evaluation practices in the United States. The report states

that the current evaluation system is a failure because it does not provide "accurate and

credible information about individual teachers' instructional performance" and, therefore,

"sustains and reinforces a phenomenon that we have come to call the Widget Effect, the

tendency of school districts to assume classroom effectiveness is the same from teacher to teacher" (p. 4).

The research in this project provides greater detail and specific actions to improve the evaluation process. It explains that failure to provide meaningful evaluation also keeps a school or district from providing for the needs of each teacher. This research states that "73 percent of teachers surveyed said their most recent evaluation did not identify any development areas, and only 45 percent of teachers who did have development areas identified said they received useful support to improve" (Weisberg et al., 2009, p. 6). The report "suggested a complete overhaul of the teacher evaluation process: with frequent classroom evaluations (at least three), better training for evaluators, and an understanding for teachers that not all are top performers" (p. 6). In sum, the criticism is that "evaluation systems fail to differentiate performance among teachers. As a result, teacher effectiveness is largely ignored" (p. 6). As schools and their evaluation systems enter the second decade of the 21st century, research has shown some evaluation systems are broken and those systems that are good are rarely implemented well. Most research suggests that there are existing systems that can work, but there is a strong need to train evaluators, change cultures so that teachers expect valid evaluations, and link evaluation to student achievement (Toch & Rothman, 2008 & Weisberg et al, 2009).

Best Practices in Evaluation

Despite a rich history of more complex and comprehensive evaluation processes, there are several reports that question the implementation of these processes. There are, however, some examples of fully implemented evaluation processes as well as evidence

of positive effects that result from this work. This section will examine what is currently happening in places where teacher evaluation is being implemented effectively.

A Brief History of Previous Systems

The Coleman Report findings suggested in 1966 that poor and minority students cannot achieve academically unless they learn with white students who have middle class cultural advantages of educated parents or an educated community as a support group (Kiviat, 2000). This report suggested, then, that teacher quality did not matter for poor and minority students. By association, then, teacher evaluation would not be that important because teacher quality does not lead to student achievement. By 2001, however, the Federal program *No Child Left Behind* required schools to increase the achievement level of all students and disaggregated data to identify achievement levels by all categories. Ultimately, this program determined that all students must be proficient on a standardized assessment by the year 2014. While the Coleman Report suggested this goal is not attainable, more recent research has shown "the single most influential component of an effective school is the individual teachers within that school" (Marzano, 2007, p. 1). The No Child Left Behind program extended that logic to require, in a sense, that each student has an effective teacher so as to guarantee student achievement for each student.

There are many studies that quantify the influence of effective teachers on student achievement. The most valid studies seek to control for factors like previous achievement of students, socioeconomic status, ethnicity, gender, and class size. In one particular study, students who have a teacher evaluated at the 75th percentile in terms of pedagogical proficiency as opposed to a teacher at the 25th percentile will outgain

students by 14 percentage points in reading and 18 percentage points in mathematics. In addition, students who have a teacher at the 90th percentile as opposed to a teacher at the 50th percentile will outgain students by 13 percentage points in reading and 18 percentage points in mathematics (Marzano, 2007). In contrast to the results of the Coleman Report, these and other studies show that ethnicity and poverty do not have to determine achievement or under-achievement.

Research has provided information about what the most effective teachers do and the effect they can have in increasing student achievement. Others, like Danielson, have created blueprints and frameworks to evaluate teachers on the extent to which they utilize these practices (Aseltine, Faryniarz, & Rigazio-DiGilio, 2006, Danielson, 2007, Marzano, 2006). These systems are much more comprehensive than their predecessors in the previous centuries and provide major domains of teaching practice with several traits as part of each domain. Each trait is measurable along a rubric of multiple proficiencies ranging typically from ineffective to exemplary. With this new rubric, then, there is a range of qualities and excellences toward which a teacher can aspire, so evaluation can transform from a summative (either acceptable or not) process to a formative one that can help teachers achieve continuous improvement culminating in excellence. As opposed to previous methods that say a teacher either did or did not ask effective questions, these rubrics allow evaluators to judge the effectiveness of the questions and provide teachers with a continuum of improvement possibilities.

Teacher Training and Input Systems

Despite the lack of specificity, many policies about teacher quality have been written to improve educational outcomes. Although New Mexico adopted the three-

tiered licensure system largely to provide more income for teachers and entice them to remain in the career, the system also matched certain inputs of educators with educator quality. It correlates to teacher quality what is called the "three-legged stool" for quality assurance: teacher education program accreditation, initial teacher licensing, and advanced professional certification. As this process creates teacher learning across a career, some studies have concluded a 40 percent variance in achievement occurs with people who possess these inputs versus those who do not (Marzano & Waters, 2009). This variance, while significant, does not provide enough evidence that student achievement will improve simply because teachers attended an accredited program, were licensed, and studied for advanced professional certification. Thus, this plan is now becoming the foundation for better and targeted professional learning across the career.

Analysis of Implementation of Current Systems

In addition to what are called inputs, teacher training before the commencement of teaching, systems that analyze the effectiveness of teachers once they begin to teach are called evaluation systems. These systems typically have asked teachers to perform some act of reflection on professional practice and be observed at least once or twice a year to be teaching well. Recent criticisms of these systems (Toch & Rothman, 2008 & Weisberg et al, 2009) are harsh and are based upon the incredulity of the results: the high percentage of teachers who were effective in a situation when student achievement scores were low or dropped. For example, Michigan enacted a law in 2011 requiring more intense evaluation of teachers at a time when student achievement scores were dropping; the expectation of the law was that a significant number of teachers would be found ineffective. In a survey of ten large districts, however, 99.4 percent of the teachers were

rated as effective or highly effective after the more rigorous evaluation standards were in place. Less than one percent of teachers were rated ineffective or minimally effective with just .2 percent in the ineffective category (Education Trust, 2012). These results are even a little more alarming than other studies like *The Widget Effect* study that found satisfactory ratings ranging from 94 percent – 99 percent in the areas surveyed (Weisberg, Sexton, Mulhern, & Keeling, 2009).

A recent study performed in Cincinnati examines a teacher evaluation system that relies on multiple structured observations by experienced evaluators (Taylor & Tyler, 2012). This study suggests there are good reasons to expect a well-designed evaluation program could improve teacher performance immediately and over time. The results showed on the average that "a student instructed by a teacher after that teacher has been through the Cincinnati evaluation will score about 11 percent of a standard deviation higher in math than a similar student taught by the same teacher before the teacher was evaluated (Taylor & Tyler, 2012). Since the use of highly structured observations is relatively new, there is only a little evidence to determine that their implementation will improve student achievement; still, early research results are promising.

Better Evaluation Leads to Better Teaching

Currently, there are many strategies to improve teaching: performance pay, alternative certification, licensing exams, and professional practice schools. Reformers are just beginning to explore teacher evaluations (Toch, 2008). Robert Marzano's research indicates there are three commitments to school reform and suggests teacher evaluation is the second most promising because "how teachers make changes in classroom practices directly relates to student achievement" (Dessoff, 2012). The

historical problem as Marzano sees it is that evaluation is typically not about helping

teachers improve their craft. Often, teachers are expected to be excellent at every aspect

of teaching. In older systems, teachers either had a skill or did not. This system forces

teachers to be less than honest about their needs to achieve growth, and administrators do

not rate teachers in those areas and put teachers in a situation in which the area of greatest

need becomes ignored. As a result, the system becomes a façade (Dessoff, 2012).

The solution, Marzano claims, is to choose two or three strategies or skills on

which to improve.   For example, a teacher might choose to improve questioning

strategies that help students think more deeply about the subject and deepen their depth of

knowledge. When an evaluator visits the classroom, the dynamic and expectation change

because the teacher knows the evaluator is there to help the teacher improve on a goal.

The evaluator pays special attention to this and maybe one or two other goals for

improvement and provides feedback accordingly. This method replaces marking a

checklist that provides evidence of teachers' using strategies and helping them improve

how the strategies are used (Dessoff, 2012). This level of support and collaboration is

only possible with these new evaluation systems that provide a continuum of practice that

allow for reflection if teachers and evaluators see their job as a collaboration of

continuous improvement.

The Promise from the Teacher Evaluation System in Cincinnati

A study examined the effectiveness of the teacher evaluation system (TES) in

Cincinnati and its ability to produce accurate predictions on a teacher's ability to raise

student achievement. Those who conducted the study sought to show that a rigorous

evaluation system improved teaching and learning. Importantly, the study found enough

evidence to suggest that effective teachers use certain practices that are worth replicating in other practitioners (Kane, Wooten, Taylor, & Tyler, 2011). These practices discussed in the study are the very ones found in the previously mentioned NMTEACH Observation Rubric.

The TES program provided teachers and administrators with information about what practices lead to specific scores. The descriptions of practices and performance levels help administrators and teachers create maps to improve performance levels. While many evaluation programs have nothing to offer experienced teachers, a program like TES provides variations of improvement on a rubric that moves beyond proficiency to mastery. In sum, the study states strongly that there is enough evidence to suggest a robust and particular observation protocol can provide "critical information to teachers and administrators on what actions they can take to [raise student achievement]" (Kane, Wooten, Taylor, & Tyler, 2011).

So, what do effective teachers do and in what ways do they do it? Marzano's (2007) observation protocol says there are 41 traits to observe; Charlotte Danielson and Thomas McGreal's (2000) say 22. Instead of listing all of these traits, it is more instructive to state a series of assumptions about effective teaching as these will inform the reason I chose the class I did to perform my study:

- Students learn best when new knowledge is connected to prior knowledge; therefore, instruction builds on prior knowledge, addresses students' needs, and assesses to determine understanding and future instructional needs.
- Effective teaching challenges students to learn rigorous curriculum.

- Professional growth takes time and occurs within each individual with a reflective process.
- Changing behavior occurs before changing attitudes.
- Teachers should choose a piece of area to improve on that can be generalized to their practice (Aseltine, Faryniarz, & Rigazio-DiGilio, 2006).

For example, a Connecticut standard looks at a teacher's ability to ask good questions, and the observer would look for evidence of a teacher engaging students in this manner (Danielson, 2007). In perusing the list above, it is also clear that an evaluator will judge how much a teacher's behavior has changed, how much the teacher's curriculum has become more rigorous, and how much teachers are seeking improvement and reflecting on the success of these efforts.

Clarification about Observation

The research on teacher observation provides some assuring data as well as some telling gaps. Evaluators in New Mexico evaluate best practices adapted from Danielson's four domains of planning and preparation, the classroom environment, instruction, and professional responsibilities as part of its new evaluation model piloted in the 2012-13 school year and implemented in the 2013-14 school year. The evidence within these domains are observed within a five-step continuum of achievement that ranges from ineffective to exemplary. As mentioned earlier, these teacher activities and behaviors suggest research-based practices that have a high probability of leading to student achievement.

In addition, observation, by its nature is limited as a feedback tool to the number of and timing of observations. A recent study suggests that the traditional method of one person providing feedback is a shortcoming in that it "provides little guidance toward instructional improvement, and administrator feedback is vague" (Mahar & Strobert, 2010, p. 6). This study suggests that the information gathered through observation "was found to be significantly more effective in providing feedback that promotes professional growth" (p. 10) if it were a data point in a system that sought teacher improvement.

The Value of Collaborative Communication

When establishing a system, an important piece of its validity is communication. There are public aspects of an evaluation system that stem from being public institutions subject to statute as opposed to the private communication that is part of a teacher being an employee. Basic public elements include institutional goals, job descriptions, roles and responsibilities, standards of performance, and clear procedural guidelines. For the parts that are codified in law, it is important that the public knows so that there is confidence in the process (Stronge, 2008).

While there is a public element to teaching and evaluation, evaluations are traditionally summative and pro forma; therefore, little detail is typically communicated between teachers and administrators. In addition, systems rarely seek information from anyone other than an administrator. Newer evaluation protocols seek two-way communication that allows both sides to create an evaluation plan that includes improving skills and pedagogy. This collaborative expectation asks the teacher to increase expectations which in turn will more likely lead to an improvement in performance. A system with specific goals and expectations provides a means to

differentiate specific teacher needs in continuous improvement. When these items occur with systematic communication through a cycle, the focus can remain on "organizationally relevant improvement and performance" (Stronge, 2003, p. 8).

In higher education, there has often been an expectation that evaluation is a process that includes the observer. In this way, the observer pursues descriptive information to show the teacher what he or she is actually doing in class. Therefore, the teacher and observer discover judgments together. An observer gathers notes and asks questions that lead to a reflective component on which the team can collaborate. Typical questions ask if the visit was typical or atypical and whether the notes taken are an accurate reflection of a classroom. During a meeting, the teacher has already had time to reflect on the information. After discussion and consideration of the event, the evaluator can offer some judgment, but this only comes once the teacher brings personal reflections to bear on the communication (Wadsworth, 1988).

Higher education has provided additional insight into the feedback process. At Indiana University, for example, a program was created with individual teachers choosing goals they wished to achieve. Evaluators, knowing what teachers wanted to accomplish, were able to help teachers with their teaching. These evaluators did not hold teachers to a "hypothetical best way to teach"; rather, they worked to help teachers develop according to the style that worked best for them. This system could only work when both sides collaborated. In some ways teachers were more accountable for their teaching because they had to account for what they believed to be best and true and evidence those beliefs in all they did. This program found that teachers appreciated the program that expected and evaluated their professionalism, and evaluators found that the

conversations were fruitful in helping teachers develop who they were and what they were able to be (Flanigan, 1979).

Multiple Measures

In the media, the major focus of teacher observation is accountability for results of student learning. At the same time, teacher evaluation should include multiple measurements of teacher practice so as to be a fair measurement of what teachers actually do. At this time, education is at a transition period of redefining what evaluation can become. Historically, there were checklists of behaviors and actions teachers were expected to do: keep order, provide lessons, etc. These expected or predictable elements of teaching have not disappeared; they are a portion of an observation. In addition, a teacher's ability to plan, instruct, engage, deepen learning, assess, and work as a professional are what an evaluator now determines. And, these qualities in New Mexico are almost half of a teacher's evaluation.

In K-12 education, there are very clear protocols to follow for observation from 22 (Danielson) to 41 (Marzano) traits along four or nine categories respectively. The observations are not the total evaluation because evidence that a teacher is doing good things in a classroom does not mean that students are learning as they should. Indeed, high yield strategies, those that lead most often to student learning, do not always work and might cause learning loss if used at the wrong time. To put in other terms, evaluation needs to provide insight and accountability for both the use of research-based effective methods (the science of teaching) as well as the way and time in which they are used (the art of teaching) (Marzano, 2007).

The Inherent Limitation of Observations

As discussed previously, there is much to be gained when teachers and evaluators collaborate on a couple of goals. Still, the robustness of observation protocols provides more than a few traits to observe and rate. Therefore, there are questions about how to rate items that might not be part of the goals that a teacher will choose. If a teacher chose two traits on which to improve, there would still be twenty or forty traits on which to evaluate. To evidence all of these traits, evaluators need to perform multiple observations to evaluate this breadth and depth of a teacher's professional work (Aseltine, Faryniarz, & Rigazio-DiGilio, 2006, Danielson, 2007, & Marzano, 2006).

To sum: administrators ask teachers to choose a couple of goals; evaluators are expected to collaborate with teachers to help them reflect and grow while simultaneously holding teachers accountable for the other twenty to forty traits of an effective teacher. In addition, most teachers nationwide are implementing Common Core State Standards (CCSS), a movement with "the biggest implications in the areas of curriculum and assessment, [and an increased expectation that] teachers will have to acquire new instructional skills in order to bring the CCSS to life for their students" (Danielson, 2013, p. 1). In the best observation protocols, there is a range of qualities in a rubric that expect meaningful and trained judgment as well. The change that the Common Core represents is that observation should focus most strongly on "student engagement, which is defined as students who are intellectually active: they make suggestions, initiate improvements, monitor their own improvements against clear standards, and serve as resources to one another" (Danielson, 2013, p. 2). The assumption of most of these evaluations is still that an evaluator can provide a valid and reliable judgment on each trait through five to seven observations. Recent work in evaluation is continuing to develop a process of

accountability that includes teachers instead of judges them from a distance (Carr & Harris, 2001 & Johnson, 2005). In this system, evaluators are the sole source of data with few if any additional sources of evidence of a teacher effectively using these traits.

Student Feedback

The Rationale for Student Feedback

Some researchers have recognized that "performance evaluation for summative purposes of such a small sample of actual teaching practice yields little useful information for teachers on how to improve their teaching process" (King, 2007, p. 2)**.** To change that reality, administrators must not only meet the needs of district offices but spend more time helping teachers. The best way is to get teachers to try new methods of delivery and new strategies of teaching without threatening their job security. The study suggests that removing "the regime of formal summative evaluation" is necessary to help teachers become comfortable enough to take the risks of changing practice (King, 2007, p. 2)**.**

Some teachers suggest that while teachers are adept or at least habituated to providing feedback to students regularly, few teachers expect or want that level of feedback about their own work. According to one practitioner, the reason is fear of negative feedback and its consequences. This person overcame that uneasiness, sought additional feedback, and recognized that "the best feedback comes from students…. [She] started doing midterm evaluations, promoting them to students as a chance to have a say in how the course is run. [She] found this feedback infinitely more honest, detailed, and helpful than the end-of-course reviews, which come at a time when students have less incentive to be constructive in their criticism" (Wiggins, 2012). Receiving feedback

in time for a teacher to make changes during a semester is part of the movement toward a more formative evaluation process than has been traditionally summative. It allows for teachers to be reflective and change practice during a semester to determine the effectiveness of new strategies and encourages teachers to continue to seek improvement to increase student learning (King, 2007 & Wiggins, 2012).

Another researcher agrees with both the timing and the method for even clearer reasons. Simply put, "anyone who has tried a new teaching technique in the classroom realizes the complexity of educational research. What works for one teacher may not work for another. What worked in the 9:30 class may not work in the 10:30 class" (Lewis, 2001, p.1). The solution, then, is to continue to evaluate practices in the classroom and planning before teaching in the class. In addition to written responses like surveys from students, this practitioner is one of few who believes that it is essential to hold "informal conversations with students [to determine] what happens to students both in and out of the classroom" (Lewis, 2001, p.1).

Student Feedback in Higher Education

There is little research in the area of student feedback in the K- 12 arena. Higher education has been seeking student feedback for decades, and most institutions use student surveys as one piece of data to determine tenure. Temple University studied the accuracy of student evaluations on a series of nine effectiveness factors and found there was a strong correlation between professional evaluators' ratings with the students' ratings (Lamberth & Kosteski, 1981). Most high school systems, however, seek student feedback with little expectation of its predictive value. Some surveys ask questions of engagement for all students and availability and desire to help students. Unfortunately,

these are questions that are similar to the 1960's expectations of teachers. As students are expected to understand knowledge on a more complex level, it seems logical to expect students to know more about what teachers should do and that a formal process of interviewing can begin to discover the information an observer cannot.

The Promise of Student Feedback

One of the solutions posited in policies throughout the United States is to improve evaluation systems by taking student achievement into account as well as by improving teacher observation. Research by the Bill and Melinda Gates Foundation (2012b) proposes strong correlations to improved teaching performance when multiple sources are part of the process and when teacher observations are a central part of evaluation. Instead of the single observation, the research of this study states there are good reasons for multiple observations. For example, if an observer sees strong classroom management techniques during an observation, he might comment on this strength. If the observer sees this feature as dominant over multiple observations, he would rightly point to the strength of management abilities and discuss other dimensions to improve like more challenging and scaffolded instruction. In addition, multiple observations allow the observer to evidence several dimensions of an observation instrument differently from lesson to lesson. Therefore, multiple observations provide a much more reliable picture of the strengths and weaknesses of a teacher's complete practice than a single observation. "Still, a high-quality observation system entails at most a handful of classroom visits, while student surveys aggregate the impressions of many individuals who've spent many hours with a teacher" (Bill and Melinda Gates Foundation, 2012a, p. 1). If these observations were coupled with feedback from the students in the classroom,

the picture of a teacher's practice over an extended teaching period would be even more complete. (Jerald, 2012).

The Essential Role of the Observer

Observation cannot simply occur and be effective because it occurred. The observer needs an extensive training because poor observation practices are worse for teachers than no observation at all. Unlike previous forms of observation, the work of the observer is not just to provide immediate feedback from casual observation; it is also to provide some probing questions of practice that encourage a teacher's self-reflection. "The ultimate test of an evaluation system is whether a relationship of mutual trust exists between supervisor and the teacher…. The key to success is the amount of flexibility the supervisor has in working toward the particular skills, knowledge, techniques, styles, and so on that best fit that teacher's needs and interests" (McGreal, 1982, p. 1). In this way, the process does not deteriorate into the opinion of the observer; rather, the work is to understand the class in a continuum of instruction as understood across four domains or none categories of research-based practices and multiple applications within those domains. When an evaluator is competent at this level, fruitful discussions can become about extending teacher practices to future lessons instead of commenting on the existence or not of a certain behavior as a compliance measure. The process, then, aligns with cognitive psychology in providing immediate feedback for the teacher which creates meaning through a process of reflection and deep learning expected of students (Jerald, 2012).

A teacher is judged on the ability to create an environment of respect and rapport, establish a culture for learning, manage classroom procedures, manage student behavior

and organize physical space. In addition, a teacher is judged on the ability to communicate with students, use questioning and discussion techniques, engage students in learning, use assessment in instruction, and demonstrate flexibility and responsiveness (NMTEACH Observation Rubric).

The observer, then, becomes crucial in the process of evaluation as one with a significant amount of knowledge. Still, this process cannot be about what the observer knows. The MET project (Bill and Melinda Gates Foundation, 2012b) is an unprecedented large scale study that used multiple indicators to determine the effectiveness of teacher evaluation systems. It provided three key lessons for future research: "high-quality classroom observations will require clear standards, certified raters, and multiple observations per teacher;… combining the three approaches (classroom observations, student feedback, and value-added achievement gains) capitalizes on their strengths and offsets their weaknesses,… and combining new approaches to measuring effective teaching- while not perfect- significantly outperforms traditional measures. Providing better evidence should lead to better decisions" (p. 29). For this process to be valuable, it is important to distinguish the dual roles of observer: evaluator and collaborator. Since the movement of observation and evaluation over the past fifteen years has been more to improve teaching than offer a summative statement about whether a teacher is acceptable or not, the role of collaborator has become the primary one. Under the old summative role, the teacher plays a passive role and accepts a judgment of proficient or not. As mentioned earlier, well over 90 percent of teachers experienced acceptable evaluations, so the process is not a process at all; it is just a formality. To change this paradigm, observers need to create environments of discussion

and exploration of practice to realize the goal of improvement of instructional practice. As a result, the process is an exploration of practice in which the collaborator becomes a researcher to help the teacher explore new ideas (Wadsworth, 2002).

Some suggest there is a strong threat to the validity of observations with a collaborative observer that comes directly from the expectation of the process itself. Teachers know that the observer is part of a process in which the relationship is not collaborative by its very nature. Observation is simply part of the evaluation process that will lead to employment or not, and so the idea of collaboration is theoretically interesting but very difficult to create. It is also suggested that most evaluation instruments are inadequate because they try to parse activities into separate activities that are in practice interconnected. As a result, the evaluation of an observation into pieces is an artificial construct that might not take the dynamic of the teaching process into account; thus, measuring the interaction of the variables is critical to understanding a teacher's effectiveness (Foster, 2003).

Research on Student Feedback

While there is currently very little research in the area of student feedback, the research that exists is promising. It has been shown to be as valid and reliable as the expert in the field and is the reason for my optimism in undertaking this research. "Recently many policymakers and practitioners have come to recognize that—when asked the right questions, in the right ways—students can be an important source of information on the quality of teaching and the learning environment in individual classrooms" (Bill and Melinda Gates Foundation, 2012a, p. 1).

As previously mentioned, New Mexico follows a revised version of Charlotte Danielson's observation protocol. In her own work, she discusses an "evaluation system that incorporates the perspectives of others" (Danielson, & McGreal, 2000, p. 51). The belief that underlies this is that exemplary work is clear to each stakeholder, so performing this type of evaluation provides multiple points of comparison that should agree. Surveys from students, she believes, can provide a great deal of information. These surveys, she states, should be about the class, not the teacher and should discuss topics like how fairly students are treated in class and how clear expectations are for all students (Danielson, & McGreal, 2000).

Danielson suggests a limitation so students cannot use the feedback to harm a teacher personally. This method, however, limits students in their observations and feedback to compliance issues of teachers, not students' ability to explain teachers' challenging them to seek a greater depth of knowledge, a key component of college and career readiness expected with the adoption of the Common Core (The New Teacher Project, 2013).

Currently, many blogs and newspaper articles are asking for student feedback as part of teacher observation protocol. One article discusses the creation of a project through Harvard University to begin to understand how to harvest the information students can provide about teacher instructional practices (Sheehy, 2012). Another article reports that the state of Georgia is just beginning a process in which it will make student feedback part of teacher evaluation for students as early as five years of age (Butrymowicz, 2012). In high school, students spend the entire semester in a class with a teacher, but the observer spends a few hours with a teacher. Therefore, the study I am

proposing will gather information from students both to supplement observation data gathered by an observer and provide additional insight into the effectiveness of teachers to create more information into a reflective and comprehensive evaluation process.

Effect of School and Classroom Climate

One of the ten areas an observer rates in the NMTEACH Observation Rubric is the climate in the classroom, an area that students feel strongly as participants in the classroom. Since research suggests the climate of the classroom is an important indicator of student achievement, specific student feedback could lead to further insights to help teachers "improve." Teachers want to know if their students feel sufficiently challenged, engaged, and comfortable asking for help" (Bill and Melinda Gates Foundation, 2012a, p. 1). By contrast, the Bill and Melinda Gates (2012b) MET study looked at the effectiveness of classroom climate and found inconclusive results. The study found that climate was "unrelated to student achievement gains" (p. 10).

On a larger scale, "a substantial body of research shows that, for good or ill, a school's social environment has broad influence on students' learning and growth, including major aspects of their social, emotional, and ethical development" (Schaps, 2005). Research suggests that students who find the school environment to be supportive and caring are less likely than others to become involved in substance abuse, violence, and other problem behaviors. By contrast, "when schools fail to meet students' needs for belonging, competence, and autonomy, students are more likely to become less motivated, more alienated, and poorer academic performers" (Schaps, 2005).

There is a warning: some climates can affect student achievement negatively. Educators who compromise academic standards to preserve good personal relationships with poorer-performing students "[expose] low- socio-economic status students to

socially therapeutic—rather than intellectually demanding—values and activities, and
their school's efforts … may actually help to divert attention from academic goals
(Schaps, 2005). Put simply, "an individual determines success based upon the
individual's perception. [As a result,] "the goals individuals adopt are used in daily self-
regulation within the classroom setting and, therefore, are likely to directly affect the way
the person thinks, feels, and performs in that setting." (Adelman & Taylor, 2005. p. 3).
The greatest influence on an individual's goal setting and attitude "is the quality of a
student's relationships with other students and with the school's staff" (Schaps, 2005).
This research suggests "strong associations between achievement levels and classrooms
that are perceived as having greater cohesion and goal-direction, and less disorganization
and conflict," especially for students from low-income homes and groups who often face
discrimination (Adelman & Taylor, 2005, p. 3).

The Limitation in Observing Classroom Climate

Significantly, "because the concept is a social psychological construct, different
observers may have different perceptions of the climate in a given classroom" (Adelman
& Taylor, 2005, p. 2). In addition, "it is important to note that theoretical and empirical
work in this area highlights students' perceptions of their classroom/ school-wide
environment rather than the objective environment itself, because it is students'
perceptions that are presumed to play the more important role in the goal adoption
process" (Church, Elliott, & Gable, 2001, p. 2). This distinction points to a limitation in
asking an evaluator to determine the effectiveness of a classroom climate for each student
in the room and suggests there is something worthwhile in seeking additional feedback
from those who experience the climate daily. "Given the importance of classroom

climate, the establishment and maintenance of a positive climate in every classroom must be a central focus of all school staff" (p. 4).

Three Types of Student Performance Engagement

Since classroom climate affects students' willingness to engage in the classroom, it is important to analyze the types of student engagement in a given classroom. "Given that different goals are differential predictors of important outcomes in educational settings, researchers must attend to the issue of what leads individuals to each type of goal" (Church, Elliott, & Gable, 2001, p. 1). The MET study (Bill and Melinda Gates Foundation, 2012b) mentioned earlier sought to study these items and clustered several characteristics to determine what predictive role certain climate factors could have on achievement. The study suggested the cluster of factors was significant but was unable to determine which factors were most significant under which circumstances. As a result, the study claims climate's effect is inconclusive, yet it suggests more analysis of the phenomena should occur.

Some research has focused on the predictive role of individual classroom/ school-wide characteristics, whereas others have combined several characteristics together to form composite indicators of classroom/ school-wide mastery and performance goal structures (Church, Elliott, & Gable, 2001, p. 2). For the purposes of this study, the focus will be on class goals since the study will analyze students' perceptions on effects of teacher behaviors and attitudes in a given class.

Therefore, part of the analysis of classroom climate will examine the relevance of these three factors: lecture engagement, evaluation focus, and harsh evaluation. Lecture engagement regards "the extent to which students perceive that the professor makes the

lecture material interesting. Lectures that students find interesting and engaging are likely to facilitate absorption and "flow" and draw the student into the learning process" (Church, Elliott, & Gable, 2001, p. 2). An evaluator is able to see the strategies a teacher uses to engage students, but it is very difficult to ascertain to what extent the student responds favorably without a conversation. Thus, the part of classroom climate that lends itself to student engagement and willingness to take the risks associated with learning requires more than observation.

The next two focuses pertain to the extent to which the teacher has integrity to the students. Evaluation focus regards "the degree to which students perceive that the professor emphasizes the importance of grades and performance evaluation in the course. A strong emphasis on evaluation is likely to orient students toward performance outcomes" (Church, Elliott, & Gable, 2001, p. 2). Related to this idea is the concept of harsh evaluation, which regards "the extent to which students view the grading structure as so difficult that it minimizes the likelihood of successful performance" (Church et al., 2001, p. 2). Both types of evaluation, focus and harshness, are qualitative measures that allow students to perceive achievement as attainable and to what extent. They are essential factors in classroom climate that mostly can be determined through conversations with individual students.

The aforementioned MET study (Bill and Melinda Gates Foundation, 2012b) summarizes certain practices that students predominantly consider teaching best practices and has shown significant correlation of students' acknowledgement of the presence of these qualities with the level of success of the students' achievement in the subject. Students rate the extent to which teachers know if something is bothering students, if

classmates behave according to clear expectations for learning, if the teacher knows when the class understands, if the class learns to correct its own mistakes, if the method for learning is pleasing to students, if the teacher wants students to share their ideas and thoughts, and if the teacher's comments help students improve. This information is gathered through student feedback surveys and is beginning to be shown to have validity in providing meaningful feedback to teachers so as to improve teachers' effectiveness in increasing student achievement. In part of the study, teachers who sought to improve their achievement in these student feedback measures improved student achievement scores significantly on state assessments.

Summary

The literature pertaining to teacher evaluation presents a history that reflects the increasing need to account for the role of the teacher in the classroom. It reflects a change from the industrial understanding of education as a model of efficiency to a more research-based scientific model that understands the dual role of professional preparation and classroom practice. Charlotte Danielson and Robert Marzano have created separate comprehensive systems to account for the dual roles of the teacher.

Issues exist with teacher evaluation that have little to do with the model and more to do with studies that have shown the teacher evaluation systems are not being implemented properly. As a result, there is a call for more training of evaluators, clearer and consistent standards for all teachers, and some amount of teacher observation and student achievement as evidence of teacher effectiveness. Despite these concerns, there are some examples that provide evidence of increased student achievement when evaluation systems are implemented properly.

Within the teacher observation protocol are areas of teacher practice that an evaluator can observe for best practices, but is unable to observe for effectiveness in improving student learning. As a result, this study will seek student feedback, specifically through conversations with students who are not achieving in the class and those with similar characteristics who are achieving. The issue in the research is that there are few studies performed that examine the value of student feedback. The limited research that exists is promising in that it suggests student feedback is as valid as feedback from trained evaluators because students want teaching qualities that research states are effective, and evaluations from students mostly equate with those trained to evaluate.

Finally, one of the areas associated with teacher observation and of importance to students is classroom climate. The research suggests that evaluators cannot observe the extent to which students engage in the class because the decision is not necessarily made each day in each class and because the decision to engage is personal and qualitative. Students will remain willing to take the risks associated with learning when they believe teachers engage students in lecture, when they believe teachers engage students in performance measures actually used in the course, and when teachers evaluate fairly and with an eye toward student achievement.

The research shows that a study seeking student feedback on teacher performance is significant at this time, specifically because evaluation processes have become so complex as to require more types of feedback so as to provide teachers with as close to a 360 degree evaluation as possible. Research suggests this comprehensive approach

should lead to a more comprehensively reflective process that helps teachers'

effectiveness improve, thus leading to increased student achievement.

Chapter 3

Introduction

The current environment of school reform emphasizes finding the primary agent or agents that will improve educational outcomes for students and close persistent achievement gaps. Present research is able to determine a list of practices of effective teachers, but "research will never be able to identify instructional strategies that work with every student in every class. The best research can do is tell us which strategies have a good chance of working well" (Marzano, 2007, p. 5). While there has been significant research to determine which specific qualifications, practices, or strategies yield the best learning, the work that remains is to ascertain under what specific conditions and for what students (Goe & Stickler, 2008). Knowing and using these high yield strategies are the science of teaching, but the art is using them correctly (Marzano, 2007). As a result, in today's accountability-driven environment, "initiatives to develop teaching quality and effectiveness must consider not only how to identify, reward, and use teachers' skills and abilities, but also how to develop teaching contexts that enable good practice" (Darling-Hammond, 2012, p. 4).

One issue with evaluating a teacher's ability to improve student success is that what appears to be the best use of strategies at the best times does not yield achievement for all students. When Robert Marzano first published his work on evaluation, he was aware of that limitation. Therefore, this study will seek to add some insight into Marzano's (2007) concerns by asking: What perspectives can students provide about what influences their achievement in the classroom? How do students' perceptions of their teachers' expectations, behaviors, and attitudes impact these students' success?

Purpose of the Study

  I am aware that teacher observation and evaluation provide a judgment as to how well teachers execute certain behaviors and actions that are likely to lead to high student achievement, even though the simple presence of these strategies does not provide certainty that these strategies lead to student achievement. Performed the correct way under the correct circumstances, these strategies are more likely than other strategies to lead to student achievement (Darling-Hammond, 2012, Marzano, 2007, & Danielson & McGreal, 2000). The purpose of this research is to ascertain what insights students can provide when they are not achieving in a highly effective classroom, one in which I judge the teachers are performing very effectively at executing many of the best research-based instructional, curricular, and assessment strategies.

  In this qualitative, single-bound case study, I will interview six underachieving students as well as those who do achieve. The observation protocol I am using has ten observable traits with scores ranging from ineffective to exemplary. The questions I will ask students take the effective and highly effective explanations and turn them into questions that ask if students experience their education at this level and what effect these traits and practices have on the students and why. In addition, I will ask the questions from the Bill and Melinda Gates MET survey (2012b) that have shown a correlation to high student achievement. In sum, the single-bound case study will explore the feedback students can provide regarding teachers' effectiveness and what patterns and themes exist in terms of the traits that are most important to students to help them succeed. Finally, I will seek to explore how, if the goal of evaluation is to improve teachers' abilities to improve student achievement, student feedback could inform that pursuit. I will talk with a cross-section of students in this underachieving group to determine if there are

teachers' behaviors or methods that teachers are using I am not observing and thus provide some insight into closing the achievement gap. This qualitative analysis allows me to hear the stories and garner the perspectives of students who are not achieving and ask for their ideas and solutions and compare them, when applicable, with students who are achieving.

Research Questions

Only a few public schools are pursuing student survey feedback as an additional data point to determine teacher effectiveness (Sheehy, 2012, Butrymowicz, 2012, & King, 2007).   Rarely are data requested from students, those who have a unique insight into the effectiveness of the teacher. Surveys offer some insight, but they do not provide the stories that focus on what matters to students; thus, these surveys lack the intensity of the effect of teacher behaviors and actions and students' previous experiences. For the purposes of this study, I am choosing a class with teachers whom I have observed and judged highly effective, using NMTEACH Observation Rubric and determined through data analysis as highly effective, with students improving ACT scores at four times the national rate in 2012-13. Interviews with students who are not achieving through extant methods and a cohort of similar makeup who are achieving will highlight concerns that could inform teacher evaluation and ascertain in what ways students perceive these two teachers' behaviors and strategies lead to current outcomes. The research questions are: What perspectives can students provide about what influences their achievement in the classroom? How do students' perceptions of their teachers' expectations, behaviors, and attitudes impact these students' success?

The Role of the Researcher

For the first twenty years of my career, I have been an independent school educator and had several supervisors explain that if there were a problem with a teacher, the students would let me as an administrator know. In sum, this wisdom was what I received as teacher observation and evaluation training. Conversations I held with students in these environments followed a common trajectory: when a student liked a teacher and talked about the effect of this teacher, it was about how the teacher challenged the student to do work the student did not know he could do. When the teacher inspired the student, the teacher encouraged the student to pursue areas that were previously of little interest. These two beliefs continue to inform my philosophy of what a highly effective teacher does: trigger something that creates intrinsic motivation in a student to succeed. In the traditional sense, the teacher is able to help the student learn for learning's sake.

For the past six years of my educational career, I have been a public charter school administrator and been taken by some specific foundational differences in approaches to education that exist between independent and public schools. A peer in New Mexico is also a career independent school educator who switched to charter schools, and he and I often discuss these differences. The first concern is the enormous amount of compliance paperwork required in public education that has little to do with focusing on student achievement and education. These practices parallel McGregor's Theory X research that "the average human being is lazy and self-centered, lacks ambition, dislikes change, and longs to be told what to do" (Stewart, 2012, p. 1), even though the dominant current belief is that most people are Theory Y, "active rather than passive shapers of themselves [who] long to grow and assume responsibility" (Stewart,

2012, p. 2). In sum, our concern is that many useful ideas or initiatives are drowned in the amount of reporting required to provide evidence of work accomplished because this method can prove teachers are working. As a result, time that could be taken in reflecting on and understanding what data might show is taken in reporting and making sure all of the requirements of reports are met.

This feeling about many public school processes leads me as practitioner to prioritize which applications impact student learning most strongly and which are merely compliance. Improving teaching to increase student learning is the primary goal. The NMTEACH Educator Effectiveness System has as one of its goals improving teaching in order to increase student achievement. This recently-adopted teacher evaluation program is a new plan which holds significant promise to improve student learning enough to help this site meet its mission of preparing each student for college success. There are, I believe, evaluation expectations that will not provide the data that the process claims will result from implementation. For example, the teacher observation protocol, based largely on the work of Charlotte Danielson, has twenty-two observable and evaluative traits. In areas of classroom procedures and student engagement, students have a better idea of a teacher's achievement over one hundred and eighty days than I, as observer, can in three, half-hour visits.

New Mexico has applied for and received a waiver from the requirement that each student be proficient by 2014, and created an A – F grading system that expects growth in students' achievement scores for the top performing 75% and the lowest performing 25%. All New Mexico schools have received three report cards, and in the first two report cards, this site has performed below the state average for improving the

achievement of the lowest 25% of its students. A specific interest I have in evaluation is that I expect improvement in the lowest 25% of our students that is better than the state average. Last school year, this site adopted an extensive tutoring program and dropped its five-year average of failures per class in half. There are still students who are not improving; therefore, I wish to discover what these students believe they are receiving, or not, from their teachers.

Research Design

The design of this project results directly from the information I am seeking: insight into students' perceptions about their experiences in classrooms taught by highly effective teachers. In order to receive specific information and determine the passion of the students and the impact of the teachers, this work must be a qualitative study which "begins with assumptions, a worldview, the possible use of a theoretical lens, and the study of research problems inquiring into the meaning individuals or groups ascribe to a social or human problem" (Creswell, 2007, p. 37). For a research project to be understood, the researcher must be transparent about epistemologies because "to know how a researcher construes the shape of the social world and aims to give us a credible account of it is to know our conversation partner" (Miles & Huberman, 1994, p. 4). This clarity allows fellow researchers the opportunity to join in the research conversation.

The sampling method in this research follows critical theory, which holds that "social reality is historically constituted and that it is produced and reproduced by people" (Myers, 2013). As this epistemological research "focuses on the conflicts and contradictions in contemporary society", high school students will show some awareness

of these forces that will require interpretation to unearth the understandings of the effect of the factors that are often precursors to underachievement (Myers, 2013).

      An additional issue in this study is arising in qualitative research with increasing regularity: "the lines between epistemologies have become blurred" (Miles & Huberman, 1994, p. 5). At this time in their lives, teens are subject to influences, both good and bad, and "research suggests that the classroom and school culture can have a powerful effect on student achievement and attitude toward learning…. Understanding how to establish and maintain a positive classroom climate is seen as basic to improving schools" (Adelman & Taylor, 2005, p. 2). Therefore, this research will also be interpretivist with the assumption that students will "generally attempt to understand phenomena through the meanings that people assign to them" (Myers, 2013). I will interview students with the goal of understanding the complexity of the classroom context for them. I will ask follow-up questions that provide examples for the reasons they have embraced their attitudes and beliefs and that may allow for new discoveries to be unearthed to understand what barriers might exist that can be addressed with focused instructional strategies and support services.

      The competing difficulties of achieving with college preparatory, rigorous standards for students who have not achieved with less strenuous work often strains teachers. Still, teacher improvement becomes a primary means to ensure continual school improvement. The system becomes both accountability-oriented, a means to contribute to the personal goals of the teacher, and simultaneously the total educational performance of the institution (summative); and improvement-oriented, a means to assist the individual to meet his needs while improving the school (formative) (Stronge, 2003). I

will examine student data from both critical theory and interpretivist perspectives. By

doing so, I will endeavor to balance my understanding of students' issues with factors

that correlate with underachievement even as they strive to meet the school's mission of

preparing each student to succeed in college.

Research Method

The study seeks what teacher observation protocols often do not provide, reasons

students who are not succeeding are not connecting sufficiently with the teacher and the

curriculum. The goal is to uncover some of those reasons. "Case study research involves

the study of an issue explored through one or more cases within a bounded system"

(Creswell, 2007, p.73).

"Every case should serve a specific purpose within the overall scope of inquiry….

Each case must be carefully selected so that it predicts contrasting results but for

predictable reasons (a theoretical replication)" (Yin, 2003, p. 47). Six of the cases

represent underachievement, students with a grade of 75% or lower in this class. The

other six cases are high achievers, students with a grade of 85% or above in this class.

Seeking to understand "why" leads qualitative methods research that pursues the

"understanding [of] a phenomenon from the point of view of the participants and (their)

particular social and institutional context" (Myers, 2013).

Selection of Subjects

As an evaluator, I can observe the ten traits within the five scored ranges

(ineffective to exemplary) specified in the NMTEACH Observation Rubric. Even in the

classes of teachers who perform in the highly effective to exemplary range, there are

students who do not achieve. Therefore, it follows that there must be something I am not

seeing that could help teachers improve or students achieve at a higher level. Each trait, and all of them taken as a whole, represent practices that should improve student achievement; hence, seeking greater insight into a teacher's effectiveness in connecting with students is a worthy understanding to gain.

This study employs a purposive sample of twelve separate cases, six high achieving and six underachieving. In a grade level of about 100 students, it is likely that there will be more than six students in the each pool of potential interviewees. Therefore, I will accept the first six of each pool that follow the process of meeting with a school employee, letting that school employee explain the process, reading the research questions, and signing consent forms. Once the consent process is complete, I will begin the interview process.

As part of high school redesign, New Mexico high students are required to do one of the following before graduating: take an honors class, take an AP or IB class, take a dual credit class, or take a distance learning class. This school is on a semester block program in which each semester class allows a student to earn a credit for each semester class. The class I will study is required of each junior and is an honors two-credit, year-long class. The rigor of the class is part of the school's college preparatory mission; thus, the school requires each student to take this class. This specific class is team taught, and it requires students to complete various and varied student learning activities. The teachers work to provide for the specific development of and self-evaluation of twenty-first century skills, long-term collaborative research projects, individual assessments, field work, ACT testing, academic vocabulary development, and specific science and reading skill building assignments. This situation provides many differentiated means to

access learning with teachers available for tutoring, and assignments accommodated and differentiated as needed. With all of this support, there are still students who are underachieving.

Unit of Analysis

Helping struggling students achieve is a complex process with no clear set of research-based activities to follow that ensure achievement. Part of the difficulty arises from events that are out of the teachers' control. Even though this study could receive information about those issues from student interviews, it is not attempting to measure what students perceive about aspects of learning teachers cannot influence. While data gathering will note these issues, it will focus more on what students perceive could help them achieve and what and how students should communicate about their struggles. In my experience, when teachers and students connect in some meaningful way, educational outcomes improve; therefore, identifying links for students who struggle is an additional goal of the study. The units of analysis are the difficulties or miscommunications that the students experience in their relationship with the teacher, as well as the moments of connection that the students experience, including those issues students bring to the relationship.

Often, struggling students do not speak about their experiences of struggle. Therefore, decoding the students' language and experiences is critical to interpreting the findings. Seeking commonalities in experience as causes of underachievement is primary to the purpose of this study, so that the findings can be translated to teachers in their work, to improve the achievement of all students. This study explores reasons students do not engage and commit to their learning. It examines high achieving students'

attitudes and understandings of the classroom environment and teachers' strategies. It examines a "mirror" for underachievers, for data not yet in the literature, specifically, how or in what way students' beliefs about the class and themselves as well as perceptions of the instructional strategies of the teacher might determine academic achievement.

Data Collection Methods

The semi-structured interview used in this study is based on the ten traits from the observation protocol as well as questions asked in the Bill and Melinda Gates (2012b) MET survey. For example, when looking at a teacher's ability to create expectations for learning, I will determine how the expectations are understood by the struggling student. In each case, the questions seek to distinguish what the student understands about the trait. In addition, the student then explains his or her perception of what the teacher does as compared to what a teacher might do as effective or highly effective.

Each semi-structured interview is digitally recorded. The interviews range from thirty minutes to one hour and fifteen minutes. I will explain that each interview is part of a study that the teachers voluntarily undertook to determine if there is information that can help them teach their students more effectively. As a result, students and their parents know that a summary of the information that does not identify students will be shared with the teachers. The purposes of the research, the duration of the interview, the subjects' participation, and a description of the procedures will be given to students and their parents. Students' parents sign an informed consent as do the two teachers participating in the team-taught class; the families receive assurance of confidentiality,

are assured that participation is voluntary, and are told that refusing to participate involves no penalty.

The semi-structured interview includes open-ended questions about each of NMTEACH Observation Rubric's ten observation protocol traits with follow up questions for clarification and elaboration to elicit fully-developed, personal explanations as well as open-ended questions about effective student and teacher practices the MET survey has recognized as correlating to student achievement. Students are encouraged to ask questions so that they understand the concepts and to discuss past experiences as a means to inform current understandings.

Sampling

My classroom observations show me that the strategies used by these two teachers are highly effective, yet the research that promotes these strategies acknowledges that the strategies do not work well all the time. At this point, the research ends. The goal of this study is to gain insight into the factors that keep some students from achieving in an effective classroom with a rigorous college preparatory curriculum. The teachers provide for the specific development of and self-evaluation of twenty-first century skills with long-term collaborative research projects, individual environmental science assessments, field work, ACT testing, academic vocabulary development, and specific science skill building assignments. This environment provides several differentiated means to access learning with teachers available for tutoring, and student needs accommodated. This study will choose a purposive sample of six underachieving students and six high achieving students to determine in what ways the insights the students provide are applicable for other low-achieving students.

The final understanding this research provides, then, may have less to do with the statewide focus on the NMTEACH Observation Rubric and more to do with how students self-determine the effect of the classroom climate on learning. In addition, I believe, there will emerge interesting data on how each group looks at teacher feedback, both how to access it and how to use it to improve learning and achievement. I expect there to be a distinction in the way the two groups of students perceive themselves and to gain some insight into where the result of that discrepancy leads. By choosing students in a rigorous course with highly effective instructors, the case study examines the causes of the struggles and may identify ways to improve practices.

Types of Analyses

I will combine three separate strains of research into a coherent analysis: a new use of student feedback, an examination of students' views of classroom culture, and an understanding of what specific influences a positive classroom climate can have on students' ability to self-determine academic outcomes. Therefore, I am choosing a class with a positive environment and a differentiated but rigorous curriculum to analyze why some students with the same factors succeed and some do not. "Any qualitative study requires decisions about how the analysis will be done, and these decisions should inform, and be informed by, the rest of the design" (Maxwell, 2005, p. 95). Questions will begin with an explanation of a "good" teaching strategy for each of the ten areas of instructional strategies. After assuring understanding, I will ask if that strategy is important in helping the student achieve and ask why or why not. I will ask the student how other activities might work better and why? And I will ask if any need to be avoided and why. After the round of questions, I will ask thoughts about class and why students think they are doing well/ poorly and how the teacher can do something about it.

The structure of data analysis follows researched practices for qualitative research. The most important step is to work with the interviews quickly and be vigilant about following established procedures such as listening to transcription tapes so as to take time to listen and think about what ideas are percolating before performing a formal analysis (Maxwell, 2005). I will keep coded data into "data that facilitates comparison between things in the same category", organized data that facilitates comparison of "broader themes and issues" (Maxwell, 2005, pgs. 96 - 97).

After I analyze all interviews, I will tabulate the frequency of ideas that I anticipate will dominate the responses of students and the frequency with which they are mentioned. I will do so by combining responses into answers to specific questions. I will also color code responses to each question by high achieving and underachieving students. In addition, I will tabulate the frequency of ideas that I did not anticipate and seek to understand what these say. If the comments were not anticipated, I will seek understanding from research on the topic and the frequency of their occurrences. In a small practice study I performed, the category of students speaking about themselves showed insights students are giving about themselves or about their teachers that transcend the substantive phase into the theoretical phase. For example, a student stated he was "increasing his mental acuity" (personal interview, April 24, 2013). As these personal issues surface, students become willing to engage more or less deeply based on their perceptions of themselves and the teacher's ability to hit upon the needs or wants that stem from that understanding, so I will look closely not just for students' personal reflections, but how these inform students' perceptions of their achievement.

My final concern is to control myself and my urge to create an answer instead of report the findings, so that I "isolate certain themes and expressions that can be reviewed with informants, but that should be maintained in their original forms throughout the study" (Miles & Huberman, 1994, p. 6).

Standards of Quality

"The researcher's role is to gain a "holistic" (systemic, encompassing, integrated) view of the context under study: its logic, its arrangements, and its explicit and implicit rules" (Miles & Huberman, 1994, p. 6). Therefore, my research is seeking to unearth what feedback students who struggle to succeed can provide about instructional practice. "The qualitative research in a good study is ethical. This involves more than simply the researcher seeking and obtaining the permission of institutional review committees or boards. It means the researcher is aware of and addressing the study of all ethical issues" (Creswell, 2007, p. 47). The research is delimited in that I perform the research, leaving me responsible for the quality of the study and its execution.

It is essential for students not to feel intimidated or forced into involvement or required answers. As a result, I meet with students in a neutral office and ask follow-up questions that focus on my understanding of what it is like to be the student with whom I speak. If I perceive that a student is uncomfortable, I will err on the side of not pursuing that line of questioning and move to a new topic rather than potentially harm the student. I provide students with my questions and let them see them all before I begin to ask questions and provide a preface to help them know the teachers and I want this feedback. I also remind them I will ask follow-up questions to understand when I do not understand a student's meaning. I will also probe for examples to help me understand the context for the praise or concern and confirm student's right to privacy. The pilot study showed that

students were quite willing to provide this information and did not see me as a threat in any way.

Participants have a minimal risk since their identities will be kept from the teachers and students in the class. These students are simply being asked for perception and analysis of what could help them be more successful. The questions will focus on those areas that students could expect support from teachers and perhaps help them to learn to self-advocate. Students and their families are free to decline. All physical data will be stored in a locked file cabinet in my office. Student names will be deleted and files coded for my knowledge. All tapes will be erased after transcription, which will occur within three days of the interviews.

Summary

This qualitative single-bound case study elicits student feedback to provide insight in the teacher evaluation process. Even though students are not often asked for feedback into teacher practices, they are sought in this study because they are the recipients of teachers' actions and strategies every day. A trained observer witnesses teachers' actions and strategies three to four times a year and determines that good teachers use the best strategies and are judged highly effective. Evidence leads me to expect these highly effective teachers' efforts lead to higher student achievement than teachers who are minimally effective. Still, some students in classrooms with highly effective teachers do not achieve.

I will talk with students about their experiences in a classroom with highly effective teachers and discuss the students' experiences and perceptions. The students chosen represent qualities found in this site for students who typically underachieve. Although there is little research about the effectiveness of student feedback, there is

promise that the information that they can offer is as accurate as trained evaluators. Therefore, I will seek answers to the following two questions: What perspectives can students provide about what influences their achievement in the classroom? How do students' perspectives of their teachers' expectations, behaviors, and attitudes impact these students' success?

Chapter 4

Introduction

Purpose of the Study

Teacher observation and evaluation provide a judgment as to what behaviors and actions are likely to lead to high student achievement. At the same time, it is clear that there is no certainty that these strategies lead to student achievement all of the time (Darling-Hammond, 2012; Marzano, 2007; Danielson & McGreal, 2000). The purpose of this qualitative study is to ascertain in a classroom I judge to be highly effective what additional data can students provide to supplement the findings of an observer in Danielson's observation system, specifically for those who do not achieve. In general, I observe a teacher on a number of research-based traits that should lead to student achievement, believing that the better these traits are executed, the greater the positive effect on student achievement. Still, some students do not succeed. Therefore, I asked these students about their experiences in the classroom and their reflections about what was effective and why to analyze students' perspectives about what additional barriers could exist for students in the classroom.

Domains two and three of New Mexico's iteration of Charlotte Danielson's observation protocol (NMTEACH Observation Rubric) have ten observable traits with scores ranging from ineffective to exemplary. In this qualitative case study, I spoke with six students who were underachieving (defined as a grade of 75% or below) and asked them their perceptions of what they experienced and what those experiences meant to them. In addition, I asked six students who were achieving (defined as a grade of 85% or above), so there was a point of comparison for feedback from the student interviews.

The questions I asked students took the effective and highly effective statements of the NMTEACH Observation Rubric and turned them into questions that explored how students experienced them and what effects these experiences had on the students. In addition, I asked questions about teachers' and students' behaviors from the Bill and Melinda Gates Measure of Effective Teaching (MET) Project (2012b) research into student feedback that correlates to high student achievement. In total, this single-bound case study sought what feedback students can provide regarding teachers' effectiveness and what patterns exist in terms of the traits that are most important to students to help them succeed. Finally, I sought to show that if the goal of evaluation is to improve teachers' abilities to improve student achievement, then student feedback gained by talking with students may help students be more successful.

The purpose of this study is to determine if and how student feedback might enhance teacher observation as well as provide additional feedback to improve teacher evaluation and effectiveness. This qualitative analysis allows me to garner the perspectives of students who are not achieving as well as those of students who are, and ask for their ideas and insights.

Research Questions

Some public schools are pursuing student survey feedback as an additional data point to determine teacher effectiveness (Sheehy, 2012; Butrymowicz, 2012; King, 2007). Self-completion surveys, however, provide little means to understand the reasons for responses or to use additional observational data to supplement the responses (Queensland Government, 2003). That being said, student feedback from surveys has provided some additional insight into the effectiveness of a teacher, but they do not

provide the stories that focus on what matters to students. Since the feedback provided from these surveys often lacks the intensity of the effect of teacher behaviors and actions and students' previous experiences, interviews with students whom teachers are not helping through extant methods could highlight concerns to inform teacher evaluation and to ascertain how these two teachers' behaviors lead to current outcomes and can effect improved student outcomes. The research questions are: What perspectives can students provide about what influences their achievement in the classroom? How do students' perceptions of their teachers' expectations, behaviors, and attitudes impact these students' success?

Introduction to Student Responses

It was my hope in conducting this study that students would be able to provide some meaningful insights into what matters to them in the classroom. I had hoped they would be specific about methods or assignments that were particularly helpful and why they were; I wanted to know when certain methods and assignments were not good and why. The precursor to these interviews was that students would understand the language on the NMTEACH Observation Rubric as well as the MET Survey categories. If students misunderstood, I feared, my additional explanations of each topic would skew the results.

In many ways student responses exceeded my hopes. All twelve were forthcoming about their experiences and times in which experiences in class worked for them and did not. They were reflective as to why success or struggle occurred and willing to consider their role in the difficulty. In some of my research, I read of the concern of asking students about their experiences because these surveys or discussions

would deteriorate into personal attacks on teachers, but that never happened in our

discussions; the discussions focused on the questions and topics inherent in the questions.

Instead, students were able to process each question individually and provide

specific praise in one area and concern in the next question. They provided specific

examples of successful practices and assignments as well unsuccessful ones. They were

willing to consider reasons for struggle and look at their as well as the teachers' roles in

problems. The length of interviews ranged from thirty to one hundred ten minutes with

the majority in the forty to fifty minute range.

Since the interviews followed the topics on the NMTEACH Observation Rubric

as well as the seven c's of the MET Project, the responses are arranged according to the

topics of each question. When the rubric and project were asking very similar

information, the responses were placed together to avoid duplication. While there are

seventeen potential topics, some responses were placed into another topic as the

responses and insights gained were similar. The questions asked are provided above the

responses for easy reference.

Respect, Connection, and Care:

Questions asked of students:
1.   Good teachers create a feeling of respect and connection with each student. In
what ways do you feel respect from and connection to your teachers? In what ways do
you feel as if your lack of connection hurts your performance?
2.   The first one is care. In what ways do the teachers show they care about you?
How does that care help you learn?

Both the NMTEACH Observation Protocol and the seven c's include a measure

that evaluates the extent to which a teacher shows respect and creates a connection with

the student and/ or the student receives care from the teacher. A recent MET research

study explains care as a foundational need in a classroom that may provide a correlation

to achievement. In a study of 2358 classrooms that parcels student achievement from low to high, it finds fewer than 20 percent of students in the lowest distribution of achievement agree with statements referring to the amount of care provided by their teacher; whereas, 80 percent in the highest achieving decile agree with these statements. The conclusion drawn from this correlation is that a teacher's care for a student is a significant quality present in classes where students achieve (Bill and Melinda Gates Foundation, 2012a, p. 4).

In some ways, that conclusion is an almost expected result of survey work like this because it is logical, but it seemed to me to be too simple of a conclusion: students perform better for teachers whom they perceive care about them. I wondered why might some students underachieve when students perceive the teachers do care? I chose the classroom I did because my observation was that all students were cared for, so I was hoping this qualitative study could highlight what students wanted and expected as care from their teachers. I did not expect that achieving and underachieving students would have a different understanding of what they perceive as care.

Each of the six achieving students in one way or another appreciates the care and concern of the teachers as evidence of their function as educators. One student sees these teachers as not there to make students feel bored but to help them learn in a fun way. Teachers explain thoroughly because "they really want [us] to know what they are teaching and why we learn it." They do so by really getting into an answer and explaining and expanding on answers. As over half of the achieving students said, this phenomenon exists while teachers really want students to "get it on [their] own."

The teachers' tone is described as respectful and personal with the high achieving half of the students saying the teachers get on the students' level, not to dumb down the information but to provide a perspective that helps students understand the rigorous material. These teachers are "always available to help [students]" and provide ample feedback focused on making student work better. This feedback is provided in advance of assignment due dates to ensure these students are successful. Each of the six high achieving respondents understood the care and concern provided by teachers is focused on helping students achieve.

The six students who underachieve were more passionate in their explanation of the teachers' concern and care provided to them. Four of the six mentioned the specific personal connection teachers gave them. For example, teachers knew students' names and called students by these names instead of, "Hey, kid. What's up?" There is similar contact in the hallway and throughout the class period. This type of contact feels nice to students, and one even said it was important to her to "make them feel proud of [her] in a sense." Interestingly, not a single achieving student made a statement about teachers' knowing their names or needing to achieve to make the teacher happy.

Some underachieving students provided insight into the reasons it was important that teachers know them by name. One explained she was very timid the first semester and even afraid to ask questions. She spoke with her therapist about how to deal with her feeling that her teachers were so smart that she felt beneath them. She was told to learn about them as people, so she researched them online and was fortunate enough to see them in town and at stores, so she was no longer afraid of them. Another student explained that he valued the personal connection because it motivated him to do work.

When not motivated, he is aware that will miss a few assignments and just get lost in the crowd.

The comment about doing work repeated many times. These underachieving students see their teachers as helping them "understand what is going in in the class." One student had a conversation about a low grade he earned and appreciated the teacher's explaining the negative effect of the grade on his overall grade in the class. Another appreciated a teacher providing some time and effort to help him fix up his paper "to get [his] grade to passing." This explanation is what the student describes as "good work."

Finally, students appreciate the care provided even when they have an off day. Teachers will ask students if they need water or a break, and one teacher was described as funny and nice. Students do not expect answers; rather, teachers provide guidance to help students write more professionally or turn in work on time. As another said, "They care that we pass the class as long as we ask them, but it is our responsibility to keep up and ask them for help."

The two groups provide a clear distinction in the way they view care from their teachers. Achieving students expect teachers care and show concern, but underachieving appreciate it and see it as a means to make students feel good. I gained a sense that underachieving students do not typically receive that caring all of the time, so it stands out for them in this class. In addition, the concern teachers provide is evidence of two different ends: achievers see teachers as seeking learning from their students and being proactive in helping that occur; underachievers see teachers as seeking task completion and being reactive in letting students know the effect of their poor work or late grades.

The discussion of these aspects of teaching seem to suggest that for high achieving students, teachers share responsibility for their students' achievement, but underachievers see learning as their responsibility and are solely responsible when it does not occur. Additional support for that belief stems from the evidence that a high achieving student was appreciative that the teachers knew of the accommodations in his IEP and worked constantly to meet them, but two underachieving students with ADHD asked for nothing more than a quiet space to work which was enough for them. When asked, the underachieving students did not know if their teachers knew of the ADHD issue as the students did not want special treatment.

Finally, examples of care bifurcate into the type of student someone is. An achieving student comments that teachers care by making the class more fun and checking that students understand before their work is turned in. Underachieving students appreciate the open ended questions instead of "direct telling [students] what to do." Another does warn that connections are sometimes difficult because one of the two teachers might yell at you because "when he gets angry, he gets angry because he cares."

Challenging Questions

Questions Asked of Students:
1.   Teachers are expected to ask questions that set high expectations for each student. Do you find the teachers ask questions that make you think deeply about the topics in class? Can you think of times that you would expect deeper questions and do not get them?
2.   The sixth one is challenge. This strategy is related to the previous one. How do teachers challenge you to learn difficult, college-preparatory material? How do teachers encourage you to achieve at this level? What suggestions could you give to get them to improve their efforts?

Challenging questions are essential in creating a rigorous learning environment for students. These questions take information or curriculum and apply it to additional

topics or take skills and apply them in a new way. The class is an honors class taken by every junior in the school, so its title establishes an expectation that students will grapple with difficult reading and writing material that will prepare them to be successful in college. As a class that purports to be college preparatory, challenging questions are essential in meeting this goal.

It is important to begin by determining what students understand when they are provided with challenging curriculum. The twelve have a similar understanding of the expectations of the course. They define challenging as needing to elaborate or explain topics, making students really think about ideas, using various resources to come up with ideas, requiring research, and paying attention to the topic of the lectures provided in class. They mostly see the curriculum of environmental science as new material that they have not studied before. As students reflect, they believe their teachers want students to understand the topic, know how things work, think deeply, and present their understanding in professional, precise, and concise writing. In this way, all students expect that the teachers will not give answers; rather, they give an idea and want students to look at several aspects of an idea, make connections between and among ideas, and expand on them.

By junior year in high school, students have knowledge of how schooling works, and many answers to this domain of quality teaching show evidence of that knowledge. They realize that the questions teachers ask cannot lead to "half-assed" answers; rather, students understand that a brief answer does not provide the depth needed to provide a thoughtful response. "You can't just be like atmosphere is in outer space or just talk about circulation or where Hadley cells come from" because "the questions are difficult

in a way that you can answer them in a way that is brief that gives you a poor grade or you can go in depth and use the resources they provide and do additional research and provide an in depth answer, so these questions allow you to go above and beyond so that you can go into the more difficult thinking and learning [instead of] just base high school work."

High achieving and underachieving students comment positively on the college preparatory environment and expectations of the class. Students remark that the reading, writing, and researching get them ready for college preparatory expectations like projects that students "can't just answer in two to three sentences; it's a paragraph and half kind of a question because you can't just touch on it briefly and have to go in depth to get to the bottom of it and also have to make it flow with the rest of your paper so you have to find its relevance to the next question, which can be really difficult but once [they] find the right bridge, it makes it a really good paper."   The learning is relevant as one student explains because he had been watching news with his mother and explained to her some learning in class and what the news meant. As he explained, he did not even know he was learning that deeply.

They appreciate the expectation that comes from the environment of putting students in groups and working with people who struggle together with the difficulty of the readings. In addition, they discuss the importance of the future and ways to reach their goals. The class spends time dissecting the science section of the ACT and triggers responses in students that make them want to be successful in their future. As one struggling student explains, the class "serves such a huge purpose not for environmental learning but for class learning because for a lot of kids this is their first introduction to a

big class. I have to learn from a lecture, the teacher is removed and I have to learn, that's huge for some people because I have seen college classes like that so this is huge. The teacher is not always going to be there; this is our first time to be independent."

Despite these praises that are very specific to excellent teaching, there are times the class falls short of expectations. At times, the teachers lecture too much and keep the class from going into any topics other than the ones they control closely. More than a few students wish the class could go more deeply into side topics that mean a lot to them. When some students do not believe the questions are challenging enough, they believe a solution would be for students to have a little more choice to delve into similar topics but in a direction that students could handle and would challenge them. Another solution might be for students to research another aspect of the topic than the one with the research provided in class. In sum, teachers could "let the class evolve a bit in a way more fluid environment and that would help a lot; especially if they want us to have a science experience they should let us let the class be different – let someone say I don't believe in global warming and say why and they should the other kid say I believe this. I think it would help to let kids be different and express themselves and express their personal belief because it helps them see the variety of life and variety of what you can study." In this way, the solutions students provide offer an additional challenge to the rigor they praise in the class.

Assessments

Questions Asked of Students:
1.   Assessments are tests, quizzes, worksheets, and projects. How well do assessments test what you have learned? How involved are you in establishing the

criteria of excellent work and giving the teachers feedback in the work you are expected to do?

Despite the common belief among high achievers and low achievers that the work is challenging and that students are expected to achieve at a high level, their understanding of assessment, the way in which that understanding is measured, is split between high and underachieving students. High achieving students see the assigned papers as work focused on their own understanding and presentation of that knowledge, while underachieving students comment on grading related to the teacher determining what is good or not. In this way, underachieving students see the grading part of assessment as disconnected from learning and the curriculum, more or less as something done to them not as something that reflects achievement of learning.

High achieving students believe papers assess understanding that students have learned, and most of these students believe they need to go back and fix up their learning if something does not make sense. They see the assessment process as finding answers to a set of questions and placing them into a scientific paper. As one student explains, teachers do a good job at asking questions that require students to think about how to put their thoughts together coherently. While papers are the main assessment mechanism, other small projects like hall papers and presentations also relate to the main concepts in the papers and major learning objectives. At times, when students did not achieve, their grade reflected this lack of understanding. In general, this group of six saw their grades as evidence they understood what they learned and their papers and projects provided evidence of their achieving those learning objectives as presented in a coherent paper.

Underachieving students see the grading and feedback from assessments as "putting down" what they think, teachers' criticism of students' work, and teachers' opinions of students' work. In this way, underachieving students see little opportunity to control their own achievement as thinking at a high level on rigorous learning objectives. One underachieving student who is seeing herself as a better writer is aware of that ability in being able to discuss "more on global topics", fix sentence structure, stay on topic, and not beat around the bush; mostly compliance measures of effective writing. A student who offers high praise on constructive feedback (be more professional, stay on topic) says it helps him see what he has done wrong. Still another says the real feedback comes when teachers return the paper with their notes because now he knows "what they want." Underachieving students are not learning what quality work is in order to provide it; they are unable to self-edit before turning in their papers.

While many students praise the process of working in groups and learning, two underachieving students say it is difficult to determine if they are learning because it is not their own work; it is group work. As a result, the process of peer editing is not as helpful as some might believe because some peer editors do not offer feedback that helps students learn because they do not know more than the students they are editing. In addition, some students have had what they determine to be an insignificant missing piece of a paper to have had too strong an effect on their final grade. In this case students experience a disconnect between what they believe are the most important aspects of the assessment and those that actually have a strong effect on their grade.

Confer

Questions Asked of Students:
1.   The second is confer. This strategy has teachers encourage students' ideas to create a lively discussion about important topics. In what way do the teachers do this? How does their encouraging discussion help you improve your learning?

By creating a larger than normal class size, the teachers have made the ability to confer as a whole class more difficult. As a result, they have created small groups and small group exercises to allow students to confer in some situations at certain times. These are specific planned activities that many see as welcome breaks from the intense research and writing that dominate the class. Still, students are aware that the ability to confer, which they define as the opportunity to discuss ideas and consider ramifications, is lacking in the class. Therefore, most comments are suggestions to provide for more opportunities.

Students agree that they do not really have discussions in class. In their own groups, they will discuss the topic at hand, but mostly to clarify assignment requirements. At times, the groups will get students to come up with an answer they agree with and go beyond the question, which will help them learn from each other. The few times there are discussions that broaden the topic and get students to think more deeply about ideas as to how to solve problems in the world are cherished, but most students see these as not part of the class and sometimes inefficient.

In general, students do not see discussions as intentional events. Therefore, many reference a good discussion, but, unlike every other discussion of the teachers' planning, these discussions are seen as excellent but too infrequent. The other comments focus on their appreciation of students' questions in that the teachers love to look closely into answers. The only other thing they say teachers do is open topics with questions to help

guide future student work. A few students reference other teachers they believe do involve students in discussions and suggest a desire for more discussion like these other classes.

Consolidate

Questions Asked of Students:
1. The fifth one is consolidate. This strategy seeks to help you connect ideas and seek deeper understanding. It is an important skill in an advanced class like this. How do teachers help you learn to do this? What should they continue to do and what could they do to help you learn this important skill?

Students throughout the interviews reference the fact that the way they know they are learning is that they connect their learning to other information, or, in the terms of the MET project, consolidate their learning, find deeper understanding through the connection of understandings gained throughout their work. They recognize that the breadth and depth of the class is difficult to comprehend "in the first couple of weeks in which most students were like this doesn't make sense." Since I interviewed in April, students "know more about Hadley cells and know Latin America has good land to grow crops," so the class continued to make more sense. As another student stated, the class takes "these big words like arable land, abiotic and biotic conditions, and these broad ideas and puts them in a way that makes sense."

Still, many students do not recall teachers' intentionally showing students or explaining to students how to connect ideas to others. Upon follow up questions, however, students explained the various means teachers helped students learn to consolidate learning. As one underachieving student explains, "the chapters all correlate with one another – biomes, population density, arable land, and like we do transparencies

and we do a map of transparencies of biomes, population density, and arable land and lay them on top of one another so we can see how they work together and we can see why people live where they do and what biome or the effect of arable land. When we first started the chapter, we were like how does this all go together, but actually diving into the chapters and listening to what they're saying, it really helped clarify in the way they put it all together."   As another underachieving student explained, teachers "kind of teach us how to consolidate in a low key kind of way. This is connected to this because of this and a and y is connected to b because it's all this big array because it's all one thing. I became a better writer when I made those connections."

Said another way by achieving students, teachers "help us by having us answer questions ourselves about the topic and have us go more into depth about the next topic. So we definitely have to connect. I'm not sure what they have done for me personally to help me learn that things are connected. I know they discuss it in class like biomes and it's just like everything we have learned in the class has been connected like Hadley cells and biomes." As another student explains, "when they give lots of examples about what we're learning, it connects to the real world. It addresses all of what we read about in the news, and we have BBC links to know what's going on in the world, and these current events are tying in to what we're learning and we get articles about what ties into air currents and things." And another explains, "It's nice because it makes it feel relevant. This topic of science means something in the world and is extremely relevant to improve your view of the world." Another claims, "It's that each thing we learn goes with another thing and connects the same way in math you build up one thing and learn from another."

"The majority of these topics they do make some very clear lines about these topics connect, and how they are going to work together about tying things together. Arable land – even though we work on one thing at a time and it is clear how these distinct units all work together in many areas, so we talk about environmental science and how it affects a population and everything and it all gets connected back to the original idea that this is the world we live in and small changes make big changes later on. There is a lot of consolidation. In our class, they give us a question set and want us to research and make connections and for a lot of kids it works great and I have seen it with a lot of kids they are starting to make connections, which is great to make connections even though for a student like me it is basic."

Engage and Captivate

Questions Asked of Students:
1.   Teachers are expected to engage students in learning, keep them intellectually engaged throughout the lesson, and help them contribute to their learning. Talk with me about how the teacher does and does not do so.
2.   The third one is captivate. This strategy seeks to inspire curiosity and interest in the subject. How do teachers help you become curious about the subjects you are studying? As you think about it, does the way they make you curious help you to achieve in this class?

As a class, Environmental Science is not a high interest curriculum. Most students mention at one time during their interviews that the class is not very interesting, but teachers provide some assignments, lectures, and videos that engage them in the topic. An overwhelming majority of the time, students recognize the effort teachers put forth in generating interest in the topic, and some discuss how this effort helps students want to learn more about the subject and apply it to their everyday conversations.

In general, students are aware that teachers give topics and assessments that allow students to learn instead of teachers telling them what to think or telling them the answer. As a result, students appreciate that they learn better and more completely than if information were just provided to them. Students even recognize that teachers create additional projects to ensure one more time that students learned the topic. For example, after students had done an extensive project on biomes, the teachers still put together a hallway project that had students place their biomes on the walls of the hallway and write a definition of it, "so that students are always thinking about biomes."

Students are also very aware of the means teachers use to engage students in their learning. Over half of the students mention the teachers providing humor throughout lessons to keep students engaged and have a pleasant learning environment. The humor, students recognize, also keeps them paying attention, allows them an additional means to remember significant amounts of information, and helps them want to know it. Teachers also insist on students taking Cornell notes when reading and listening to lectures. While the reaction to the insistence is mixed, students appreciate that several assessments refer back to notes students have taken earlier.

In addition, many students enjoy the teachers when they simply engage in their "nerdiness." Students know the teachers genuinely like the subject and appreciate questions because the teachers can "go off about some interesting sciency thing which is cool because it makes the class more personal" than one student thought possible.

Another aspect of engagement is that students see the acts of their teachers as very intentional when focusing on student learning. They see how lectures connect to

assignments and how hard teachers work to make that happen and focus students on what is important and what is not. Students also recognize that teachers break the monotony of paper writing with "presentations, games, a class project, and other large group collaborations that make learning fun."

The teachers' work to make class engaging has been very successful based on the variety of student comments: "environmental science makes you be like, wait, it's actually pretty interesting, but I thought it was going to be boring"; "[the class] gets you to be curious because they put information in a different way", "sparks my curiosity to find out how population density and biomes relate", "makes me curious about the world and our CO2 footprint", and "gets me to talk with my family about what we are learning."

In sum, their ability to captivate students is that they seek the relation of information, challenge students' perspectives, ask controversial questions to get students invested, provide interesting facts, and show the relevance of the material to understanding many areas of the world. They just "kind of enlighten us with information so they do inspire us."

With all of this excellent work, the criticisms of the teachers' efforts are when the class does not provide relevance or connections to previous learning. When teachers do not provide relevance, students get frustrated and confused as to the reason they are doing this work. In addition, some students said it took them longer to understand the flow and purpose of the class initially, so they struggled pretty mightily at first. For some, the documentaries and videos are more redundant than reinforcing and the one method of

note taking like Cornell notes seems more arbitrary than best practice. In this way, it

seems that students need to be reminded frequently of the purpose of their work. Finally,

while there are some fun interludes, a few students believe there could be more and that

those could be more frequent.

Conduct and Control

Questions Asked of Students:
1.   Teachers create an expectation of conduct for students and that expectation should
help students learn, with a focus on self-discipline, respecting the rights of others, and
cooperating with one another. Are the standards in class clear to all students and applied
consistently and fairly? In addition, does the teacher hold students responsible for
maintaining behavioral standards and respond to student misbehavior appropriately?
2.   The seventh one is control. This strategy asks how effectively teachers are
keeping order and focus on the topics at hand. How well do teachers keep students
focused on learning? What can they do to help you remain focused on your learning?

Sometimes, student conduct is discussed as discipline, the consequence of not

behaving well. This particular classroom management issue, however, discusses conduct

and control with the purpose of providing an environment which helps students learn,

with a focus on self-discipline, respecting the rights of others, and cooperating with one

another. The goal then is providing an environment in which the standards that create

this environment are applied consistently and fairly to all as an almost secondary process

because learning is the primary function of the classroom.

This class is the largest class in the school with about fifty students in the room as

opposed to fifteen to twenty in other classes, so responses are instructive not just in terms

of what happens in the class but also what students believe should be happening in other

classes. There are two sort of "tone setters" that were common statements made by the

twelve respondents. The first is they appreciate the respect granted to all students and the

way in which it is reciprocated. One student described the feeling in class as a sense that
each student is part of a learning process, and all have to keep order and control. An
example given by another student is the teachers' telling students that teachers will not
call parents; instead, they will work with students to fix problems and solve them
together. In addition, when there are misbehaviors, teachers deal with minor ones
quickly and within a discussion.

The second reason students give for the surprisingly good behavior in class is that
the teachers are fun and funny. There were several descriptions of the joking ranging
from "high school jokes" to "jokes between teachers" to "people joking with them" to
"jokes about previous topics." The best example of admiration came from a student who
appreciated a ten minute discussion of migration to China by taking a ramp and driving
there. The class laughed for ten minutes and then got back on track, more focused than
previously. The result of the fun, as one student explained, is that students like their two
teachers and follow codes of conduct out of respect for them. Put simply, there is a time
to joke, but when it is finished, it is time to get back to work.

Students' understanding of conduct and control is most clearly explained by one
student, "skeptical at first", that students need to take care of themselves. At least half of
the students are aware that teachers are able to allow for distractions but get students right
back on track. Students who do have discipline issues are treated with respect and
spoken to in the hall instead of in front of the class. Finally, students believe the reason
control is so good is that standards are very clear and followed clearly and fairly.
Students understand they are in the class to meet rigorous academic standards, so they do
not see the point of acting out. It is significant that one of the underachieving students in

the study was identified as a student who acted out in the first semester. When I asked

him specifically about the comments made by students and comments attributed to

teachers ranging from needed to unfair, he stated with clarity that they always spoke to

him with respect, he deserved the negative attention, and they always encouraged him to

be better. When I asked what was different this semester, he explained that he has

changed and is focusing on his learning more. Significantly, he is also aware that when

he gets off track, his teachers discipline him differently from the first semester. He is

reminded about how his previous behavior got him off track, praised for improving, and

given a reminder to be who he really is. He says he appreciates that they acknowledge

his efforts and want him to be the better student he is becoming.

Classroom Structures:

Questions Asked of Students:
1. Effective classrooms expect all students to meet high expectations. To help make
that happen, the teachers will create norms and structures in which students can learn
with and from each other. How well do the teachers set up the classroom structures and
how well do these structures help you achieve?

Effective and highly effective teaching expects all students to meet high

expectations. Teachers create a predictable environment of norms and structures that

help students know how to learn with and from each other. I asked students how

effectively the norms in the class help students achieve. Their explanations provide

insight again into the different attitudes of the achieving student versus the

underachieving student.

Achieving and underachieving students are clear in the specific classroom

structures as well as their effectiveness. Students appreciate the normal daily schedule of

beginning of class lectures, a plan or discussion of work expectation, and time to work with peers to accomplish tasks. They call that predictability comforting. The work is set up in an Inspiration diagram with questions to answer, links to data to research, and other support documents. In addition, students see work from last year and have access to a school-wide server to save work and provide access anywhere in school. They work in groups to accomplish tasks; in the first semester groups chosen by the teacher, and in the second semester groups students choose themselves.

The strongest appreciation for the classroom structure comes from achieving students who appreciate the collaborative work expected in class. Most mention two important aspects of partner work. The first is that they get to choose their partners and work with their friends. Even though one says it takes her longer to finish her work because she is with people with whom she is comfortable, she believes she is able to come up with better answers because she and her friends are willing to question each other and think through their answers.

The second advantage is that they get to work with partners of four and rotate through partnerships. In the system, a student works with a partner on a paper, and then shows that paper to another partnership of two for peer editing. In this process, the student is clear that his work can be the best it can be because of the number of eyes on it even before it is turned in. The process allows for many ideas discussed to make the ideas more precise and clear. As he said, if one student is absent or does not understand the idea, there are three people able to explain before having to go to the teacher. Another student praised this process as "several levels of support."

Underachieving students discuss the means in which these structures do not meet their needs and provide an insight into additional things that can help students. The use of partner work was very difficult at first for some because they did not like teaching themselves or learning from one another. Another person was partnered with a pair of students with whom he and his partner struggled to work, so the solution was that they did not work with them anymore. Still another was disappointed because he believed that a peer edit can only be as good as those performing the edit. Finally, another difficulty is from a student with a history of not getting his own work finished. He explained that peer work simply makes him feel guilty because he lets his peers do his work for him, and he thinks if there were another means for him to present his learning, he would not be in this situation of letting his friends down.

Although largely critical, half of the students believed the system got better as they improved their work within it. One student said he appreciates the self-paced nature of the work and frequent feedback and clarifying lectures to know what he needs to do to get better. Another student has a partner who misses class for athletics and is aware that her situation makes it more difficult for her to keep up. Instead of complaining about the situation, she is thankful for tutoring on Tuesday to help her catch up from her work. One final student is appreciative that the school culture encourages students to conduct themselves as needed to succeed in a collaborative environment.

Flexibility

Questions Asked of Students:
1. Excellent teachers are flexible in that they respond to your needs in a number of ways. Please discuss what are the best ways they respond to your needs and what ways they are not so effective and why.

With all of the focus on student achievement, it is possible to forget that students are people and that they have needs or problems that divert them from meeting learning objectives. Some of their needs are immediate and some are more complex and require extended responses. This particular question focuses on whether teachers adapt for students and whether these actions meet students' needs. Interestingly, high achieving and underachieving students both see the teachers as flexible, but the focus of that flexibility is very different.

High achieving students appreciate teachers answering questions in a way that makes sure students learn about the topic. When teachers tell students to go back to their notes, they understand their role and need to do so. There is also a trust that teachers "know what students can do on their own" and what they need to be retaught. One high achieving student also has an IEP and comments that teachers have been "extremely accommodating… which has been extremely helpful." Another student also notes that teachers are accommodating for sports absences by providing tutoring and allowing for late work.

Underachieving students also appreciate the ability to turn in late work and tutoring, so they can "fix" their work. The tutoring option helps another student lessen her anxiety and lessen her fear that she will "fail if she does not get this turned in." A few students with ADHD are provided with a smaller and quieter space to work so that they accomplish more work in class. Another student misses class for therapy sessions appreciates going to tutoring and having the lecture repeated. Others appreciate Tuesday tutoring to turn in late work with no penalty because of having bad days. The interesting

comment is that presumably underachieving students have more needs, but Tuesday tutoring is the only flexibility available to them.   As one student notes, teachers provide a tone in class that they help students, but there are not multiple means to provide assistance for the many needs in class. As noted in earlier comments, struggling students would not naturally ask for these accommodations or modifications because they typically see themselves as responsible and accountable for their work.

Summary

Students provided feedback on seventeen questions about their experiences in what I judge to be a highly effective classroom. The specificity and depth of the responses show thoughtfulness and depth from each student, whether high achieving or underachieving. Most comments discuss ways in which teachers either engage students at a high level or fall short of meeting students' needs. In a few areas, responses between high achieving and underachieving students differed, and these differences are the final areas of analysis undertaken in the next chapter as they provide information that leads to unanswered questions and recommendations for future research.

Chapter 5

Why the Research: The Proposal

As an educator for more than twenty-five years, I have watched the role of the teacher in the classroom change from teacher presentation to student-centered and student-focused learning. The adoption of the Common Core has added new phrases to our lexicon like close reading, depth of knowledge (DOK), and other items that expect students to provide evidence of their learning in a rigorous and personal way. As students have become more responsible for their learning, I have become interested in looking at how students are currently helping teachers meet their new more challenging expectations. What I found was that there has been an increase in student surveys and even some research by the MET project of Bill and Melinda Gates Foundation to suggest positive student feedback correlates to higher student achievement than negative student feedback.

Still, I was unable to find research detailing structured discussions with students; I could not even find researchers in the field of teacher evaluation suggest it as a desirable means to improve teacher practice. Therefore, the first goal of this study is to determine that these structured discussions show signs of validity. Since I believed I would find they had value, I wanted to determine what that value might be and suggest other avenues of research to pursue this type of work. Finally, I hoped that that the feedback from students in a highly effective classroom would provide insights as to some of the reasons some students achieve and some do not.

This project sought to delve more deeply into the teacher evaluation process as measured through domains two and three of the NMTEACH Observation Rubric. To do

so, I chose what I determined to be a highly effective classroom and observed the presence of teachers executing the strategies of highly effective teachers. The presence of these research-based strategies suggests that all students should achieve in this rigorous classroom. Still, there are some students who underachieve (defined as a grade of 75% or below) in this class. The study asks six of these underachieving students about their perceptions of the way they experience these strategies, the effectiveness of them, and suggestions to improve instruction and curriculum. For a point of comparison, I asked six high achieving students (defined as a grade of 85% or above) the same questions and combined, compared, and contrasted their responses.

I anticipated comments would fall into six categories: technology issues, climate of class, structure of class, students' comments about selves, teacher's work with students, and college preparatory curriculum. There was no meaningful feedback offered regarding technology as it was working effectively for students. Interestingly, students did not talk specifically about themselves as learners by saying things such as "I am the type of student who needs a teacher to tell me to do something" or "I need teachers to give me this accommodation." As a result, this aspect was not realized either. The end of this study will analyze the difference in the way high achieving and underachieving speak about what they expect in classes. The differences in their comments lead to some specific recommendations of future study. Commentary about the college preparatory curriculum and the structure of the class provide significant evidence for the reason to hold these conversations with students. The most significant evaluation arises from the climate of the classroom, specifically in an area called harsh evaluation (Church, Elliott, & Gable, 2001, p. 2).

In general, these conversations allowed me to explore how, if the goal of evaluation is to improve teachers' abilities to improve student achievement, student feedback could inform that pursuit. Two specific areas of analysis follow. The first focuses on the recent increase of seeking student feedback through surveys and looks at student interviews as an additional data point. Even though there is still an uncertainty as to the validity of this information, this study went beyond quantitative data from surveys and interviewed students to hear their perceptions. The second area of analysis looks for a distinction in the way high achieving and underachieving students perceive themselves in order to gain some insight into where the discrepancy leads. The study suggests there is a discrepancy, and the data that arise from it lead to some insights that could help teachers improve student achievement and possibly close achievement gaps. By choosing students in a rigorous course with highly effective instructors, the case study examines the causes of the struggles and may identify ways to improve practices by having students identify the practices that improve student achievement.

The Perspective of Evaluation

The historical problem of teacher evaluation as Robert Marzano sees it is that evaluation is typically not about helping teachers improve their craft. Often, teachers are expected to be excellent at every aspect of teaching. In older systems, teachers either had a skill or did not. Systems with those focuses force teachers to be less than honest about their needs to achieve growth. Administrators do not rate teachers in those areas and put teachers in a situation in which the area of greatest need becomes ignored. As a result, the system becomes a façade (Dessoff, 2012).

Evaluation systems do not have to be this way. It is my premise that current systems which are accountability-driven should become "initiatives to develop teaching quality and effectiveness [that] must consider not only how to identify, reward, and use teachers' skills and abilities, but also how to develop teaching contexts that enable good practice" (Darling-Hammond, 2012, p. 4). This study suggests that talking with students in a structured environment provides such a context as well as feedback as to what is good practice.

Units of Analyses

In my experience, when teachers and students connect in some meaningful way, educational outcomes improve; therefore, identifying more effective practices for students who struggle is the primary goal of the study. The units of analysis were expected to be the difficulties or miscommunications that the students experience in their relationship with the teacher, as well as the moments of connection that the students experience, including those issues students bring to the relationship. An additional unit of analysis arose in the places in which underachieving students stated a similar appreciation of a teacher behavior but a very different definition or expectation of that behavior. This specific unit of analysis will conclude the analysis as it provides the most exciting outcome of the study, suggested skills teachers should intentionally teach struggling students.

Research Questions

The study is focused on two questions. The first is what perspectives can students provide about what influences their achievement in the classroom? This question helps me understand what strengths and challenges the students bring with them that might

influence anything they do in class. The second is how do students' perceptions of teachers' expectations, behaviors, and attitudes impact these students' success? The second question looks closely at the effect of the students' perceptions of their experiences in the classroom by asking how students' perceptions of teachers' expectations, behaviors, and attitudes impact these students' success.

Analysis of Data's Connection to Research

The purpose of this study is to ascertain in a classroom I judge as highly effective what additional data students can provide to supplement the findings of an observer using the NMTEACH Observation Rubric. I asked these students about their experiences in the classroom and their reflections about what was effective and why to analyze students' perspectives about what additional barriers could exist for student achievement in the classroom.

Domains two and three of New Mexico's iteration of Charlotte Danielson's observation protocol (NMTEACH Observation Rubric) have ten observable traits with scores ranging from ineffective to exemplary. In this qualitative case study, I spoke with six students who were underachieving (defined as a grade of 75% or below) and asked them what they experienced and what those experiences meant to them. In addition, I asked six students who were achieving (defined as a grade at 85% or above), so there was a point of comparison for feedback from the student interviews. The questions I asked students took the effective and highly effective statements of NMTEACH's Observation Rubric and turned them into questions that asked how students experienced them and what effects these experiences had on the students (see Appendix B). In addition, I asked questions of teachers' and students' behaviors from the Bill and Melinda Gates Measure

of Effective Teaching (MET) Project (2012b) research (called the seven C's) (see

Appendix C).

Themes Emerging from the Research

I asked seventeen questions of twelve students and found several themes emerge

from the conversations. Some of the responses on some topics provided no additional

insight, so these topics are not part of the analysis. Specifically, discussions about the use

of classroom space and transitions from one activity to another said, in essence, that

students find these things are taken care of such that they are a non-issue for all twelve

participants. As a result, I have reported nothing in chapter four about these two topics.

In addition, I combined student comments from the NMTEACH Observation Rubric and

MET Research when they were related. As a result, nine topics emerged for analysis in

this study: providing concern, care, and respect; anticipating student confusion; assessing

learning; asking challenging questions; providing helpful and consistent classroom

structures; managing conduct and control, giving the opportunity to confer, engaging and

captivating students, and offering flexibility when issues arise.

Students Know Good Teaching

There have been several small studies over the past ten years that are leading to

promising conclusions that suggest students know what effective teaching is and can

identify specific qualities of excellence when experienced. "Recently many

policymakers and practitioners have come to recognize that—when asked the right

questions, in the right ways—students can be an important source of information on the

quality of teaching and the learning environment in individual classrooms" (Bill and

Melinda Gates Foundation, 2012a, p. 1). Since there has been no research on the validity

of student interview data, the first part of the analysis will evaluate if student feedback matches my observation and if their analysis matches explanations of quality instruction.

Several times in interviews, students mention the reputation the class has as an uninteresting curriculum. A few students mentioned the dread of taking the class because it talks so much about the environment. The lack of interest is significant in that students do not want to take the class. This factor creates an additional challenge for teachers who have a responsibility to create interest and generate engagement within a rigorous class that most students consider boring.

The class is an honors class taken by every junior in the school, so its title establishes an expectation that students will grapple with difficult reading and writing material that will prepare them to be successful in college. The twelve students have a similar understanding of and appreciation for the expectations of the course. They define challenging as needing to elaborate on or explain topics, making students really think about ideas, using various resources to come up with ideas, requiring research, and paying attention to the topic of the lectures provided in class. In their writing, students connect ideas to each other and prior understanding, have fun with the teachers, obtain help to achieve, experience various modes of presentation, and work through multiple modes of assessment. All students recognize and appreciate the goal of learning independently and reference through many questions the college preparatory expectation to "teach [themselves.]" They recognize these experiences as expectations of quality work that help students display their learning and prepare for success in college.

Another student added to an explanation that exceeds expectations, the ability to prepare students to learn on their own and monitor their own learning. In the words of one student, the class "serves such a huge purpose not for environmental learning but for class learning because for a lot of kids this is their first introduction to a big class. I have to learn from a lecture, the teacher is removed and I have to learn, that's huge for some people because I have seen college classes like that so this is huge. The teacher is not always going to be there; this is our first time to be independent."

The class also teaches skills students will need to be successful in their future. As one underachieving student explained, teachers "kind of teach us how to consolidate in a low key kind of way. This is connected to this because of this and a and y is connected to b because it's all this big array because it's all one thing. I became a better writer when I made those connections." Other students are aware that teachers "help us by having us answer questions ourselves about the topic and have us go more into depth about the next topic."

Additional praise connects to the supports provided in the class like insisting students take Cornell notes when reading and listening to lectures. They appreciate that several assessments refer back to notes students have taken earlier. Finally, students enjoy the teachers' just simply engaging in their "nerdiness." Students know the teachers genuinely like the subject and appreciate questions because the teachers can "go off about some interesting sciency thing which is cool because it makes the class more personal" than one student thought possible.

Validity of Teaching Qualities

Earlier research pointed to a series of assumptions about effective teaching. These mirror the statements made by the twelve students regarding the quality of instruction they receive. The traits provided often noted in research are the following:

- Students learn best when new knowledge is connected to prior knowledge; therefore, instruction builds on prior knowledge, addresses students' needs to make that happen, and assesses to determine understanding and instructional needs.

- Effective teaching challenges students to learn rigorous curriculum.

- Professional growth takes time and occurs within each individual with a reflective process. (Aseltine, Faryniarz, & Rigazio-DiGilio, 2006).

The feedback provided by all twelve students equates with the understanding of teacher best practices. Students comment often on the connections they make to previous learning and the multiple means teachers provide to make that happen for each student. In addition, as one student explains, the learning is relevant because he had been watching news with his mother and explained to her some learning in class and what the news meant. Most of the comments also mirror the highly effective comments in the highly effective range that show students learn with each other and know what quality work is.

In sum, their ability to captivate students is that they seek the relation of information, challenge students' perspectives, ask controversial questions to get students invested, provide interesting facts, and show the relevance of the material to understanding many areas of the world. They just "kind of enlighten us with information so they do inspire us." As observer, I note these highly effective practices. All twelve

students note these and similar teacher behaviors but over the majority of the school year. In this way, structured conversational feedback validates what I see as observer and adds to the conversation in that students tell what behaviors are effective and why. As observer, I am unable to tell why.

Criticisms

In general, there are very few criticisms of the teachers' activities, teachers' behaviors and the curriculum as presented. Even the criticisms confirm that students understand quality teaching because they do not criticize poor teaching; instead, they discuss when an example of quality teaching has occurred but not frequently enough. Therefore, student feedback provides an important data point to determine quality teaching because as an observer I can see examples of quality instruction, but only students will know if that instruction occurs frequently and is effective for them.

At times, the teachers lecture too much and keep the class from going into any topics other than the ones they control closely. More than a few students wish the class could go more deeply into side topics that mean a lot to them. Students are aware that the ability to confer, which they define as the opportunity to discuss ideas and consider ramifications, is lacking in the class. The few times there are discussions that broaden the topic and get students to think more deeply about ideas as to how to solve problems in the world are cherished, but most students see these as not part of the class and sometimes inefficient. The criticisms provide some directions for additional engaging activities the teachers could undertake to make the class even more effective. Again, if the system evolves, receiving planned feedback from students could provide teachers

with an immediate sense of means teachers could use to provide more engaging instruction or more consistently engaging instruction.

Solutions

I was intrigued by the specificity of solutions provided be students when asked. To me, further evidence that students comprehend quality instruction is that they offer suggestions that are more challenging assessments or more enrichment in the classroom. When some students do not believe the questions are challenging enough, they believe a solution would be for students to have a little more choice to delve into similar topics but in a direction that students could handle and would challenge them. An additional solution might be for students to research another aspect of the topic than the one with the research provided in class. In sum, teachers could "let the class evolve a bit in a way more fluid environment and that would help a lot; especially if they want [students] to have a science experience they should let us let the class be different."

The solutions students provide offer additional rigor. These analyses provide ample evidence that students understand quality instruction and curriculum and even provide feedback that could enrich a class. The evidence suggests that student feedback could provide some very specific assistance to teachers to help students not just achieve at current levels but also extend learning in many ways.

Promise of Student Feedback from Interviews

The student feedback provided in these interviews exceeds what currently exists in research literature because it goes beyond an observation and a judgement of the teachers' executing certain activities or providing certain behaviors. It provides specific

feedback as to which activities work for students and in what circumstances. For example, students explained means to provide extension activities for high achieving students and means for teachers to check for understanding in the class.

This particular finding offers teachers support in an area in which they typically struggle: differentiation. When students were asked about assessment practices, they believed strongly that teachers sought understanding from students. As a result, they made several suggestions that would make creating differentiated assessment more meaningful for themselves: papers that pursue a direction antithetical to the research given in class, discussions of topics that might be similar to the cases studied in class, and problems for which there is not specific research to propose solutions in the area. These suggestions are rigorous assignments, and they suggest teachers and students could collaboratively plan meaningful assessments and these assessments could be more challenging and relevant than those created by teachers alone. The difficulty of differentiation can often be a teacher finding the right assignment; this feedback suggests that after students understand the learning objectives and goals, they are able to suggest differentiated assignments.

It is worth noting that all twelve students interviewed were in eleventh grade. They are in a small charter high school with a college preparatory mission and part of a mandatory honors class. The school's free and reduced lunch percentage at the time of the study was about 25%, which is half the statewide percentage. Students' ability to articulate their needs and concerns so precisely could be influenced by the school climate.

Climate

Climate can often influence student achievement. The first type focuses on the school and the effect of its expectations and feeling on students. Since the scope of this study focuses on students in a specific classroom, there are no school climate factors examined in this study.

Some research suggests that "teachers want to know if their students feel sufficiently challenged, engaged, and comfortable asking for help" (Bill and Melinda Gates Foundation, 2012a, p. 1). This is the feeling students receive in a positive climate. Still, the Bill and Melinda Gates (2012b) MET study looked at the effectiveness of classroom climate and found inconclusive results. The study found that climate was "unrelated to student achievement gains" (p. 10). Research by the same organization suggests the role of classroom climate in student achievement is uncertain.

Some research suggests specific situations in which climate has a strong effect. There are "strong associations between achievement levels and classrooms that are perceived as having greater cohesion and goal-direction, and less disorganization and conflict," especially for students from low-income homes and groups who often face discrimination (Adelman & Taylor, 2005, p. 3). Furthermore, "it is students' perceptions that are presumed to play the more important role in the goal adoption process" (Church, Elliott, & Gable, 2001, p. 2). This distinction of student perception points to a limitation in asking an evaluator to determine the effectiveness of a classroom climate for each student in the room and suggests there is something worthwhile in seeking additional feedback from those who experience the climate daily. "Given the importance of classroom climate, the establishment and maintenance of a positive climate in every classroom must be a central focus of all school staff" (p. 4). It follows that students'

perceptions are necessary because students are the best evaluators of a positive climate.

Classroom Climate – Three Factors

A lengthy study on the topic broke classroom climate into three factors: lecture engagement, evaluation focus, and harsh evaluation. Part of the analysis of classroom climate will examine the relevance of these three factors. The first, lecture engagement regards "the extent to which students perceive that the teacher makes the lecture material interesting. Lectures that students find interesting and engaging are likely to facilitate absorption and "flow" and draw the student into the learning process" (Church, Elliott, & Gable, 2001, p. 2). An evaluator is able to see the strategies a teacher uses to engage students, observe an engaging lecture, and comment on the breadth and depth of strategies a teacher uses to engage student; but it is very difficult to ascertain to what extent the student responds favorably without a conversation. Thus, the part of classroom climate that lends itself to lecture engagement and willingness to take the risks associated with learning requires more than observation.

As noted in earlier analysis, teachers oversee a topic that students do not like and often consider boring. Still, high achieving and underachieving students comment on the humor teachers to bring to the topic. They discuss how the fun makes them want to learn the topic more as a result of the effort of their teachers. Students also note how teachers provide high interest and relevant videos that connect the topic to a larger understanding of the world and get students thinking. Teacher lectures are also topical and focus on the important points with students taking Cornell notes and referring back to them in assessments. Student discussion responses confirm that lecture engagement is strong and its effect is clearly positive. A survey could confirm that lecture is engaging, but the

structured questioning provides the reasons something works and ways in which teachers can be instructionally agile for future lectures and presentations.

Perception Distinctions between High Achieving and Underachieving Students

The next two focuses pertain to the extent to which the teacher has integrity to the students. It is in these areas where the distinction between the feedback of high achieving and underachieving students begins to differ and suggest several directions for future research. Evaluation focus regards "the degree to which students perceive that the professor emphasizes the importance of grades and performance evaluation in the course. A strong emphasis on evaluation is likely to orient students toward performance outcomes" (Church, Elliott, & Gable, 2001, p. 2).

Most comments made regarding evaluation focus are positive as they suggest teachers are clear about learning objectives. In addition, students are very specific as to what is the evaluation focus: academic rigor and connections of information to other information in written assignments of enough length to connect data points into a coherent argument. The distinction is in the way high achieving and underachieving students perceive the evaluation focus on writing. High achievers see teachers as seeking learning from their students and being proactive in helping that occur; underachievers see teachers as seeking task completion and being reactive in letting students know the effect of their poor work or low grades.

For high achievers, these teachers are "always available to help [students]" and provide ample feedback focused on making student work better. This feedback is provided in advance of assignment due dates to ensure these students are successful. Each of the six high achieving respondents understood the care and concern provided by

teachers is focused on helping students achieve and discussed examples of relevant practices.

The comment about "doing work" repeated many times. These underachieving students see their teachers as helping them "understand what is going in in the class." One student had a conversation about a low grade he earned and appreciated the teacher's explaining the effect of the grade on his overall grade in the class. Another appreciated a teacher providing some time and effort to help him fix up his paper "to get [his] grade to passing." This explanation is what the student describes as "good work." In this way, both sets of students are clear about the evaluation focus, but the difference in the way they perceive teacher support could lead to their level of achievement.

This difference in perception relates to the belief that for high achieving students, teachers share responsibility for their students' achievement, but underachievers see learning as their responsibility and are solely responsible when it does not occur. Each of the six underachieving students said at least one time during the interview that he or she is responsible for his or her work; no high achieving student made such a comment. This distinction alone flies in the face of the belief that underachieving students sometimes need to be held accountable for their work. Despite the common belief among high achievers and low achievers that the work is challenging and that students are expected to achieve at a high level, their understanding of assessment, the way in which that understanding is measured, is split between high and low achieving students. High achieving students see the assigned papers as work focused on their own understanding and presentation of that knowledge. High achieving students believe papers assess understanding that students have learned, and most of these students believe they need to

go back and fix up their learning if something does not make sense. They see the assessment process as finding answers to a set of questions and placing them into a scientific paper. As one student explains, teachers do a good job at asking questions that require students to think about how to put their thoughts together coherently. At times, when students did not achieve, their grade reflected this lack of understanding. This group of six saw their grades as evidence they understood what they learned and their papers and projects provided evidence of their achieving those learning objectives as presented in a coherent paper. In this way, the evaluation focus is clear and focuses on the essential learning objectives of the course.

Underachieving students comment on grading related to the teacher determining what is good or not. In this way, underachieving students see the grading part of assessment as disconnected from learning and the curriculum, more or less as something done to them not as something that reflects achievement of learning. Underachieving students see the grading and feedback from assessments as "putting down" what they think, teachers' criticism of students' work, and teachers' opinions of students' work. As a result, underachieving students see little opportunity to control their own achievement as thinking at a high level on rigorous learning objectives. One student says underachieving students are not learning what quality work is; instead, they are unable to self-edit to provide first draft excellence.

A distinction exists when students discuss the cooperative learning approach to classroom learning. While many students praise the process of working in groups and learning, two underachieving students say it is difficult to determine if they are learning because it is not their own work; it is group work. As a result, the process of peer editing

is not as helpful as some might believe because some peer editors do not offer feedback that helps students learn because they do not know more than the students they are editing. In addition, some students have had what they determine to be an insignificant missing piece of a paper to have had too strong an effect on their final grade. In this case students experience a disconnect between what they believe are the most important aspects of the assessment and those that actually have a strong effect on their grade. Thus, they do not understand the essential elements of the assessments and remain uncertain of their learning. When this uncertainty exists, underachieving students do not understand the basis upon which they achieve, which makes it difficult for them to achieve.

The difference is important and worthy of more study: achievement for high achieving students is learning and high grades are a representation of that learning; achievement for underachieving students is task completion on time and grades are a representation of "doing work." This distinction is potentially groundbreaking with several ramifications for students' education. It suggests that underachieving students have a different belief about school than high achieving students do, and this difference keeps them from learning at a high level.

As suggested earlier, underachieving students have a strong belief that they are accountable for "doing work." The issue suggested here is that they see the teacher as the ultimate determiner of quality work and that understanding of quality is out of their reach. A teacher could focus "doing work" not just on performing the work but also on determining how to do so. As some students suggested, having exemplars of quality work could help; these data points suggest that consciously working with struggling

students to analyze what constitutes quality could help students begin to see their role as learners who work with teachers to learn. The exciting conclusion to draw from this line of reasoning is the success of the work could close persistent achievement gaps by intentionally teaching students how to learn.

Harsh Evaluation

Harsh evaluation regards "the extent to which students view the grading structure as so difficult that it minimizes the likelihood of successful performance" (Church et al., 2001, p. 2). As suggested in previous analysis, high achieving students understand on what they are assessed and evaluated, but several underachieving students do not. While it is not surprising, then, that underachieving students believe they receive harsh evaluation: uncertain standards, reactionary grades, and low scores over which they have little control, it might point to a cause for the understanding of evaluation.

High achieving students see their grades as something over which they have control. As a result, students talk about the papers as "understanding what [we've] learned" that "connects all of what [we've] found the answers to and actually made it work together." At least three high achieving students were asked specifically if they are learning, improving, and able to determine their own achievement, and three said they could. As one student said, "right now we are working on the book, and we have to answer questions about what we read and learn and what we understand, and that is how they evaluate us to see what we've learned." High achieving students believe they receive fair evaluation and have even learned to edit themselves to ensure they are successful, thus learning how to self-evaluate.

Underachieving students see evaluation as a much harsher process over which they have little control and understanding. Students claim teachers "critique [student] work and tell students what [teachers] think", help students learn how to fix sentence structure and stay on topic and not beat around the bush", and "help [students] see what they've done wrong." Underachieving students are clear that "teachers will tell [students] when they have not learned", learning is not "apparent until [students] get the final grade", because "the real feedback comes in when [students] turn the paper in and then get it back with the teacher's notes on it…. [Students] really see how well [they] did with [their] grade." One frustrated student expressed the difficulty best when he said, "I'm not involved at all (in assessment) because it usually frustrates me to write a paper about what they want me to think about it – they want to hear what they want and they really grade me hard if I think this is different, and I think it would be better if they gave us things with different perspectives."

When I asked the six underachieving students if they are aware of their own learning, all students said they were. Still, five of the six described grading as teachers telling students if they have learned and four of six explained good writing in terms of sentence structure, spelling, and proper citation. It is interesting, however, that while students do explain the factors of harsh evaluation, they do not see their experience as harsh. The reason might be that they perceive teachers actions as evidence of concern, care, and respect.

Providing Concern, Care, and Respect

Another area of research in which high achieving and underachieving feedback differs significantly is in the areas which discuss teachers' levels of concern, care, and

respect. Recent MET Research suggests the area of care correlates strongly to student achievement. In one study of 2358 classrooms that broke student survey data into deciles, when only 10 percent of students reach acceptable achievement level, 20 percent of all students in class see their teachers as caring. By contrast, for a class with 90 percent of students reaching acceptable achieving levels, over 80% of students agree that their teachers care (Bill and Melinda Gates Foundation, 2012a, p. 4).

A simple conclusion drawn from that research suggests that care correlates well with student achievement. One of the reasons I chose this class was that I believed all students experience care, and I thought issues with underachievement were more complex than the findings in the study suggests. Therefore, I combined the NMTEACH Observation Rubric responses about concern and respect with the MET Research care responses to determine if I could gain some insight into the complexity. The first thing that jumped out to me was not a single achieving student made a statement about teachers' knowing their names or needing to achieve to make the teacher happy, but the six students who underachieve were more passionate in their explanation of the teachers' concern and care provided to them. Four of the six mentioned the specific personal connection teachers gave them. For example, teachers knew students' names and called students by these names instead of, "Hey, kid. What's up?" There is similar contact in the hallway and throughout the class period. This type of contact feels nice to students, and one even said it was important to her to "make them feel proud of [her] in a sense." Another student explained that he valued the personal connection because it motivated him to do work. When not motivated, he is aware that will miss a few assignments and just get lost in the crowd. This feedback suggests that some students desire teacher

connection as a motivation to work since the incentive to achieve is not intrinsic for these students.

Differences of Academic Understanding

High achieving students understand the care and concern from teachers as evidence they are quality educators. Teachers "really want [students] to know why [they] learn it" and "get it on [their] own." Underachieving students appreciate the care provided when they have an off day, need water or a break, and provide guidance to help students write more professionally or turn in work on time to help students "pass the class." In this way, high achieving and underachieving students appreciate the care and concern provided by teachers, but the focus of the former is learning whereas the focus for the latter is passing the class.

I sensed that underachieving students do not typically receive that caring all of the time, so it stands out for them in this class. In addition, the concern teachers provide is evidence of two different ends: high achievers see teachers as seeking learning from their students and being proactive in helping that occur; underachievers see teachers as seeking task completion and being reactive in letting students know the effect of their poor work or low grades. The discussion of these aspects of teaching seem to suggest that for high achieving students, teachers share responsibility for their students' achievement, but underachievers see learning as their responsibility and are solely responsible when it does not occur. Additional support for that belief stems from the evidence that a high achieving student was appreciative that the teachers knew of the accommodations in his IEP and worked constantly to meet them, but two underachieving students with ADHD asked for nothing more than a quiet space to work which was enough for them. When

asked, the underachieving students did not know if their teachers knew of the ADHD issue as the students did not want special treatment. I was unable to determine if students could determine if teachers treated them differently or if they were treated the same and perceived it differently.

Flexibility

Related to care and concern is teachers' ability to meet needs of students on an individual basis. While high achieving and underachieving students both see the teachers as flexible, these responses split between high achieving and underachieving students. High achieving students appreciate teachers' answering questions in a way that makes sure students learn about the topic. There is also a trust that teachers "know what students can do on their own" and what they need to be retaught. One high achieving student also has an IEP and comments that teachers have been "extremely accommodating… which has been extremely helpful." Another student also notes that teachers are accommodating for sports absences by providing tutoring and allowing for late work.

While underachieving students also appreciate the ability to turn in late work and tutoring, they see these accommodations as allowing them to "fix" their work. The tutoring option helps another student lessen her anxiety and lessen her fear that she will "fail if she does not get this turned in." A few students with ADHD are provided with a smaller and quieter space to work so that they accomplish more work in class. Others appreciate Tuesday tutoring to turn in late work with no penalty because of having bad days. Presumably underachieving students have more needs, but Tuesday tutoring is the only flexibility available to them.   As one student notes, teachers provide a tone in class

that they help students, but students do not perceive multiple means to provide assistance for the many needs in class. In addition, struggling students say they do not ask for these accommodations or modifications because they typically see themselves as responsible and accountable for their work.

Summary

This project sought to delve more deeply into the teacher evaluation process as measured through domains two and three of the NMTEACH Observation Rubric and the seven C's of the Bill and Melinda Gates Foundation MET Project. I spoke with twelve students, six high achieving and six underachieving about their perceptions of the behaviors of teachers in one class I judge to be highly effective. The study focused on two questions: What perspectives can students provide about what influences their achievement in the classroom? How do students' perceptions of teachers' expectations, behaviors, and attitudes impact these students' success?

The data gathered from the study suggested that seeking student feedback through structured feedback agrees with the findings of an evaluator and provides additional insights into teachers' effectiveness. Secondly, the data showed that student agreement about the quality of teacher behaviors was not as instructive about students' needs as understanding the context and perceptions of students regarding what those students understood. Further, the data suggest that underachieving students' expectations focus on needs for task completion, the opportunity to pass the class, and extra time to finish work. In addition, struggling students see themselves as accountable and responsible for their own achievement as opposed to high achieving students who see teachers as partners in

helping students achieve. These findings suggest a few areas that follow need further study and lead to a series of recommendations.

Recommendations

This study occurred ultimately to determine if structured interviews with students would provide valid data and if that data could add to a teacher's evaluation. The data from twelve interviews suggest the answer to both questions is structured interviews should occur **if** (emphasis provided) the process is focused less on accountability and more as an exploration of continuous improvement undertaken with the practitioner and the observer. The data gathered ask some questions and present some conundrums for which there is not a clear answer and for which questions arise about current research. Therefore, an additional recommendation is for other researchers to undertake similar research to begin to understand the power of student voices.

The qualitative study sought student perceptions, and it found that high achieving and underachieving students possess a few perceptions that are foundationally different. In my observations, teachers provided very similar behaviors for students, but high achieving and underachieving students' perceptions are almost opposite. These differences are important enough that they must receive more study to determine the distinction exists and, if it does, find means to address it.

There are a series of research questions that arise from the dichotomies presented in the study. These questions seek understanding all focused on understanding what students can be taught to help close these achievement gaps:

-   What are the differences between what underachieving/ struggling students understand about their expectations from a class as opposed to what high achieving student expect? Are these differences definable and teachable?

-   Some teachers believe that underachieving students need to fail or receive low grades to be held accountable, yet this study suggests these students hold themselves accountable, perhaps to the detriment of their own learning. Are there studies that can be performed to research the validity of this finding? If this finding were true, are there ways to teach underachieving students how to determine their needs and ask for help so as to partner with teachers in their learning instead of see themselves as more accountable when they do not ask for help?

-   This study suggests that underachieving students expect more accountability measurements from teachers than proactive teaching for learning. Is there a way to determine if that finding is a perception of struggling students or a reality? Is there a way to improve this situation for struggling students so they see their experience as focused on learning and not task completion?

In general, the study leads to questions for which there is little research. The data suggest that underachieving students have a different understanding of education than high achieving students do that is somehow connected to their perceptions. While there are several questions, they point often to specific questions or ideas that target interventions or understandings to improve student achievement.

Ironically, the key to the future of this research exists in the insight provided by achieving students about their teachers. The potential power of this work can only occur if one important policy and practice change occurs: teacher evaluation becomes a partnership between evaluator and teacher. When that change occurs, the evaluator and teacher will welcome new data points, such as seeking student feedback from structured interviews.

This study occurred because one of the teachers in the study asked me to do it. She wanted to know why some students did not achieve. I wanted to know as well but also hoped to find out if there were adjustments or changes that teachers could make to improve student achievement. This study was created so that it could be easily replicated in a school, a department, or even a classroom. The data I received from the interviews are formative in nature and worth sharing with teachers during the school year to improve their work with students. The questions are structured and focused on students' perceptions and the effectiveness of teachers' behaviors in helping students achieve. My experience showed students were willing to discuss their perceptions and their feedback was valid and provided formative suggestions to meet students' needs.

The time needed to speak with several students and analyze the responses is significant, so it is not realistic to suggest this process for every teacher in every school. That being said, there are two targeted ways I would implement this in a school or district plan:

1.   Specific Need for Specific Teacher Data:

There are ten specific areas of teacher practice identified in the two observation domains in the NMTEACH Observation Rubric. If a teacher were ineffective or minimally effective in an area or two and the evaluator understood the teacher needed more data to find ways to improve, I would create a group to ask questions related to this specific identified teacher need. For example, if the evaluator observed that teachers were not "using questioning and discussion techniques to support classroom discourse" (NMTEACH Observation Rubric, 3B), the evaluator could ask a group of high and underachieving students questions related to this area of practice in addition to a couple of related ones like engaging students in learning (3C) and assessment in instruction (3D). Then, the evaluator could discuss the findings with the teacher to provide a clearer insight into students' perceptions of specific practice and collaborate on means to improve teaching.

2.   Opportunities for Teachers to Grow

This use of the protocol is for teachers who are seeking to grow in their practice and looking for the area(s) on which to focus. As evaluator, I would ask several students questions from at least five areas of practice and gather the data, focusing specifically on areas of strength and suggestions to improve and discuss those with the teacher. In this way, the teacher will be able to collaborate with the evaluator on new strategies to employ and means to receive feedback form students as to their success.

As an educator, I was pleased with the depth and specificity of student feedback. I was surprised at the distinction high achieving and underachieving students made in their perceptions and expectations of their experiences, and I believe strongly that further research in this area could unlock some important secrets to underachievement. Finally, I

was glad that the concept of an additional area of feedback seems to have a tremendous

amount of promise to provide formative data to teachers in an effort to improve

achievement for students in the current classroom during the current year.

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Appendices

Appendix A Domains 2 and 3 of NMTEACH Observation Rubrics

Elements	Domain 2: Creating an Environment for Learning				
	Level of Performance				
	Ineffective	Minimally Effective	Effective	Highly Effective	Exemplary
NM TEACH 2A: Creating an environment of respect and rapport • To what level are interactions in the classroom positive and productive? • To what level are all student groups respected and valued in the classroom?	Classroom interaction both between the teacher and students, and among students, are inappropriate or insensitive to students' cultural backgrounds, and may include the following: • Sarcasm. • Put-downs. • Conflict.	Classroom interactions, both between the teacher and students, and among students, are generally positive, but may include these: • Some conflict. • Occasional displays of insensitivity. • Occasional lack of responsiveness to cultural or developmental differences among students.	Classroom interactions, between teacher and students, and among students, are as follows: • Are polite and respectful. • Demonstrate knowledge of cultural and developmental differences among groups of students. • Disagreements are handled respectfully.	Classroom interactions among the teacher and individual students are as follows: • Are highly respectful. • Reflect warmth and caring. • Practice reflects sensitivity to students' cultures and levels of development. • Respectful discourse.	In addition to all the requirements to be highly effective, the teacher as a leader demonstrates the following: • Helps create a school-wide environment of respect for the campus, the stakeholders, and the rules. • Works with colleagues on developing support for students in need. • Helps to create school-wide interventions, and support programs.
	Ineffective	Minimally Effective	Effective	Highly Effective	Exemplary
NM TEACH 2B: Organizing physical space • To what level do all students have equal access to learning resources and materials? • To what level does the classroom environment support the day's lesson?	The physical environment is as follows: • Unsafe. • Students do not have access to learning. • Poor alignment between the environment and the lesson activities.	The classroom is safe as follows: • Essential learning is accessible to most students. • The teacher's use of physical resources, including technology, is moderately effective. • Teacher is partially effective in modifying the	The classroom is safe as follows: • Learning is accessible to all students. • Teacher ensures that the physical arrangement is appropriate to the learning activities. • There is posted evidence of student learning.	The classroom is safe as follows: • Students contribute to the use or adaptation of the physical environment to advance learning. • Technology is used skillfully, by teachers as appropriate to the lesson.	In addition to all the requirements to be highly effective, the teacher as a leader does the following: • Teacher uses the classroom to model or demonstrate for other teachers. • Helps colleagues arrange

Creating an Environment of Respect and Rapport (vertical row label)

		Ineffective	Minimally Effective	Effective	Highly Effective	Exemplary
				• Teacher makes effective use of available physical resources, including technology.	environment to suit learning activities.	• their environment so learning is accessible to all. • Technology is used skillfully, by teachers and students as appropriate to the lesson.

		Ineffective	Minimally Effective	Effective	Highly Effective	Exemplary
Establishing a Culture of Learning	**NM TEACH 2C:** Establishing a culture for learning • To what level do students exhibit a learning energy during the lesson that supports engagement? • To what level are students encouraged to communicate with others to address learning goals?	The classroom environment conveys a negative culture for learning as follows • Low teacher commitment to the subject. • Low expectations for student achievement. • Little or no student effort.	Attempts to create a culture for learning and is partially successful as follows: • Some teacher commitment to the subject. • Modest expectations for student achievement. • Some student effort. • Teacher and students appear to be "going through the motions."	The classroom culture is characterized by high expectations for all students. • The teacher establishes norms and participant structures in which students can learn with and from each other, i.e. student grouping, student presentations, and peer editing. • Teacher conveys content relevance. • Demonstrated commitment to the subject by both teacher and students. • Students demonstrate pride in their efforts.	Culture for learning in which everyone shares a belief in the importance of the subject as follows: • High levels of student excitement and teacher passion for the subject. • All Students hold themselves to high standards of performance Students initiate improvements to their efforts.	In addition to all the requirements to be highly effective, the teacher as a leader does the following: • Promotes and organizes school-wide learning program(s) and learning culture among all stakeholders.

		Ineffective	Minimally Effective	Effective	Highly Effective	Exemplary
Managing Classroom Procedures	**NM TEACH 2D:** Managing classroom procedures • To what level is the classroom culture and routine maximizing instructional	Instructional time is lost. • Inefficient classroom routines. • Inefficient procedures for transition. • Inefficient use of supplies.	Some instructional time is lost. • Partially-effective classroom routines and procedures • Partially-effective routines for transition	Little instructional time is lost. • Effective classroom routines and procedures. • Teacher leads effective routines for transition. • Effective use	Students contribute to the seamless operation of the classroom. • Routines and procedures are evident. • Effective transitions and use of	In addition to all the requirements to be highly effective, the teacher as a leader helps to create a culture of student ownership of school-wide

		Ineffective	Minimally Effective	Effective	Highly Effective	Exemplary
	time? • To what level does the teacher use developmentally appropriate procedures to maximize instructional time?		• Partially-effective use of supplies	of supplies.	supplies. • Students lead effective routines for transition.	operations.
Managing Student Behavior	**NMTEACH 2E**: Managing student behavior • To what level are student behavior expectations consistently monitored and reinforced?	No evidence that standards of conduct have been established. • Little or no teacher monitoring of student behavior. • Response to student misbehavior is repressive or disrespectful of student dignity.	Teacher has made an effort to establish standards of conduct for students • Effort made with inconsistent results to monitor students' behavior. • Response to student misbehavior is inconsistent.	Standards of conduct are designed to create an atmosphere conducive to learning, with a focus on self-discipline, respecting the rights of others, and cooperating with one another. • Standards are clear to students. • Teacher holds students responsible for maintaining behavioral standards. • Teacher response to student misbehavior is appropriate and respects the students' dignity. • Teacher response is consistent.	In addition to standards being clear to students are these elements: • Evidence of student participation in setting conduct standards. • Teacher's monitoring of student behavior is highly effective. • Teacher's response to student misbehavior is sensitive to individual needs. • Students take an active role in monitoring the standards of behavior.	In addition to all the requirements to be highly effective, the teacher as a leader demonstrates the following: • Actively engages in the monitoring of student behavior school-wide. • Serves as a model of positive behavior for stakeholders. • Teacher promotes system(s) of school-wide positive behavioral support that encourages stakeholders to promote and monitor a safe and healthy environment.

	Elements	Domain 3: Teaching for Learning				
		Level of Performance				
		Ineffective	Minimally Effective	Effective	Highly Effective	Exemplary
Communicates	**NM TEACH 3A:** Communicating with students in a manner that is	Does not deliver clear expectations for learning, directions,	Limited expectation for learning, directions, procedures, and	Teacher uses clear communication employing a range of vocabulary to	Expectation for learning, directions, procedures, and	The highly-effective teacher promotes ongoing and

		Ineffective	Minimally Effective	Effective	Highly Effective	Exemplary
	appropriate to their culture and level of development • To what level are directions clearly delivered and understandable? • To what level is content communicated in a clear, concise manner?	procedures, and explanations of content to students.	explanation of content.	ensure learning expectations are comprehensible to all students. Teacher allows for student clarification and feedback.	explanation of content are evident, consistent, and anticipate possible student misconceptions.	consistent communication with students. Students are provided multiple opportunities and/or modalities to express concepts being taught in class and are clearly aware of their progress with those concepts.
		Ineffective	**Minimally Effective**	**Effective**	**Highly Effective**	**Exemplary**
Uses Questioning and Discussion Techniques	**NM TEACH 3B:** Using questioning and discussion techniques to support classroom discourse • To what level do all students have an opportunity to answer questions? • To what level are questions thought provoking and rigorous?	Teacher questioning techniques are not aligned to content and provide no opportunity for student engagement	Teacher questioning techniques are low-level with minimal student engagement	The teacher's questioning techniques elicit a deep response and allows for sufficient time for students to answer through active engagement with peers and teacher.	The teacher promotes consistent analytical and collaborative approaches to understanding, uses questioning techniques that scaffold instruction for deep understanding of concepts, allowing for discussion and debate of key concepts.	Questioning techniques are engaging and reflect a high level of thinking in a culturally and developmentally appropriate environment. Students engage in deep meaningful conversations using academic language.
		Ineffective	**Minimally Effective**	**Effective**	**Highly Effective**	**Exemplary**
Engaging Student Learning	**NM TEACH 3C:** Engaging students in learning • To what level are students engaging in the lesson's activities? • To what level are activities sequential and aligned to the daily learning target? • To what level are students required to be intellectually engaged with the course content?	Activities, assignments, materials, and grouping of students are inappropriate to the instructional outcomes, resulting in no intellectual engagement. • The lesson has no structure and/or is poorly paced.	Activities, assignments, materials, and grouping of students are somewhat appropriate to the instructional outcomes, resulting in moderate intellectual engagement. • The lesson does not connect to prior understanding. • The lesson has a recognizable structure, but is not fully maintained. • The lesson does not have clear learning goals (more specific than	Activities, assignments, materials, and grouping of students are fully appropriate to the instructional outcomes. • The lesson explicitly connects to prior understanding. • All students are engaged. • The lesson's structure is coherent and paced appropriately. • The lesson has specific learning goals aligned to the standard. • The lesson allows for	Activities, assignments, materials, and grouping of students are designed to support challenging instructional outcomes. • Students are highly intellectually engaged. • The lesson is adapted as needed to the readiness of each student and the structure and pacing allow for students' reflection and closure. • The lesson	Expectations of students are at an advanced level to engage learners to obtain depth of knowledge. • The teacher formatively assesses student engagement, understanding, and ability to analyze, and immediately adapts methods for improved learning.

		Ineffective	Minimally Effective	Effective	Highly Effective	Exemplary
Engaging Student Learning				broad standard).	student reflection.	allows for formative assessment.	

		Ineffective	Minimally Effective	Effective	Highly Effective	Exemplary
Engaging Student Learning	**NM TEACH 3D:** Assessment in Instruction • To what level does the teacher determine the understanding and needs of each student during the lesson? • To what level are students aware of how they will demonstrate understanding of the content/lesson?	Assessments are not used in instruction. • Students are unaware of assessment criteria. • The teacher does not monitor student progress or offer feedback.	Assessments are occasionally used in instruction. • Students are minimally aware of the assessment criteria. • The teacher occasionally monitors students' progress and provides limited or irrelevant feedback.	Assessments are consistently used in instruction. • There are clear goals and performance criteria, communicated effectively to students. • The assessment strategies are aligned to the goal and criteria, and elicit evidence during instruction. • Teacher uses adaptive instruction including descriptive feedback. • Student involvement occurs through self and peer assessment.	Assessments are used in a sophisticated manner to drive instruction. • The teacher establishes, supports, and models the use of consistent assessment of progression and development as a tool for improved learning to stakeholders.	Students analyze and evaluate assessment data, and information, and apply same to improved learning. • The teacher involves students in establishing the assessment criteria and provides high quality feedback from a variety of sources.

		Ineffective	Minimally Effective	Effective	Highly Effective	Exemplary
Engaging Student Learning	**NM TEACH 3E:** Demonstrating flexibility and responsiveness • To what level does the teacher modify instruction within the lesson/class period?	Teacher adheres to the instructional plan, even when a change would maximize learning. • The teacher disregards students' learning challenges. • The teacher blames the students or their environment for lack of academic progress.	Teacher accepts responsibility for student success. • Teacher attempts to modify the lesson and responds to student questions with moderate success, but has a limited repertoire of strategies to draw upon.	Teacher promotes the successful learning of all students. • The teacher adjusts instructional plans and makes accommodations for student questions, needs, and interests. • Teacher utilizes a variety of strategies.	Teacher seizes an opportunity to enhance learning by building on a spontaneous event or student interests. • Teacher applies student interest to current learning goal. • The teacher ensures the success of all students, using an extensive repertoire of instructional strategies.	The teacher identifies unique "teachable moments" that relate current lessons/standards to individual and student groups. • The instructional strategy enhances depth of knowledge and cultural or learning relevance.

Appendix B NMTEACH Observation Rubric Questions

1.   Good teachers create a feeling of respect and connection with each student. In what ways do you feel respect from and connection to your teachers? In what ways do you feel as if your lack of connection hurts your performance?

2.   Teachers organize the space in the classroom to make it safe and possible for each student to learn. Do you find the space is set up well and it makes it possible for you to learn? What could make it better?

3.   Effective classrooms expect all students to meet high expectations. To help make that happen, the teachers will create norms and structures in which students can learn with and from each other. How well do the teachers set up the classroom structures and how well do these structures help you achieve?

4.   When teachers move from one activity to another, do they do so with little interruption or slowing down of learning? Do students help with these transitions or slow down the class?

5.   Teachers create an expectation of conduct for students and that expectation should help students learn, with a focus on self-discipline, respecting the rights of others, and cooperating with one another. Are the standards in class clear to all students and applied consistently and fairly? In addition, does the teacher hold students responsible for maintaining behavioral standards and respond to student misbehavior appropriately?

6.   Teachers are expected to communicate clearly to students about what they expect, and the best communication anticipates student confusion before they feel it. Do you find that your teachers explain things in a way to keep you from being confused? Do you have some suggestions to make communication clearer and better?

7.   Teachers are expected to ask questions that set high expectations for each student. Do you find the teachers ask questions that make you think deeply about the topics in class? Can you think of times that you would expect deeper questions and do not get them?

8.   Teachers are expected to engage students in learning, keep them intellectually engaged throughout the lesson, and help them contribute to their learning. Talk with me about how the teacher does and does not do so.

9.   Assessments are tests, quizzes, worksheets, and projects. How well do assessments test what you have learned? How involved are you in establishing the

criteria of excellent work and giving the teachers feedback in the work you are expected to do?

10.   Excellent teachers are flexible in that they respond to your needs in a number of ways. Please discuss what are the best ways they respond to your needs and what ways they are not so effective and why.

Appendix C MET Survey Seven C's Questions

There are some additional questions that are part of research on teacher effectiveness. These seven questions talk about the seven C's of effective teaching that have been shown to improve student achievement.

1.   The first one is care. In what ways do the teachers show they care about you? How does that care help you learn?

2.   The second is confer. This strategy has teachers encourage students' ideas to create a lively discussion about important topics. In what way do the teachers do this? How does their encouraging discussion help you improve your learning?

3.   The third one is captivate. This strategy seeks to inspire curiosity and interest in the subject. How do teachers help you become curious about the subjects you are studying? As you think about it, does the way they make you curious help you to achieve in this class?

4.   The fourth one is clarify. This strategy seeks to provide understanding and decrease or eliminate confusion. How do teachers help increase understanding and decrease confusion? In what ways does this strategy help you succeed? Do you have any suggestions to the teachers to help you understand more clearly?

5.   The fifth one is consolidate. This strategy seeks to help you connect ideas and seek deeper understanding. It is an important skill in an advanced class like this. How do teachers help you learn to do this? What should they continue to do and what could they do to help you learn this important skill?

6.   The sixth one is challenge. This strategy is related to the previous one. How do teachers challenge you to learn difficult, college-preparatory material? How do teachers encourage you to achieve at this level? What suggestions could you give to get them to improve their efforts?

7.   The seventh one is control. This strategy asks how effectively teachers are keeping order and focus on the topics at hand. How well do teachers keep students focused on learning? What can they do to help you remain focused on your learning?

Appendix D Letter of Support

EAST MOUNTAIN HIGH SCHOOL

Engage • Challenge • Inspire

February 18, 2013

Letter of Support to the UNM IRB for Douglas Wine

To Whom It May Concern:

At its meeting of February 11, 2013, the Governing Council of East Mountain High School voted unanimously to support EMHS Principal Douglas Wine's qualitative research project for his Educational Leadership 607 class at the University of New Mexico. East Mountain High School is classified as a small, rural southwestern college preparatory charter school.

The Council has been informed that Principal Wine will be interviewing juniors in Environmental Science, an honors class required of all juniors; the class requires all students to master the curriculum of rigorous reading, presentation and scientific writing.

Since Principal Wine is evaluated on teacher success, the Governing Council is pleased he will pursue a deeper understanding of teacher effectiveness. Principal Wine has discussed with the Council what he hopes to learn as well as the safeguards he will take to ensure the safety of students.

If you have any questions, you may contact me at the e-mail address below.

Sincerely,

David Walter
Chair, Governing Council
East Mountain High School
dwalter527@yahoo.com

Appendix E Parental Consent to Participate in Research Form

The University of New Mexico
Parental Consent to Participate in Research
November 3, 2014

Using Student Feedback to Enhance Teacher Evaluation

Introduction

You are being asked to approve the participation of your child in a research study that is being performed by Douglas Wine, doctoral student at The University of New Mexico, under the supervision of Arlie Woodrum, Principal Investigator and Chair, from the Department of Educational Leadership. This research is studying what feedback students can provide about their perceptions of teachers' classroom strategies and activities. Both of your child's teachers have asked Mr. Wine to perform the study because they are interested in determining if there is anything else they can do to help their students succeed.

The study looks at students performing at various levels in their Environmental Science class. By consenting, you are giving Lori Webster permission to confirm that your child belongs to one of the achievement levels being studied. Your child could be asked to participate in this study if he/she belongs to one of the study's criteria. Up to twelve people will take part in this study at East Mountain High School.

This form will explain the research study, the possible risks, and the possible benefits to your child. We encourage you to talk this project over as a family before you allow your child to take part in this research study. If you have any questions, please ask Mrs. Webster or Mr. Wine (dougwine53@gmail.com).

What will happen if you approve your child's participation?

If you agree to approve your child's participation, the following things will happen: Ms. Webster will send the questions Mr. Wine will ask to your child in advance, and she will schedule a meeting with your child and Mr. Wine during advocacy. During the meeting, Mr. Wine will meet with your child for about an hour during advocacy and discuss the strategies of an effective teacher in Environmental Science. Then, he will ask for your child's perceptions about how these strategies are presented, how they are understood, and what effects they have. Your child will be asked to provide examples and discuss what ideas he/ she has to highlight strategies that are working well as well as to suggest some that would help him/ her to be more successful.

Mr. Wine will record the interviews with a digital voice recorder. Unless he is uncertain about something your child said and needs clarification, that will be the extent of your child's participation. If Mr. Wine has questions, he will email your child within a week of the interview and set up another face to face meeting to ask follow up questions. If there is an additional meeting, your child's participation will end after that.

Mr. Wine will retype the interviews. After that, the tape will be erased, so only a written record will remain. Then, Mr. Wine will code all of the interviews into categories of similarities and unique points.

At the point information is coded, the information is de-identified, which means there is no way to determine which participant provided what piece of information.

What are the risks or side effects of being in this study?

Identification and Confidentiality:

Your child's name will only be known by your child; by Mrs. Webster, the person who screens participants and meets with your child and you to gain consent; by you; and by Mr. Wine, the person who will interview your child. His/ her name will be coded by Mrs. Webster to lessen the risk of it being identified and placed on a list that provides the name and the code (for example, John Smith, AZ364), and she will provide the codes to Mr. Wine.

When the interviews are complete, they will be retyped within 72 hours and stored in an encrypted written document on a password protected computer. This document will be stored and identified by the code Mrs. Webster created. This code lessens the risk of identifying the information and the provider. The coding documents and your consent and your child's consent forms will be kept in separate locked file cabinets in Mr. Wine's office.

Therefore, the greatest risk to your confidentiality is if your child or you talk about your involvement. It is recommended, then, that you and your child do not talk about your child's involvement in the study with anyone but your family or Mr. Wine to keep participation confidential.

We will take measures to protect the security of all your personal information, but we cannot guarantee confidentiality of all study data.

Information contained in this study's records is used by study staff. The University of New Mexico Institutional Review Board (IRB) that oversees human subject research and/or other entities may be permitted to access your records. There may be times when we are required by law to share your information. That being said, your child's name will not be used in any published reports about this study.

Student Stress:

When your child participates in a study and is asked about his/her teachers, there is a slight concern your child might feel stress because he/ she might worry that his/ her teachers will find out what he/ she said and use that information to harm him/ her in some way.

There are several factors that will limit this risk:
- The primary reason for undertaking this study is that these teachers want Mr. Wine to perform the study to help them become better teachers. Therefore, they want students to provide feedback. In addition, they will not receive information while your child is a student in the class. Instead, they will receive a summary of the information in the summer after this school year ends to limit any risk of their identifying any participants and having that identification adversely affect your child.
- Mr. Wine and your child are the only two who will know exactly what he/ she says. Your child's information will be stored off campus and will not be available to anyone on campus.

- The final report will be written by Mr. Wine in a way to make sure your child is not identified. In addition, there is a dissertation committee who will read and analyze the report before published to ensure your child's confidentiality.

While this risk is something students typically feel, there is minimal risk of a breach of confidentiality that teachers will know which students are in the study, that they will know what your child said, and that the final report will be able to identify your child. As mentioned above in the identification and confidentiality section, there are several actions taken by the researcher (coding the student's name, not identifying participants to the teachers, meeting the student's in a closed office, and retyping the interviews within 72 hours) that will minimize the possibility of a breach of confidentiality.

Concerns Over Other Reportable Information:

Mr. Wine is a licensed school administrator and is required through his license to report certain information to school, state, or legal authorities when information that requires such reporting is provided. As a result, if Mr. Wine were told information that required such reporting, he would make those reports.

The list below is not complete but will discuss typical reportable events that any school employee or licensed teacher would report:

- Student reports illegal activity: If your child reports any illegal activity (drug use, sexual impropriety, abuse), Mr. Wine is required to report that information to legal authorities. After that report, Mr. Wine would speak with an authority at the school, you, and any public support organizations (CYFD, etc.) to ensure your child's safety.
- Student reports illegal or unethical behavior by teachers: If your child reports any information that suggests improper behavior by his/ her teachers, Mr. Wine will report that information as required. In some cases, he will speak with an administrator at the school; in more serious cases he would report unethical behavior to the New Mexico Public Education Ethics Bureau. In the case of illegal activity, he will call the police.

What are the benefits to being in this study?

Societal Benefit:

The primary benefit of participation in social research is the information it will provide to improve some sort of societal situation. Since this project refers to teaching, the goal is to improve teaching, and your child's assistance could provide some insight into what teacher evaluators do not see or recognize when he/ she is in the classroom or performing other types of evaluation.

Self-Reflection:

Students who reflect on their experiences often learn something about themselves and the way in which they make meaning from their experiences. Therefore, a possible benefit for your child is to learn more about what he/ she values in his/ her education and what your child can ask for from teachers to improve his/ her education.

What other choices do you have if you do not want your child to be in this study?

Your child may choose not to take part in this study. There will be no penalties involved if you or child chooses not to have your child take part in this study. You may simply not sign the form, and you will not be contacted again.

What are the costs of taking part in this study?

There are no costs to participate in the study.

Will you or your child be paid for taking part in this study?

There is no compensation for being part of the study.

How will you know if Mr. Wine learns something new that may change your mind about your child participating?

You will be informed of any significant new findings that become available during the course of the study, such as changes in the risks or benefits resulting from participating in the research or new alternatives to participation that might change your mind about your child's participating.

Can you stop your child's being in the study once he/ she begins?

Your child's participation in this study is completely voluntary. You have the right to choose not to participate or to withdraw his/ her participation until a certain point. In about three months after conducting the interviews, Mr. Wine will begin to combine the information into categories. At this point, the information will be de-identified, or not specific to any one participant. At that point, it will not be possible to withdraw from the study since it will not be possible to remove your child's specific feedback from the study.

Whom can you call with questions or complaints about this study?

If you have any questions, concerns, or complaints at any time about the research study; you may speak with Mrs. Webster at East Mountain High School ((505) 281 – 7400, x. 168) Mr. Wine (dougwine53@gmail.com or (505) 228 - 0475) or the Principal Investigator, Arlie Woodrum (awoodrum@unm.edu or (505) 277-2578).

If you would like to speak with someone other than the research team, you may call the UNM Office of the IRB at (505) 277-2644.

Whom can you call with questions about your child's rights as a research participant?

If you have questions regarding your child's rights as a research participant, you may call the UNM Office of the IRB (IRB) at (505) 277-2644. The IRB is a group of people from UNM and the community who

provide independent oversight of safety and ethical issues related to research involving human participants. For more information, you may also access the IRB website at irb.unm.edu.

CONSENT

You are making a decision whether to have your child participate in this study. Your signature below indicates that you read the information provided. By signing this consent form, you are not waiving any of your or your child's legal rights as a research participant.

I have had an opportunity to ask questions and all questions have been answered to my satisfaction. By signing this consent form, I agree to let my child participate in this study. A copy of this consent form will be provided to you.

_____

Name of Parent/ Child's Legal Guardian (print)

_____ _____

Signature of Parent/ Child's Legal Guardian   Date

INVESTIGATOR SIGNATURE

I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information described in this consent form and freely consents to participate.

_____

Name of Investigator/ Study Team Member (print)

_____ _____

Signature of Investigator/ Study Team Member   Date

Appendix F Student Consent to Participate in Research Form

The University of New Mexico

Student Consent to Participate in Research (Ages 12-17)

Using Student Feedback to Enhance Teacher Evaluation

Introduction

You are being asked to participate in a research study that is being performed by Douglas Wine, doctoral student at The University of New Mexico, under the supervision of Arlie Woodrum, Principal Investigator and Chair, from the Department of Educational Leadership. This research is studying what feedback students can provide about their perceptions of teachers' classroom strategies and activities. Both of your teachers have asked Mr. Wine to perform the study because they are interested in determining if there is anything else they can do to help their students succeed.

> **Comment [AU1]:** the last part of this sentence is redundant to other sections and it is more appropriate to include it in the other section.

The study looks at students performing at various levels in their Environmental Science class. By consenting, you are giving Lori Webster permission to confirm that you belong to one of the achievement levels being studied. You could be asked to participate in this study if you belong to one of the study's criteria. Up to twelve people will take part in this study at East Mountain High School.

> **Comment [AU2]:** the interviews are not taking place at UNM, where are they taking place?

This form will explain the research study, the possible risks, and the possible benefits to you. We encourage you to talk with your family before you decide to take part in this research study. If you have any questions, please ask Mrs. Webster or Mr. Wine (dougwine53@gmail.com).

What will happen if you decide to participate?

If you consent to participate, the following things will happen: Mrs. Webster will send the questions Mr. Wine will ask you in advance, and she will schedule a meeting with you and Mr. Wine during advocacy. During the meeting, Mr. Wine will meet with you for about an hour during advocacy in Mrs. Webster's office and discuss the strategies of an effective teacher in Environmental Science. Then, he will ask for your perceptions about how these strategies are presented, how they are understood, and what effects they have on you. You will be asked to provide examples and discuss what ideas you have to highlight strategies that are working well as well as to suggest some that would help you be more successful.

Mr. Wine will record the interviews with a digital voice recorder. Unless he is uncertain about something you said and needs clarification, that will be the extent of your participation. If Mr. Wine has questions, he will email you within a week of the interview and set up another face to face meeting to ask follow up questions. If there is an additional meeting, your participation will end after that.

> **Comment [AU3]:** this is a confusing sentence. this is the end of the interview. if you have follow-up questions, you may contact the student again in the future.

Mr. Wine will retype the interviews. After that, the tape will be erased, so only a written record will remain. Then, Mr. Wine will code all of the interviews into categories of similarities and unique points. At the point information is coded, the information is de-identified, which means there is no way to determine which participant provided what piece of information.

> **Comment [AU4]:** this sentence doesn't make sense here; it may be better under participant withdrawal.

What are the risks or side effects of being in this study?

Identification and Confidentiality:

Your name will only be known by Mrs. Webster, the person who screens participants and meets with them and your parents to gain consent; by your parents; and by Mr. Wine, the person who will interview you. Your name will be coded by Mrs. Webster to lessen the risk of it being identified and placed on a list that provides the name and the code (for example, John Smith, AZ364), and she will provide the codes to Mr. Wine.

When the interviews are complete, they will be retyped within 72 hours and stored in an encrypted written document on Mr. Wine's password protected computer. This document will be stored and identified by the code Mrs. Webster created and not your name. This code lessens the risk of identifying the information and the provider. The coding documents and your parents' consent and your consent forms will be kept in separate locked file cabinets in my office.

Therefore, the greatest risk to your confidentiality is if you talk about your involvement. It is recommended, then, that you and your parents do not talk about your involvement in the study with anyone but your family or Mr. Wine to keep participation confidential.

We will take measures to protect the security of all your personal information, but we cannot guarantee confidentiality of all study data.

Information contained in this study's records is used by study staff. The University of New Mexico Institutional Review Board (IRB) that oversees human subject research and/or other entities may be permitted to access your records. There may be times when we are required by law to share your information. That being said, your name will not be used in any published reports about this study.

Student Stress:

When you participate in a study and are asked about your teachers, there is a slight concern you might feel stress because you might worry that your teachers will find out what you said and use that information to harm you in some way.

There are several factors that will limit this risk to you:
- The primary reason for undertaking this study is that these teachers want Mr. Wine to perform the study to help them become better teachers. Therefore, they want you to provide feedback. In addition, they will not receive information while you are a student in the class. Instead, they will receive a summary of the information in the summer after this school year ends to limit any risk of their identifying any participants and having that identification adversely affect you.
- Mr. Wine and you are the only two who will know exactly what you say. Your information will be stored off campus and will not be available to anyone on campus.
- The final report will be written by Mr. Wine in a way to make sure you are not identified. In addition, there is a dissertation committee who will read and analyze the report before published to ensure your confidentiality.

While this risk is something students typically feel, there is a minimal risk of a breach of confidentiality that teachers will know you are in the study, that they will know what you said, and that the final report will be able to identify you. As mentioned above in the identification and confidentiality section, there are several actions taken by the researcher (coding the student's name, not identifying participants to

the teachers, meeting the student's in a closed office, and retyping the interviews within 72 hours) that will minimize the possibility of a breach of confidentiality.

Concerns Over Other Reportable Information:

Mr. Wine is a licensed school administrator and is required through his license to report certain information to school, state, or legal authorities when information that requires such reporting is provided. As a result, if Mr. Wine were told information that required such reporting, he would make those reports.

The list below is not complete but will discuss typical reportable events that any school employee or licensed teacher would report:

- Student reports illegal activity: If you report any illegal activity (drug use, sexual impropriety, abuse), Mr. Wine is required to report that information to legal authorities. After that report, Mr. Wine would speak with an authority at the school, your parents, and any public support organizations (CYFD, etc.) to ensure your safety.
- Student reports illegal or unethical behavior by teachers: If you report any information that suggests improper behavior by your teachers, Mr. Wine will report that information as required. In some cases, he will speak with an administrator at the school; in more serious cases he would report unethical behavior to the New Mexico Public Education Ethics Bureau. In the case of illegal activity, he will call the police.

What are the benefits to being in this study?

Societal Benefit:

The primary benefit of participation in social research is the information it will provide to improve some sort of societal situation. Since this project refers to teaching, the goal is to improve teaching, and your assistance could provide some insight into what teacher evaluators do not see or recognize when they are in the classroom or performing other types of evaluation.

Self-Reflection:

Students who reflect on their experiences often learn something about themselves and the way in which they make meaning from their experiences. Therefore, a possible benefit for you is to learn more about what you value in your education and what you can ask for from teachers to improve your education.

What other choices do you have if you do not want to be in this study?

You may choose not to take part in this study. There will be no penalties involved if you choose not to take part in this study. You may simply not sign the form, and you will not be contacted again.

What are the costs of taking part in this study?

There are no costs to participate in the study.

Will you be paid for taking part in this study?

There is no compensation for being part of the study.

How will you know if Mr. Wine learns something new that may change your mind about participating?

You will be informed of any significant new findings that become available during the course of the study, such as changes in the risks or benefits resulting from participating in the research or new alternatives to participation that might change your mind about participating.

Can you stop being in the study once you begin?

Your participation in this study is completely voluntary. You have the right to choose not to participate or to withdraw your participation until a certain point. In about three months after conducting the interviews, Mr. Wine will begin to combine the information into categories. At this point, the information will be de-identified, or not specific to any one participant. At that point, it will not be possible to withdraw from the study since it will not be possible to remove your specific feedback from the study.

Whom can you call with questions or complaints about this study?

If you have any questions, concerns, or complaints at any time about the research study; you may speak with Mrs. Webster at East Mountain High School ((505) 281 – 7400, x. 168) Mr. Wine (dougwine53@gmail.com or (505) 228 - 0475) or the Principal Investigator, Arlie Woodrum (awoodrum@unm.edu or (505) 277-2578).

If you would like to speak with someone other than the research team, you may call the UNM Office of the IRB at (505) 277-2644.

Whom can you call with questions about your rights as a research participant?

If you have questions regarding your rights as a research participant, you may call the UNM Office of the IRB (OIRB) at (505) 277-2644. The IRB is a group of people from UNM and the community who provide independent oversight of safety and ethical issues related to research involving human participants. For more information, you may also access the IRB website at irb.unm.edu.

CONSENT

As a minor from ages 12 – 17, you are able to provide consent. Therefore, you are being asked at this point to provide consent to participate in the study. Simultaneously, your parents will be asked to provide consent. Your taking part in this study can only occur if you provide consent and your parents provide consent.

As a result, you are making a decision whether to participate in this study. Your signature below indicates that you have read the information provided, consent to be a research participant, and will participate in the way explained in this form. By signing this consent form, you are not waiving any of your legal rights as a research participant.

A copy of this signed consent form will be provided to you and your parents.

_____

Print Your Name Here

_____   _____

Sign Your Name Here   Today's Date

_____

Email Address

_____

Cell Phone Number

INVESTIGATOR SIGNATURE

I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information described in this consent form and freely consents to participate.

_____
Name of Investigator/ Study Team Member (print)

_____ _____

Signature of Investigator/ Study Team Member   Date

Appendix G Teacher Consent to Participate in Research Form

The University of New Mexico
Teacher Consent to Participate in Research

USING STUDENT FEEDBACK TO ENHANCE TEACHER OBSERVATION

11/03/2014

Introduction

You are being asked to participate in a research study that is being performed by Douglas Wine, doctoral student at The University of New Mexico, under the supervision of Arlie Woodrum, Principal Investigator and Chair, from the Department of Education Leadership. This research is studying what feedback students can provide about their perceptions of teachers' classroom strategies and activities. You will receive a summary of the findings in the summer after the school year ends with no information about specific subject participants. The research seeks to determine what teacher observation protocols cannot provide. Its assumption is that it is worth asking for feedback from students who are not succeeding and are not connecting well in the class. This lack of connection assumes that if the student could engage in the topic, the struggles he/ she faces could be mitigated, at minimum, and removed, at maximum. Students will be asked about ten traits of strong instructional practices from the NM Teach Observation Protocol, those researched to engage students in their learning; and the "Seven C's", seen as meaningful instructional practices from the Bill and Melinda Gates Foundation Measurement of Effective Teaching (MET) research. You are being asked to participate in this study because you teach these students struggling in science, you requested this research, and your class offers several differentiated opportunities for students to succeed. Up to twelve people will take part in this study at East Mountain High School.

This form will explain the research study and the possible risks as well as the possible benefits to you. We encourage you to consider all of the information before you decide to take part in this research study. If you have any questions, please ask Douglas Wine (dougwine53@gmail.com, (505) 228 -0475) or Arlie Woodrum (awoodrum@unm.edu or (505) 277-2578).

What is the rationale for the study?

New Mexico is currently using the NM Teach Observation Rubric. The ten qualities in the rubric are adapted by the New Mexico Public Education Department from Charlotte Danielson's work. The observation requires a trained evaluator (New Mexico provides and requires calibration training) to observe in a classroom and provide a trained judgment on the ten qualities along a five point rubric ranging from ineffective to exemplary. They are very similar to those of the other major researcher in this area, Robert Marzano, and are predicated on research of best practices. Danielson and Marzano are very specific that these practices are the best teaching; however, they are unable to correlate a specific strategy to a specific outcome with a predicted reliability (Marzano 2003, 2007, 2009; Danielson 2002, 2007, 2011, 2013; Danielson & McGreal 2000).

Comment [AU5]: the pronoun usage with these sentences is confusing.

Observation identifies effective teaching practices and judges teachers' ability to perform them. Observation does not, however, determine if these strategies are yielding student achievement; test scores often do. In the New Mexico school report card, student achievement on these tests is separated into Q3 students (the top performing 75% in a given school) and Q1 students (the lowest performing 25% in the same school). The top researchers in the field, Danielson and Marzano, note that using the best strategies does not guarantee the achievement of each student, and they do not discuss why some do not achieve.

Offering an accurate and a complete portrayal of a teacher's work is the key to the teaching observation protocol. The majority of the research in the area discusses the importance of training the observer and getting the observer to be part of a learning community for continued learning. These programs are means to ensure the accuracy of what the observer sees, but even if an observer can see everything exceptionally well, there is still a built-in limitation that does not provide a complete a picture of teacher practices across a year. The process needs feedback from people with the teacher daily for that degree of certainty: students. This research project seeks feedback that observations do not provide, feedback from students who are in the teacher's class every day. The purpose of this research is to determine what additional information can be gained about teachers' instructional practices from students in those classes.

The students who underachieve at this site (earn less than 75% in the class) frequently possess at least one of the following four attributes: parents who did not graduate college, a learning issue noted on an Individual Education Plan (IEP), students needing free or reduced lunch, and students who have chronically underachieved in the subject. In order to gain additional perspective from students possessing these attributes, I will also interview students with these attributes who are achieving (earn at least 85% in the class). So that my interviews allow for the possibility of insight about each attribute, I will interview up to twelve students.

The primary interest is in determining how students perceive how teacher qualities manifest and affect students, and there is no certainty that the attributes of underachievement will provide any insight. It is most important to interview students looking at how they perceive their teachers influence their success in a highly effective classroom designed to prepare them for college success. I will ask follow up questions that provide examples for the reasons they have embraced their attitudes and beliefs and that may allow for new discoveries to be unearthed to understand what barriers might exist that can be addressed with focused instructional strategies and support services.

What will happen if you decide to participate?

If you agree to participate, the following things will happen:

A school employee will determine if students fit the criteria for the study.

A school employee, who has no supervisory responsibilities and no ability to coerce students into participating, will contact their parents and ask for their consent about participating. She will also ask for and receive consent from the students.

After obtaining consent, I will meet with the student to perform the following process:

The school employee will send the questions to the student in advance and schedule a meeting with the student and me. During the meeting, I will meet with the student for about an hour and discuss the strategies of an effective teacher in Environmental Science. Then, I will ask the student for perceptions about how these strategies are presented, how they are understood, and what effects they have. The student will be asked to provide examples and discuss what ideas he/ she has to highlight strategies that are working well as well as to suggest some that would help him/ her to be more successful.

I will record the interviews with a digital voice recorder. If I have questions after the interview, I will email the student within a week of the interview and set up another face to face meeting to ask follow up questions. If there is an additional meeting, the student's participation will end after that.

I will retype the interviews. After that, the tape will be erased, so only a written record will remain. Then, I will code all of the interviews into categories of similarities and unique points.

After I analyze all interviews in the four column document, I will tabulate the frequency of ideas that I anticipate will dominate the responses of students on another sheet that lists all categories of comments and the frequency with which they are mentioned. I anticipate comments will fall into six categories: technology issues, climate of class, structure of class, students' comments about themselves, teacher's work with students, and college preparatory curriculum.

> **Comment [AU6]:** same comment as the assent form.

> **Comment [AU7]:** This is redunant and the summary does not directly communicate what will happen. You will interview students. that doesn't come across.

In addition, I will tabulate the frequency of ideas that I did not anticipate and seek to understand what these say. If the comments were not anticipated, I will seek understanding from research on the topic and the frequency of their occurrences.

On the right hand side of the interviews, I look at the theoretical comments and tabulate the frequency of them. In a small practice study I performed, the category of students speaking about themselves showed insights students are giving about themselves or about their teachers that transcend the substantive phase into the theoretical phase. For example, a student stated he was "increasing his mental acuity" (personal interview, April 24, 2013). As these personal issues surface, students become willing to engage more or less deeply based on their perceptions of themselves and the teacher's ability to hit upon the needs or wants that stem from that understanding, so I will look closely not just for students' personal reflections, but how these inform students' perceptions of their achievement.

After tabulating the frequency of both substantive and theoretical comments, I will perform the following actions to complete my analysis:

- Check for etic and emic comments and analyze similarities and differences
- Check for any concerns that might exist in column four and make sure they are all analyzed by me
- Count similarities and determine dominant areas and weak areas
- Compare the results with the anticipated results and literature review
- Prioritize areas of deeper analysis and lesser analysis
- Determine the meaning of the overall study
- Draft an analysis and revise as needed

> **Comment [AU8]:** I'm not sure why this is included, what are you trying to convey with this?

To protect the privacy of the students, I will provide a summary of this analysis to both of you after the school year has ended. The summary will explain their feedback as well as suggestions they made.

How long will you be in this study?

Participation in this study for students will include an interview of about an hour each for up to twelve students with a possible follow up for clarification within a week of the first interview.

As a teacher, your participation is my speaking with students in your class, performing an analysis, and writing a dissertation. All research will conclude by June 2015 and the dissertation by June 2016.

What are the risks or side effects of being in this study?

There are several risks that could occur during this study. If you experience any problems associated with these or other risks, please contact either Douglas Wine (dougwine53@gmail.com, (505) 228 - 0475), Arlie Woodrum (awoodrum@unm.edu or (505) 277-2578), or the UNM Office of the IRB at (505) 277-2644.

1. There are risks of stress, emotional distress, inconvenience and possible loss of privacy and confidentiality associated with participating in a research study in which minors speak of their experiences about others, in this case their teachers. Students and their families will go through an approval process which explains the importance of their not speaking about their participation in order to protect the students' confidentiality. Students will only speak with me, and I will record their responses, type them and save them in an encrypted file, and delete the digital recording within 72 hours of the interview.
2. There is a minimal risk that students alert me about improper activities by either teacher. My ethical responsibility would require me to alert the school's Principal of the accusations, discuss the allegations with you, and would determine whether or not to report the information to the appropriate state agency or authority. For example, if there were comments about sexual impropriety, I would be obligated to report it to the NMPED Ethics Bureau and let the Principal respond to any employment issues. I would alert the Principal Investigator and meet with the IRB to amend the investigation.
3. There is a concern that any negative comments made about your teaching could adversely affect your evaluation and thus, your career. Since I am not an employee of the school, I will not speak with any school employees about any of the comments made by the students. The final research study will discuss the usefulness of the feedback students will provide, not the quality of the specific teachers or whether their evaluations were correct. In addition, neither of you will be identified in the final study. Both of these facts limit any potential career risks.

What are the benefits to being in this study?

Societal Benefit:

The primary benefit of participation in social research is the information it will provide to improve some sort of societal situation. Since this project refers to teaching, the goal is to improve teaching, and your assistance could provide some insight into what teacher evaluators do not see or recognize when they are in the classroom or performing other types of evaluation.

Student Feedback:

The summary feedback provided this summer will discuss what type of feedback students provided as well as what they perceive of the effectiveness of the myriad strategies offered in your class. This information can be used by you to become more successful in helping students achieve.

What other choices do you have if you do not want to be in this study?

If this study does not interest you, you are free to decline.

How will your information be kept confidential?

We will take measures to protect the security of all your personal information, but we cannot guarantee confidentiality of all study data.

Information contained in your study records is used by study staff. The University of New Mexico Institutional Review Board (IRB) that oversees human subject research and/or other entities may be permitted to access your records. There may be times when we are required by law to share your information. However, your name will not be used in any published reports about this study.

Information collected as part of the study will be labeled with a study number; information without your name will be entered into a computer database and locked file cabinet in the investigator's office. Only Doug Wine will have access to your study information. Data will be stored in a locked cabinet in his office until a successful dissertation defense, and then will be destroyed.

> **Comment [AU9]:** you do not have a certificate of confidentiality.

What are the costs of taking part in this study?

You will not be charged for any study procedures.

Will you be paid for taking part in this study?

You will receive no compensation for taking part in this study.

How will you know if you learn something new that may change your mind about participating?

You will be informed of any significant new findings that become available during the course of the study, such as changes in the risks or benefits resulting from participating in the research or new alternatives to participation that might change your mind about participating.

Can you stop being in the study once you begin?

Your participation in this study is completely voluntary. You have the right to choose not to participate or to withdraw your participation at any point in this study.

Whom can you call with questions or complaints about this study?

If you have any questions, concerns or complaints at any time about the research study, Arlie Woodrum or his associates will be glad to answer them.

If you need to contact someone after business hours or on weekends, please call (505) 228 - 0475 and ask for Douglas Wine.

If you would like to speak with someone other than the research team, you may call the UNM IRB at (505) 277-2644.

Whom can you call with questions about your rights as a research participant?

If you have questions regarding your rights as a research participant, you may call the UNM Office of the IRB (IRB) at (505) 277-2644. The IRB is a group of people from UNM and the community who provide independent oversight of safety and ethical issues related to research involving human participants. For more information, you may also access the IRB website at http://research.unm.edu/irb/irb.unm.edu.

CONSENT

You are making a decision whether to participate in this study. Your signature below indicates that you read the information provided. By signing this consent form, you are not waiving any of your legal rights as a research participant.

I have had an opportunity to ask questions and all questions have been answered to my satisfaction. By signing this consent form, I agree to participate in this study. A copy of this consent form will be provided to me.

_____   _____   _____

Name of Teacher (print)   Signature of Teacher   Date

INVESTIGATOR SIGNATURE

I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information described in this consent form and freely consents to participate.

_____
Name of Investigator/ Research Team Member (type or print)

_____ _____

(Signature of Investigator/ Research Team Member)   Date