

EVALUATING TEACHER EFFECTIVENESS: A TEMPLATE FOR
ADMINISTRATORS AND TEACHER TRAINERS

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Karen Schreder

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TABLE OF CONTENTS

	PAGE
List of Tables	v
List of Figures	vi
Abstract	vii
 CHAPTER	
I. Introduction	1
Purpose of the Project	2
Scope of the Project	3
Significance of the Project	4
Limitations of the Project	5
Definition of Terms	6
II. Literature Review	10
Historical Background	10
Teacher's Knowledge of Their Craft	14
Teacher Behavioral Modalities	20
Effective Teaching Practices: Management and Style	28
Current Systems of Teacher Evaluation	32
Summary	35
III. Methodology	37
Phases	43
Conceptual Framework	44
Survey Design	47
IV. Results	53
Online Survey	53
Summary	59

CHAPTER	PAGE
V. Summary, Conclusions and Recommendations	70
References	75
Appendices	
A. Survey Questions.....	83
B. Questions for Interview	87
C. Certificated Teacher Observation/Evaluation Form.....	89
D. Certificated Teacher Evaluation Form	92
E. Ideas for Evaluation and Development of Teacher Behavioral Modalities	95
F. Evaluation and Development Template	98

LIST OF TABLES

TABLE		PAGE
1.	Respondent Breakdown	50
2.	School Entity Breakdown of Respondents	51
3.	Attributes from the Domain of Teacher Behavioral Modalities Respondents Feel Are Valuable to a Student's Success	55

LIST OF FIGURES

FIGURE	PAGE
1. Venn Diagram.....	45
2. Teacher Quality Statements	47

ABSTRACT

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It is of little doubt that a great teacher can have a positive influence on a student both academically and morally. However, there is no definition of a highly effective teacher to use as a reference or a guide for administrators, teachers, or teacher trainers. It is important to research and delineate these qualities so that current and pre-service teachers can grow and develop to their full potential.

This project investigates the need for a revamped evaluation tool that includes areas that are important to all areas of highly effective teaching: Classroom Management, Pedagogical Content Knowledge and an area the author termed Teacher Behavioral Modalities. Research indicates that this area is as important to highly effective teaching as Classroom Management and Pedagogical Content Knowledge. This project describes

how these domains are related, and looks more specifically at the area of Teacher Behavioral Modalities, investigating the relevance of this area to highly effective teaching. In addition, this project assesses current evaluation tools and the degree to which each of the domains is reflected in these evaluations. A survey and follow-up interviews confirmed the value of Teacher Behavioral Modalities, and the need to have them included in the current evaluation tool. Teacher quality statements based on each domain were created, in addition to an evaluation template specifically aimed at the evaluation and development of the area of Teacher Behavioral Modalities.

CHAPTER I

INTRODUCTION

When one discusses good teaching, the context—economic, historical and political—is critical to framing the discussion. Many teachers have been considered good—but the definition of a highly effective teacher continues to evolve and still eludes educators and those who evaluate and train them. It is difficult to approach teacher training, improvement and development without an appropriate mark to hit. Cruickshank and Haefele, in 1990, stated, “An enormous underlying problem with teacher evaluation relates to lack of agreement about what constitutes good or effective teaching” (as cited in Goe, Bell, & Little, 2008, p. 1). An even bigger factor in the definition of teacher effectiveness is the advent of merit pay, and value-added teacher evaluation and pay systems. Are teachers to be recognized on the statistical achievement of their students? Or is there more to being an effective teacher?

If we are going to recognize and pay for high quality teachers, we should know how to evaluate, develop, and mentor them, based on a well-defined, research-based set of criteria. I began to look for a structured definition or description of a highly effective teacher. This proved very difficult to pin down. Is this person caring and collaborative? Do they value diversity and democracy? Do they hold their students to high academic standards? Or are they skilled at a variety of instructional techniques? How do we combine these factors to evaluate teacher effectiveness and promote the

development of a multi-faceted professional educator? What society wants from a teacher is diverse: test scores; literacy; ethics; morality; a democratic structure. A wide range of studies have been completed, however, a template for the evaluation and development of effective teachers has not yet been developed. Teachers, evaluators, and teacher-educators do not have a solid goal for professional growth. The entirety and intensity of the work teachers do must be described and evaluated in order to train, mentor, and pay teachers appropriately.

Teachers are often evaluated on the aspects we can observe and quantify. I believe it is also important to assess and thus value the less observable qualities that teachers use to promote academic achievement, social skills and moral development. Teacher behavioral modalities intersect with and affect other observable qualities, such as classroom management and pedagogical content knowledge, thus making it a powerful element of highly effective teaching.

Purpose of the Project

The purpose of this project is to collect evidence to substantiate the creation of a new evaluation tool that assesses all of the qualities of a highly effective teacher. To do this it was crucial to thoroughly investigate and define all of the capabilities and skills of a highly effective teacher. The elements currently being evaluated both nationally and in the tools considered in this project focus mainly on the areas of classroom management and teacher content mastery, and fail to provide teachers with a solid plan for professional growth (Ramirez, Lamphere, Smith, Brown, Pierceall-Herman, 2010; Weisberg, Sexton, Mulhern, & Keeling, 2009). The method of evaluation involves

limited observation of, and feedback to, the teacher that often is irrelevant to their current situation (Glickman, Gordon, Ross-Gordon, 2010; Ramirez et al., 2010). This project will demonstrate how teacher behavioral modalities are just as important to student's academic, social, and moral success as the other commonly considered elements. Highly effective teachers are more than test scores and classroom management. The best teachers raise the "human level of educational attainment that most schools pay little attention to measuring—positive self-identity, purpose and hope" (Duncan-Andrade, 2007, p. 635).

The creation of an evaluation tool that includes these modalities will emphasize the value that they represent to students. This evaluation tool will help to mentor and develop new and existing teachers, using current research into all of the areas that are important to highly effective teaching.

We must recognize the value of all of the work highly effective teachers do—not only those that are easily observed and quantifiable in a single evaluation. Teachers are more than test scores, both to their students and the community (Duncan-Andrade, 2007; Dwornik, 2003; Eliot, 1950).

Scope of the Project

My study will focus on how different groups--administrators, teachers, and parents—view effective teaching, with particular attention to the more personal aspects, or 'teacher behavioral modalities'. A more clear definition of effective teaching will allow teachers to better serve students, administrators to better mentor teachers, and teacher leader programs to have a target for their instruction and development. The definition will guide evaluation and development in ways that will make the job of

teaching stronger and more professional, both in the public's perception and within the field of education itself.

My literature review will cover research of effective teaching, focusing on three areas of particular interest—pedagogical content knowledge, teacher behavioral modalities and effective classroom management strategies. I will then look at current systems of teacher evaluation, ending with a summary of how effective teaching and evaluation systems influence each other.

In looking at effective teaching, Ladson-Billings (1989) used recommendations by both parents and principals. I will use this survey model and add third and fourth components—university professors and the teachers themselves. I will then cross reference answers to see where effective teaching ideals intersect. From this I will form a template that can assess how highly effective teachers use teacher behavioral modalities to influence students to achieve academically, morally, and socially, within the school community. The main area that my survey questions will address is: What Teacher Behavioral Modalities are the most important for highly effective teachers? How can these behaviors be documented, assessed and developed in pre-service and current teachers? The evaluation template will be created based upon responses to these questions.

Significance of the Project

The relevance of this project to the study of teacher effectiveness and teacher evaluation is substantial. A significant and growing body of research points to teacher quality as the most significant influence on student achievement (Hanushek & Rivkin,

2010; Wylie, Lyon & Goe, 2009). The connections between teacher effectiveness and evaluation and the area of Teacher Behavioral Modalities is under-researched and under-valued (Ramirez et al., 2010; Shulte, Edick, Edwards, & Mackiel, 2004). The current focus is primarily on techniques and practices that can be rapidly noted during short observation and data-collecting sessions (Glickman et al., 2010; Ramirez et al., 2010). This project brings to bear evidence that Teacher Behavioral Modalities are important qualities that need to be more clearly identified and developed in current and pre-service teachers. These qualities include teachers' ability to collaborate and communicate effectively with parents and staff members, and to form personal connections and relationships with each student (Ladson-Billings, 1989). In addition, Teacher Behavioral Modalities involve developing positive teacher beliefs about students and learning—crucial elements of highly effective teaching (Haberman, 1995; Rosenfeld & Rosenfeld, 2008). High quality teachers are an important element in a students' success. The inclusion of Teacher Behavioral Modalities—evaluated on an equal basis with the more classic areas of Classroom Management and Pedagogical Content Knowledge—into teacher evaluation and development plans is a critical next step in assuring that there are highly effective teachers in the majority of our classrooms.

Limitations of the Project

The limitations on this project include time and resources. My survey pool was also limited to participants who elected to respond from one school district, two charter schools, and a University. My long-term goal is to create a survey that encompasses all three areas of teacher effectiveness, and to develop an evaluation tool

from that information. However, due to time constraints, my study was limited to one area of concentration. I chose Teacher Behavioral Modalities, as it was the least studied and yet what had been researched showed that this area had a substantial effect on students and intersected with other areas of teacher effectiveness (Ladson-Billings, 1989; Lemov, 2010).

Definition of Terms

The term “Teacher Behavioral Modalities” is the term I have developed that will be used to define the more personal, less tangible qualities teachers possess and use in their craft. While reviewing the research, it became evident that highly effective teachers share behavioral characteristics that set them apart from less effective educators. In the literature, these special qualities of teacher have been called dispositions, traits, or intangible qualities (Polk, 2006; Rinaldo et al., 2005; Schulte, Edick, Edwards, & Mackiel, 2004). The term Teacher Behavioral Modalities evolved after trying to move away from the term ‘intangible qualities’. This term implied that the qualities could not be measured or evaluated. I wanted a term that brought to mind modes or patterns of behavior that can be learned. I began with the term ‘mode of behavior’, but that was too cumbersome. The term ‘traits’ has been used, but I feel it is also different from the qualities I am evaluating, as it implies something implicit to a teacher’s personality. ‘Disposition’ evokes the idea that the individual is pre-disposed to these qualities. Teacher Behavioral Modalities are the personal modes of behavior that each individual teacher possesses that makes them highly effective. Teacher Behavioral Modalities is the

term I have developed, and it is distinct from dispositions. National Council for

Accreditation of Teacher Education (NCATE) defines dispositions as:

The values, commitments and professional ethics that influence behaviors toward students, families, colleagues, and communities and affect student learning, motivation, and development as well as educator's own professional growth. Dispositions are guided by beliefs and attitudes related to values such as caring, fairness, honesty, responsibility, and social justice. (Strickland, Weinstein, Thomas, Pierce, and Stuckey, 2003, "Assessment of Disposition Standards," para. 1)

This differs from the term Teacher Behavioral Modalities in that dispositions are seen to be intrinsic beliefs and attitudes, while Teacher Behavioral Modalities are what teachers actually do, or are enacted dispositions. In addition, dispositions have been emphasized as checklists in teacher preparation programs, while their implementation and development have been largely ignored in current teachers (Strickland et al., 2003). Teacher Behavioral Modalities describes modes of behavior that highly effective teachers use in their daily practice, and can be noted and evaluated.

Examples include collaboration, personal reflection, self-analysis, professional development, empathy, caring, respect, and creating a positive classroom climate by including and valuing all students. These qualities are real, but not easily quantified. Teacher Behavioral Modalities targets the ways these qualities can be evaluated and developed and intersects with Pedagogical Content Knowledge and Classroom Management in creating highly effective teachers (Ball, 2000; Brophy, 1988; Lemov, 2010).

The term "Classroom Management" is commonly accepted to mean the main small details that go into creating a secure learning environment. Seating arrangements conducive to learning and on task behavior are basic priorities in this area. In this project,

I have expanded this definition to also include: behavior management, active supervision, lesson planning, reflection on practice, lesson pacing, teacher and classroom organization and the use of diverse techniques to deliver instruction (Brophy, 1988; Lemov, 2010; Wheatley et al., 2009).

“Pedagogical Content Knowledge” refers to the area first advanced by Lee Shulman (1986). This area differs from content knowledge, in that it focuses on the skills teachers have to instruct in a particular content area. Teaching math skills is different, for example, than teaching reading skills. The ability to give clear examples and analyze student errors are elements of the skill sets in this domain. Enhancing teachers knowledge of how to teach each content area specifically is the basis for Pedagogical Content Knowledge (Ball, 2000).

The term “Highly Effective Teacher” has been come to mean different things to different people. No Child Left Behind attempted to define highly qualified teachers, under the assumption that to be highly qualified was to be highly effective. High value was placed on a teacher’s specific qualifications, specifically proper credentialing (U.S. Department of Education, 2004). The NCLB definition states a ‘highly qualified teacher’ must have a “Bachelor’s degree, full state certification, and demonstrate competency in the core academic subjects taught” (U.S. Department of Education, 2004, p. 10). In this project, the term “Highly Effective Teacher” will encompass the many areas of student development that teachers touch. Academic achievement, motivation, attendance rates, graduation rates, and personal inspiration are just some of the areas where highly effective teachers can provide a great deal of guidance and positive influence. Highly effective teachers have highly developed criteria for classroom management, and have

strong pedagogical content knowledge. In addition, a highly effective teacher realizes the importance of their teacher behavioral modalities and continues to develop them.

CHAPTER II

LITERATURE REVIEW

Great teachers can change the course of a student's life. The qualities of highly effective teachers are often discussed; however, a solid definition of highly effective teaching has been difficult to arrive at. Defining these qualities and integrating them into the current evaluation tools and teacher mentoring and development programs would benefit not only teachers but also the students whom they serve.

Teacher expertise—what teachers know and can do—affects all the core tasks of teaching. What teachers understand about content and students shapes how judiciously they select from texts and other materials and how effectively they present material in class. Their skill in assessing their students' progress also depends on how deeply they understand learning, and how well they can interpret students' discussions and written work. No other intervention can make the difference that a knowledgeable, skillful teacher can make in the learning process. (Darling-Hammond, 1997, p. 8)

If, indeed, great teachers make such a difference in the lives of students, it becomes imperative to define what it means to be a highly effective teacher so that these skills can be developed, mentored, and evaluated in the current force of teachers.

Historical Background

Socrates, Aristotle, and Plato are still held to be great teachers. The method developed by Socrates and honed by Aristotle and Plato involved deep, investigative questions. These questions used the student's prior knowledge and experiences to build new knowledge and connections. "The Socratic method is a student-centered approach

that challenges learners to develop their critical thinking skills and engage in analytical discussion” (Coffey, n.d.). The Socratic method “engages students in dialogue and discussion that is collaborative and open-minded as opposed to debate, which is often competitive and individualized” (Coffey, n.d., “The Socratic Method,” para. 1).

Plato’s pedagogy involved using questioning and dialogues, similar to the methods used by his teacher Socrates. Plato felt that each person or student had a set of aptitudes that it was the teacher’s duty to find and develop (Dewey, 1916). Both of these teachers used questioning processes to engage and use their student’s prior knowledge. These methods continue to be considered elements of good teaching. Brophy (1988) emphasized the use of questioning techniques when teaching to enhance comprehension and personal engagement.

John Dewey’s reflections and philosophy on teaching are also relevant to the history and description of a highly effective teacher. Dewey placed the teacher and students within the context of society at large. What was happening in society could not be far removed from how the students were being taught or what they were learning. Dewey felt that schooling and education was a “direct function of a child’s socialization and expression of democratic living” (Dwornik, 2003, p. 55). Dewey’s view of good teachers involved “fostering learning through an appropriate curriculum, thus freeing the child to learn” (Dwornik, 2003, p.55). The curriculum, and its incorporation of democracy and morality were important tools for the teacher. The teacher was seen as the tool to a greater societal purpose—democracy.

The teaching and modeling of moral and ethical behaviors was very important to early teachers. They were held to a higher standard than other members of society. The moral character of a teacher was more important than her academic experience and capabilities (Springer & Gardner, 2010). However, as America grew and developed, politically and economically, so did the need for more academically oriented, qualified educators.

Following World War II, with its emergence as a leading nation, America wanted to further its place in the global structure. The purpose of education was better one's economic position, or "getting on" (Eliot, 1950, p. 452). The motives behind schooling became financial and more selfish. Individuals used education to improve themselves economically or socially (Eliot, 1950). Eliot equated the pursuit of education to that of rising in society. If that motive evaporated, so would the desire to learn. Eliot posed the question that "to know what we want from education, we must know what we want in general, and derive our theory of education from our philosophy of life" (Eliot, 1950, p. 452).

Society must decide what we want from education and from teachers. Is it test scores, literacy, morality, ethics, financial success or a combination of all? It is crucial to define a highly effective teacher so that we can evaluate, develop and grow the teacher force we have, and the teachers to come. As what society wants from teachers evolves, so do the methods of evaluation. Campbell et al. (as cited in Goe et al., 2008), contend that trends in measurement of teacher effectiveness seem to follow the development of new instruments and technologies, focusing on the ability to measure something, rather than

first defining effectiveness and *then* determining a technology for measuring it (Goe et al., 2008).

Our current social and economic context has evolved to create a situation where highly effective teaching is viewed as the main key to student success. The advent of extremely efficient data systems, computerized longitudinal data collection and our ability to compare and contrast teachers, schools and districts rapidly has ushered in a new era in teacher evaluation (Darling-Hammond, 1999; Goe et al., 2008; Kupermintz, 2003). These advances in systems of student measurement have led to new methods of teacher measurement. These include value added systems that have been developed through this new technology; and other less complex systems that are based solely on yearly test scores, or checklists based on a single, short observation.

While this plethora of data is helpful in many ways, it has also become a burden to teachers. Student test scores have become one of the lone measures of teacher effectiveness. These scores allow no room or suggestion for teacher improvement, development, or growth. When we define teachers only by the scores their students receive, we are missing out on a great deal of what teachers bring to their student. Researchers such as Brophy and Good (1986), contend that there are other important outcomes besides students' performance on standardized tests that define effective teachers. More than 20 years ago, in their review of "process-outcome" research linking teacher behavior to student achievement, Brophy and Good (1986) made the following statement about their work:

The research discussed is concerned with teachers' effects on students, but it is a misnomer to refer to it as "teacher effectiveness" research, because this equates "effectiveness" with success in producing achievement gain. What constitutes

“teacher effectiveness” is a matter of definition, and most definitions include success in socializing students and promoting their affective and personal development in addition to success in fostering their mastery of formal curricula. (Brophy & Good, 1986, p. 328)

Teachers are expected to do more than teach purely academic skills. They should be recognized, mentored, and evaluated in these areas as well. A qualitative and quantitative definition of teacher effectiveness is necessary so that teachers, parents, students, and administrators can have a target.

Teacher’s Knowledge of Their Craft

A great deal of research has been done in the area of effective teaching. However, certain areas have emerged as being of greater importance to student growth and learning. Teacher pedagogical knowledge and skill is one of these areas. “Increases in student learning occur only as a consequence of improvements in the level of content, teachers’ knowledge and skill, and student engagement” (City, Elmore, Fiarman, & Teitel, 2009). Brophy (1988) used quantitative data to create a well-defined outline for what good teaching looks like. Brophy found that increasing active instruction time, or the time spent on academic activities was crucial to increasing student achievement (1988). He also found that good teaching pedagogy was not specific to different populations of students with various learning needs. If instruction is high quality, all students benefit, regardless if they have special learning needs (1988).

“Achievement gains are quantitatively linked to students’ opportunity to learn the material, and in particular, to the amount of active instruction and direct supervision of learning efforts that students receive from their teachers” (Brophy, 1988, p. 240). Brophy (1988) also found that the techniques teachers use are more important than the

materials. The materials or so-called “teacher-proof” programs are not a substitute for good teaching. No programs can substitute for highly effective teaching. “Administrators need to work with and through teachers, not through the materials” (Brophy, 1988, p. 243).

Pedagogical Skill

Teachers’ knowledge of the material is also a critical element of teacher effectiveness. Thus far, teacher knowledge has been almost universally quantified by years of teaching and courses taken. Teachers with more credits in certain areas are pre-supposed to be better prepared and thus more effective. Research has been mixed in this area, because much of it has focused not on inherent teacher skill and knowledge, but on the volume and quality of inputs and trainings provided to teachers (Hill, Rowan, Ball, 2005). Darling-Hammond (1999) found, based on a standardized assessment of teacher knowledge of subject matter, that this type of knowledge is correlated to achievement up to a certain grade level, but less important after that (Darling-Hammond, 1999). In addition, teacher intelligence has not been shown to be highly correlated with student achievement. Verbal ability, however, does show a greater degree of correlation. It may be that this is because teachers with greater verbal ability can convey material to their students more effectively (Murane, 1985, as cited in Darling-Hammond, 1999).

However, it is important to distinguish between teacher knowledge in a subject area (content area knowledge) and a deeper understanding of how to teach a particular subject area (pedagogical content knowledge). The difference between this becomes clear when one looks more closely at the research. Begle (1979) found that

... reviewing findings of the National Longitudinal Study of Mathematical Abilities, the number of credits a teacher had in mathematics *methods* [emphasis added] courses was a stronger correlate of student performance than was the number of credits in mathematics course. (as cited in Darling-Hammond, 1999, p. 8)

In a countrywide comparison, it was found that teachers in states with the most advanced teacher preparation and broad-based support programs “repeatedly led the nation in student achievement in the areas of reading and math” (Darling-Hammond, 1999, p. 17).

Pedagogical Content Knowledge

Another strand of research is beginning to receive more attention. Researchers are looking at how to “conceptualize teachers’ knowledge for teaching differently, arguing that teacher effects on student achievement are driven by teachers’ ability to understand and use subject-matter knowledge to carry out the tasks of teaching” (Hill et al., 2005, p. 372). It is not just knowledge of content, but the knowledge of how to teach content that influences a teacher’s effectiveness (Hill et al., 2005).

Dewey wrote about subject knowledge 100 years ago, however until recently, little effort had been made to tie methods and knowledge together. “Scholastic knowledge is sometimes regarded as if it were something quite irrelevant to method. When this attitude is even unconsciously assumed, method becomes an external attachment to knowledge of subject matter” (as cited in Ball, 2000, p. 241). How teachers approach their subject and their students may account for the varying effectiveness among similar teachers. “Teachers’ abilities to structure material, ask higher order questions, use student ideas, and probe student comments have also been found to be important variables in what students learn” (Darling-Hammond, 1999, p. 14).

Pedagogical content knowledge was more recently postulated to be an integral area in the study of teacher effectiveness by Lee Shulman (1986). He theorized that the way content was taught, and knowledge about how to teach each content area, was as important, or more so, than classroom management and other process-product manners of evaluating effectiveness (Ball, Thames & Phelps, 2007; Shulman, 2000). He felt that there was a certain type of knowledge that teachers had that was specific to teaching. This knowledge, he theorized, may even be subject-specific. It must also include the preconceptions and misconceptions that students bring with them to a particular subject (Shulman, 2000). This knowledge also included the idea that teachers need to be aware of how and where students misunderstand certain topics within a subject (Shulman, 2000). The manner in which a certain subject is taught is essential to increasing student understanding and performance. Pedagogical Content Knowledge was the term he developed for this type of knowledge. This concept struck a chord with many educators and theorists.

Pedagogical content knowledge pinpoints the value of strong, specific teacher knowledge of the skill and methods with which to teach each content area. “High quality instruction requires a sophisticated professional knowledge that goes beyond simple rules such as how long to wait for students to respond” (Ball et al., 2007, p. 8). Darling-Hammond (2006) found that the most successful, powerful teachers education programs approach content from a pedagogical perspective. These colleges took an approach that incorporated the learner and the subject simultaneously (Darling-Hammond, 2006). An example is in reading instruction: “There is a growing recognition that teaching reading requires a detailed knowledge of text, language, and reading process that goes

substantially beyond just being able to decode and comprehend text proficiently” (Ball et al., 2007, p. 17).

Ball, Rowan and Hill, among others, have taken Shulman’s theories and expanded on them. Shulman himself had called for a refinement of his thesis and a more structured definition of terms (Ball et al., 2007). By investigating one subject, Ball et al. (2007) found that more research into each subject area was necessary to specify the type and quality of knowledge necessary for each unique area. In this project, researchers studied teachers’ work—not the curriculum—but “everything that teachers do to support the learning of their students” (Ball et al., 2007, p. 22). She compared this to a “job analysis of teaching focusing on the actual work that teachers do” (Hill et al., 2000, p. 244). In this work, it is important to deconstruct one’s own knowledge of the subject to find the most critical aspects of it (Ball, 2000). Teachers must constantly assess themselves and their instruction (Wylie et al., 2009).

Some of the on-going research that stands out in this area involves assessing and targeting teachers’ “Mathematical Knowledge for Teaching.” A study regarding this area of knowledge found that students with low socio-economic status and students from minority backgrounds receive greater benefit from teachers with a deeper knowledge of how to teach mathematical content (Ball et al., 2007). In a longitudinal study, Ball et al. (2007) developed and validated surveys of mathematical knowledge for teaching. The study also set out to articulate, test, and refine categories of Mathematical Knowledge necessary for teaching. This work is ongoing, but preliminary findings show that the knowledge is multi-dimensional. “General mathematical ability does not fully account for the knowledge and skills entailed in teaching mathematics” (Ball et al., 2007, p. 28).

These surveys went beyond content knowledge assessments. They assessed the pedagogical knowledge teachers needed to most effectively teach mathematics. Some of the skills highlighted and studied by Ball et al. (2007) included choosing accurate descriptions, usable representations, error analysis and empathetic reasoning (p. 35). Ball et al. (2007) found that “more advanced math will not satisfy all demands of teaching. What seems to be more important is knowing the math used in teaching” (p. 38). Indeed, one question the research raised is whether content assessments for teachers have enough depth to cover how teachers teach each subject.

Ball also found that diversity and equity were not in opposition to this theory of specialized content knowledge for teaching. Strong content knowledge is inherent in seeing how others view things and how everyone differently understands each concept (Ball, 2000). Clearly, simply knowing about a subject does not make one uniquely qualified to teach it. Hill, Ball and Schilling’s 2008 study of 500 teachers conducted over three years identified four categories that attempted to conceptualize and quantify Pedagogical Content Knowledge, or as Ball termed “Knowledge of Content and Students” (p. 374). This new definition narrows Shulman’s idea to “content knowledge intertwined with knowledge of how students think about, know or learn about a particular (content area)” (Hill et al. 2008, p. 374).

The four categories researchers looked at were: a study of teacher knowledge of student errors and what they were and why they made them; interpreting student work as the display of content knowledge and understanding; identification of developmental processes and sequence, identifying what students learn first; and identifying common strategies student have to learn in order to process material (Hill et al. 2008).

Evidently, there is far more to content instruction than simply content knowledge. It is necessary that further research be accomplished in this area. Comparative research studying English teachers is currently underway. While the research is emerging in the areas of Math, Science and Technology, it is lacking in the areas of English, Language Arts, and Written Language. For a teacher to be ultimately effective, it is clear that Pedagogical Content Knowledge or Knowledge of Content and Students is crucial to cementing student understanding, promoting diversity, and increasing student achievement and motivation.

Teacher Behavioral Modalities

“The pursuit of knowledge is not a piece of content that can be taught. It is a value that teachers model” (Haberman, 2004, p. 52). Teacher’s behaviors and attitudes are important variables in student success and achievement, and many researchers and educators have stressed the need to include them in studies of teacher effectiveness and programs that develop and grow teachers (Rinaldo et al., 2005). Do great teachers possess a special, unique quality? Are great teachers born and not made? The less technical qualities that make some teachers more highly effective than others are very important factors to consider when creating a template a highly effective teacher.

A teacher who motivates a student to complete a difficult class, to come to school every day, or to finish high school is as effective as a teacher who consistently raises test scores and is a powerhouse of student achievement data (Wayne & Youngs, 2003). This is a more difficult area to quantify, yet it is just as essential to defining a highly effective teacher as are management techniques and pedagogical content

knowledge. “There has been a long-standing belief among educators that within the profession there exists distinguishable qualities between teachers who are considered to be ‘good’ teachers and those who are not” (Rinaldo et al., 2005, p. 43). The issue lies with identifying some of these qualities and then creating ways to develop and mentor them in teachers.

The behaviors valued in teachers have been emphasized more by implication than by study, analysis or recognition. When we talk about our favorite teacher, we speak of how we were led or motivated by them, or how their attitude and enthusiasm compelled us to focus on their class. It is difficult to represent the value that these intangibles have to students and to their success and achievements. Rinaldo et al. (2005), state that: “Although theoretical values are placed on the importance of such attributes as curiosity, imagination, empathy, innovation, interest, and compassion, few, if any, manifest themselves in the evaluation of what are construed as significant indicators of teacher competence” (p. 45).

After a review of over 300 pieces of professional literature, Goe et al. (2008) found that studies of teacher effectiveness indicated that effective teachers used inter-and intra-personal skills that set them above others. Collaboration, community-building, both within the classroom and among staff members, and positive contributions to attendance, graduation and attitude were found to be qualities of highly effective teachers (Goe et al., 2008). Highly effective teachers have interventionist beliefs about students, which may “lead to stronger relationships, increased self esteem, improved performance” (Rosenfeld & Rosenfeld, 2008). The most effective teacher wants to work with the student, and believes they can overcome challenges together. This is opposite to the belief that the

student is unfixable, and the problem lies within the student (Rosenfeld & Rosenfeld, 2008).

Goodlad (2004) found similar reasons to believe that certain teacher behavioral modalities were what truly made them great. The moral and ethical character of a teacher allowed them to serve the greater good by teaching students how to be caretakers of the democracy. “Those involved in the enterprise of schooling are consciously aware of the moral responsibilities inherent in teaching in a democracy” (Goodlad, 2004, p. 20). It is important to describe these qualities in terms that define what to look for and how to develop these ideals. Teachers apply critical thinking to model strong moral decisions and behavior that is not selfish, but works for the good of all.

Tichenor and Tichenor (2004) surveyed over 100 classroom teachers to find out what they felt was the most important factor in professional, effective teaching. The results found a strong character to be the most important characteristic of a teacher. While the answers varied—“caring, nurturing, flexible, displays confidence in students and the classroom, conscientious, creative, dedicated”—all focused on the moral, empathetic, and ethical soul of an effective teacher (Tichenor & Tichenor, 2004, p. 92).

There is a dearth of quantitative studies in this area. Measurable qualities have taken priority over less observable ones due to the emphasis on test scores through standardized testing (Rinaldo et al., 2005). Darling-Hammond (1999) found that

. . . research into teachers’ personality traits and behaviors has produced few consistent findings with the exception of studies finding a recurring positive relationship between student learning and teachers’ ‘flexibility, creativity or adaptability’ (Berliner & Tikunoff; Shalock, 1979; Walberg & Waxman, 1983). (p. 13)

The way a teacher approaches the subject is important as well. “Many researchers have established a positive correlation between teacher enthusiasm and student achievement” (Mowrer-Reynolds, 2008, p. 5).

Palmer (1998) wrote about how good teaching cannot be reduced to technique—“it must come from the identity and integrity of the teachers themselves” (p. 10). Palmer found a great deal of value in the heart and integrity of each individual teacher. The place where each teacher is coming from and who they are mean a great deal to how they teach. Good teachers open themselves up and become vulnerable to their students and school community (Palmer, 1998). “Intellect works in concert with feeling—if you are open to students minds, you must also be open to their hearts” (Palmer, 1998, p. 63). Effective teachers reveal a great deal of themselves to their students. Great teachers should “take risks and invite open dialogue”—much in the Socratic tradition (Palmer, 1998, p. 69). They do not hide their heart, and help students get in touch with themselves as well. To do that, each teacher has to have self-knowledge.

Self-reflection and self-evaluation are essential attributes of highly effective teachers (Rinaldo et al., 2005). The ability to continually self-assess is a teacher behavioral modality that is critical to improving practice and maintaining a high level of professional quality. Tichenor and Tichenor (2004) found that the most highly effective teachers were also those who were the most self-reflective. These teachers were constantly asking questions about student growth, learning, and how they could improve their craft (Tichenor & Tichenor, 2004). Highly effective teachers are constantly trying to improve their technique and methods within their craft. They are self-critical and

maintain high standards for themselves. They balance their self-confidence as teachers with constant analysis and reflection (Duncan-Andrade, 2007; Farr, Kamras, & Kopp, 2010; Lemov, 2010).

Star teachers, as highly effective teachers are termed by Haberman (1995), have certain qualities that encourage, motivate and energize students to learn. He finds that star teachers take problems in stride. For example, they do not feel that a child refusing to do homework, or with different needs or skills is out of the ordinary, or out of the range of their job or skills. Star teachers take this as a regular, expected occurrence in their day (Haberman, 1995). He found that these most effective teachers focused on effort rather than ability, and realized and accepted that they were personally accountable for each student's learning (Haberman, 2004).

Haberman recognized several teacher behavioral modalities amongst teachers he designated as 'star teachers.'

(T)heir persistence, their physical and emotional stamina, their caring relationships with students, their commitment to acknowledging and appreciating student effort, their willingness to admit mistakes, their focus on deep learning, and their organizational skills. (Haberman, 1995, 2004, p. 53)

He also feels there is an ideology common to star teachers. This entails behaviors such as taking the time to really listen to staff and students, collaboration, lifelong learning, and viewing student success as individual and of equal importance. They act as professionals and recognize their weaknesses and try to work through them (Haberman, 1995). These are important teacher behavioral modalities. However, what is encouraging is that while these skills may come more easily to some, they have been identified and could be mentored and brought forth in others.

The mindset of highly effective teachers is important to regard. Throughout the literature, highly effective teachers have been noted to be lifelong learners, and to be single minded in their belief that all students can learn. These teachers have the mentality that they can never give up, they can always to more, and they can always find a way to reach every student (Farr et al., 2010; Lemov, 2010).

Respect for each student and where they come from is a universal teacher behavioral modality of highly effective teachers. The idea that each student can learn and is worthy of our best efforts is crucial to motivation and a positive attitude. High expectations and requiring students to critically think about the content being taught enhances achievement and motivation (Allday, 2006; Delpit, 2006; Ladson-Billings, 1989; Lemov, 2010). Delpit (2006) found that we must “see the brilliance in each child,” teaching not out of pity but out of strength, almost forcing each one to learn (p. 221). This attitude is similar to that of the ‘star teacher’ who believes that individual student learning and achievement comes above all else.

Delpit’s (2006) research also revealed that students are more willing to put forth effort in a classroom where they feel as sense of belonging and feel cared for and accepted for who they are. This sense of caring, and a strong belief in the student themselves is a recurring key point to student success and achievement. It allows each student to recognize that their diverse qualities are valued by the teacher and within the classroom.

This theme recurs in the research accomplished by Ladson-Billings (1989). Strong ties with the students and the community where the student lives are integral to achievement, personal growth and attitude. There is great power in emphasizing

similarities between teacher and students and establishing strong ties with them (Ladson-Billings, 1989). A strong sense of self, community and culture are important for the teacher to be aware of and instill in their students. Ladson-Billings found that teachers “must consider student and community culture in the definition of effective teaching” (1989, p. 4). This is particularly true in communities with low income, disenfranchised students and high numbers of minority students. There are “community and cultural standards of excellence” that must be upheld by an effective teacher (Ladson-Billings, 1989, p. 8). These teachers must be aware of the culture of their classroom and school community and sensitive to it for each child.

Another aspect of classroom culture that is important to highly effective teaching is caring. In a quantitative study of second grade students, pre-service teachers and in-service teachers, all of those studied felt that to be perceived as caring was the most important teacher behavioral modality (Murphy, Delli, & Edwards, 2004). Noddings (2006) found that caring teachers are attentive and respond to student needs (Noddings, 2006). These needs can be ones the student is unaware of, and does not express interest in, and others that they are directly asking the teacher to meet (Noddings, 2006). The caring teacher meets the appropriate needs of her students, distinguishing the ones that are silly from those that are necessary (Murphy et al., 2004; Noddings, 2006). Duncan-Andrade (2007), found that building trust is at the basis of this relationship—often the school represents oppression. The highly effective teacher works to build trust and community within the classroom and school. This sense of caring, respect, trust, and of community motivates students to excel and learn and maintains “intrinsic interest” of the students (Noddings, 2006, p. 342).

After a review of over 300 empirical articles, Goe et al. (2008) found that the importance of teacher behavioral modalities often outweighed the more academic and technical strengths of teachers. Highly effective teachers were found to have a positive attitude and supportive classroom environment that led to “regular attendance, on time graduation, self-efficacy and co-operative behavior” (Goe et al., 2008, p. 8).

Collaboration and communication are other attributes of a highly effective teacher (Farr et al., 2010; Goe et al., 2008). This involves collaboration not only with school staff but also with parents and the community, leading to a deeper connection with the student and school at large.

Teacher behavioral modalities that define effective teachers remain difficult to quantify. The benefits imparted to the students are difficult to measure as well. Strong sense of self, work ethic, positive attitude and a connection to the community and the diversity found there are all taught to students through the efforts of highly effective teachers. Through investigation, and observation, some qualities have been identified that are clearly attributed to the most effective teachers. To enhance student motivation, great teachers create a classroom community that reflects respect and caring. Each student and their unique identity is valued, not ignored. The highly effective teacher takes the time to know each of their students, and where they come from. This not only reinforces a positive attitude, but a stronger work ethic as well.

Other qualities of effective teachers include the strong belief that each student can achieve. Hard work and effort is held above ability. Teachers hold themselves responsible for each student, and see teaching as who they are not what they do (Ladson-Billings, 1989). Effective teachers are not only teachers, they are also learners. Effective

teachers see reaching each student as part of their job, not something extra they have to do. The most effective teachers are always preparing to teach and seek new ways to reach and develop student knowledge (Duncan-Andrade, 2007). This attitude about the worth, value and future of all students pervades the research in this area.

Effective Teaching Practices: Management and Style

“Management is not so much knowing how to respond but how to prevent problems in the first place” (Brophy, 1986, p. 34). The area of effective management practices is one of the most widely studied and observed (Hill et al., 2005). The manner in which teachers organize their classroom, conduct their lessons and manage behavior is a more observable, and some feel more easily teachable, skill set than the two above (Brophy, 1988). However, some teacher behaviors have a more widespread effect than others. Techniques that ‘add’ time to the school day, foster student’s independence, and facilitate differentiation of instruction promote greater student achievement and motivation.

An element of classroom management this is teacher judgment. Teachers must make sure that tasks are of proper difficulty for each student and that pacing is appropriate to minimize frustration and maintain motivation. Lemov (2010), in researching the mechanics of teaching, studied and filmed teachers in over 100 schools. He found that slight changes in teacher behavior led to huge improvements in student response, on-task behavior, and thus academic success.

In an empirical study, Brophy (1974, 1988; Brophy & Good, 1986) found that classroom management skills were the teacher behavior most strongly correlated with

student gains. He found that “high-task engagement rates achieved through effective classroom management are among the most powerful correlates to student achievement” (Brophy & Good, 1986, p. 33). A highly organized classroom engages students, and improves on task behavior. As a result, more students have increased learning (Lemov, 2010; Mashburn et al., 2008). Teachers who are task oriented and spend most of their class time with academically oriented activities with clear objectives were found to be the most highly effective in terms of academic success and student engagement (Brophy & Good, 1986, p. 33).

Students who are engaged and on task are learning and retaining more than students who are disengaged. A highly effective teacher can foresee problems, and set up the classroom to prevent them. Teacher “withitness,” a term coined by Kounin in 1970 occurs when a teacher intervenes before a misbehavior occurs or spreads and the consequences are directed to the appropriate perpetrator (Irving & Martin, 1982). These management skills take place almost unconsciously to the highly effective teacher. They take action before a situation starts. While they may seem innate, these skills can be taught and mentored to struggling or beginning teachers.

Lemov (2010), identified techniques teachers can use to minimize delays and maximize academic learning time. He studied teachers in high poverty, high achievement schools to find out what the most effective teachers were doing to accomplish such this rate of achievement. Lemov found that there were concrete skills highly effective teachers were using to maintain high levels of student engagement and participation, and thus academic success. These skills are based in the areas of behavior management, pacing and lesson delivery.

The manner in which the teacher conducts questioning and response during a lesson is important in engaging all students (Brophy, 1988; Lemov, 2010). Both researchers found that it is important to react appropriately to students when they do not respond or do not know the answer. This contributes to the flow of the lesson and can enhance comprehension for all the students. Students cannot tune out of the lesson, and are thus more engaged in the process (Lemov, 2010). It is of equal importance to call on all students, not just those who know the answer. The feeling that they are welcome and necessary members in a discussion that is non-judgmental and positive helps students maintain engagement in topic areas they are unsure of.

Planning and structure are key to highly effective teaching. Well-planned lessons that have been practiced and are purposeful and engaging will lead to high academic achievement (Brophy, 1988; Farr et al., 2010; Lemov, 2010). When information is presented clearly, logically and with a variety of strategies, more students get more out of it. A well-planned lesson has a distinct structure, and uses openers, a hook, advance organizers, and outlines (Brophy & Good, 1986; Brophy, 1988; Lemov, 2010). Teachers use a variety of strategies to present and scaffold the lesson.

Most effective teachers use strategies that respond to student needs—active teaching. (e.g., direct and indirect instruction, experience-based and skill-based approaches, lecture and small group work) are typically most successful. The use of different strategies occurs in the context of “active teaching” that is purposeful and diagnostic rather than random or laissez faire and that responds to students’ needs as well as curriculum goals. (Good, 1983, as cited in Darling-Hammond, 1999, p. 14)

The pacing of a lesson is also a critical factor of classroom management. A poorly paced lesson—too fast or too slow—will cause many students to tune out either from boredom or frustration. Highly effective teachers, according to Lemov (2010)

provide the illusion of speed. The lesson moves along quickly, things are happening, but the topic is the same. To do this, it is important for teachers to know how long each activity within a lesson should take, and how to break it up into more manageable time frames for the students by providing different activities on the same topic (Lemov, 2010). Teachers must know what they are going to teach, and have many ways to present and practice it. This keeps all students engaged, and those that need more review or learning time receive it without the more advanced students becoming distracted.

Consistent behavioral expectations are another key management factor for highly effective teachers. Positive and proactive behavior management strategies are employed to create a classroom climate that fosters respect, high academic achievement, social competence and on task behavior (Lohrmann & Talerico, 2004). Highly effective teachers directly teach, practice and reinforce positive behavior and classroom procedures. Clear expectations, positive reinforcement in the form of encouragement and specific praise, and active supervision are crucial to designing a classroom behavior management system (Wheatley et al., 2009). Lemov (2010) asserts, “there’s one acceptable percentage of students following a direction: 100 percent. Less, and your authority is subject to interpretation, situation and motivation” (p. 168).

A highly effective teacher uses strong classroom management strategies to ensure high academic, social, and moral achievement for all students. Organization, classroom procedures and time management play an important role in creating an environment where all students are progressing, and respecting themselves and each other. Pacing and planning are used to differentiate instruction and maintain on-task

behavior. All of these techniques can be observed, evaluated and developed in pre-service and in-service teachers.

Current Systems of Teacher Evaluation

It is important to look at methods of teacher assessment and evaluation to determine what areas are being emphasized and which are being neglected. Current teacher evaluation processes also help point to the areas that are most ‘valued’ by administration and teacher training programs. Sometimes these are the more observable and measurable skills. If the systems of evaluation drive teacher mentoring and development, perhaps these need to be adjusted to include all areas of skill that encompass highly effective teaching. We need first to come to a consensus regarding what pieces form a highly effective teacher, then create the template by which this is evaluated.

There is little doubt that teacher effectiveness is of great influence on student achievement (Hanushek & Rivkin, 2010). It is a matter of how we are going to evaluate and mentor this that will make a great difference to our students. One method that is attaining popularity is the Value Added System of teacher evaluation and remuneration. Advances in data collection have influenced the development of this method (Kupermintz, 2003). This system looks at longitudinal student data and compares how each student showed improvement (or lack thereof) under different teachers. Hanushek and Rivkin (2010) found that “teacher quality varies substantially as measured by the value added to student achievement or future academic attainment” (Hanushek & Rivkin,

2010, p. 2). The data used to produce these measures are students' standardized test scores. Teachers are thus assessed by a single measure.

The Tennessee Value Added System is one such method that several states have adopted. Developed by Dr. William Sanders at the University of Tennessee, it uses test scores as the main measure of teacher effectiveness. The main flaw of this is that it does not take into account the many variables at play in the school environment. "School culture and climate, curriculum framework, and instructional approaches" are all factors in student achievement, according to Kupermintz (2003, p. 295). In addition, value-added scores "are not useful for formative purposes because teachers learn nothing about how their practices contributed to (or impeded) student learning" (Goe et al., 2008). Another important concern is that the value added system may leave more students behind because high student achievement is the ultimate goal and is also tied to teacher pay and evaluation (Kupermintz, 2003). This may create a system that focuses on students who are achieving already, not those in the most dire need.

A study of teacher evaluation in Colorado found that much of the current teacher evaluation procedures are based on accountability and are "comprised of summative evaluations that emphasize turning in paperwork" (Ramirez et al., 2010, p. 9). The assessments are based on checklists and standardized forms. There is very minimal collaborative input from staff members, and the assessments had little to do with follow-up programs of teacher mentoring and development. Researchers found that administrators and teachers saw it simply as a process that must be completed, with nothing for teachers to gain or grow from through the evaluation (Ramirez et al., 2010).

At a Northern California University, future administrators are being taught a model of teacher evaluation and development that is based on clinical supervision. The actual evaluative tools vary from school to school; however, there is a common template. The teacher sets personal goals for the year, and creates a plan for meeting them. The administrator plans one to three 15-minute observations throughout the year. Following the observation, the teacher and administrator meet to discuss the session (Glickman et al., 2010).

A charter school in Northern California has developed evaluations are based on the following criteria: pupil progress toward standards; establishment of a suitable learning environment; adherence to curricular objectives; instructional techniques and strategies, and professional growth activities (Chico Country Day School, 2008). All of the characteristics being evaluated are highly observable, technical skills that fall under the Classroom Management and Content Knowledge categories.

A mid-sized school district in Northern California, to be known heretofore as Northbrook School District, has been implementing a similar evaluation. This evaluation uses a rating scale and teacher observation. The tool includes five main areas four of which are self-explanatory. Assessing student learning; planning instruction and designing learning experiences for students; understanding and organizing subject matter for learning; and creating and maintaining effective environments for student learning all involve content knowledge or classroom management. The fifth area, engaging and supporting students in learning, is an area that could engage Teacher Behavioral Modalities. The benchmarks in this area include critical thinking and promotion of reflective learning for students (Chico Unified School District, 2003). What is still

lacking, however, is an evaluation piece that specifically targets and labels Teacher Behavioral Modalities that are representative of highly effective teachers.

A national study (Weisberg et al., 2009) concluded that most teacher evaluation systems lack meaning for participants in the process, have little to no impact, and tend toward ritual as opposed to substance (Ramirez et al., 2010). Less than 1% of teachers nationally received an unsatisfactory evaluation (Weisberg et al., 2009). Teachers have no plan for growth, and no target for professional development. The purpose of evaluation tools are called into question when it is assumed that they hold little meaning or weight for any of the stakeholders. It is important that teacher evaluation tools reflect the work that highly effective teachers do in the classroom. In this way, they can promote teacher development and mentoring in structured ways that are supported by current research.

Summary

The definition of a highly effective teacher is comprised of many elements. Evidence indicates that Pedagogical Content Knowledge, Classroom Management and Teacher Behavioral Modalities are critical pieces in defining what a highly effective teacher does. While a great deal of research has been conducted in the areas of Classroom Management and new research is emerging in the area of Pedagogical Content Knowledge, the area of Teacher Behavioral Modalities has received relatively little attention. Its importance, however, cannot be downplayed.

Teacher Behavioral Modalities promote positive behavior, on-task behavior, and pro-social skills. Students feel more confident in the classroom, and thus more

motivated to try their best. Families are more engaged and involved in the school and learning process. Students respect each other and the teacher. Teacher Behavioral Modalities promote student and family behaviors and interactions that promote increased learning and academic success. Including them in teacher evaluations would help promote these behaviors in the school and the universities. Teacher Behavioral Modalities are a valuable element of student success, and should be evaluated as such.

It is evident that current systems of evaluation lack a critical standard that is an essential element of highly effective teaching. Teacher Behavioral Modalities must be included in teacher assessments to aid in development and mentoring of highly effective teachers. Teacher Behavioral Modalities are necessary to promote students' successes, be they social, academic, or moral.

that challenges learners to develop their critical thinking skills and engage in analytical discussion” (Coffey, n.d.). The Socratic method “engages students in dialogue and discussion that is collaborative and open-minded as opposed to debate, which is often competitive and individualized” (Coffey, n.d., “The Socratic Method,” para. 1).

Plato’s pedagogy involved using questioning and dialogues, similar to the methods used by his teacher Socrates. Plato felt that each person or student had a set of aptitudes that it was the teacher’s duty to find and develop (Dewey, 1916). Both of these teachers used questioning processes to engage and use their student’s prior knowledge. These methods continue to be considered elements of good teaching. Brophy (1988) emphasized the use of questioning techniques when teaching to enhance comprehension and personal engagement.

John Dewey’s reflections and philosophy on teaching are also relevant to the history and description of a highly effective teacher. Dewey placed the teacher and students within the context of society at large. What was happening in society could not be far removed from how the students were being taught or what they were learning. Dewey felt that schooling and education was a “direct function of a child’s socialization and expression of democratic living” (Dwornik, 2003, p. 55). Dewey’s view of good teachers involved “fostering learning through an appropriate curriculum, thus freeing the child to learn” (Dwornik, 2003, p.55). The curriculum, and its incorporation of democracy and morality were important tools for the teacher. The teacher was seen as the tool to a greater societal purpose—democracy.

The teaching and modeling of moral and ethical behaviors was very important to early teachers. They were held to a higher standard than other members of society. The moral character of a teacher was more important than her academic experience and capabilities (Springer & Gardner, 2010). However, as America grew and developed, politically and economically, so did the need for more academically oriented, qualified educators.

Following World War II, with its emergence as a leading nation, America wanted to further its place in the global structure. The purpose of education was better one's economic position, or "getting on" (Eliot, 1950, p. 452). The motives behind schooling became financial and more selfish. Individuals used education to improve themselves economically or socially (Eliot, 1950). Eliot equated the pursuit of education to that of rising in society. If that motive evaporated, so would the desire to learn. Eliot posed the question that "to know what we want from education, we must know what we want in general, and derive our theory of education from our philosophy of life" (Eliot, 1950, p. 452).

Society must decide what we want from education and from teachers. Is it test scores, literacy, morality, ethics, financial success or a combination of all? It is crucial to define a highly effective teacher so that we can evaluate, develop and grow the teacher force we have, and the teachers to come. As what society wants from teachers evolves, so do the methods of evaluation. Campbell et al. (as cited in Goe et al., 2008), contend that trends in measurement of teacher effectiveness seem to follow the development of new instruments and technologies, focusing on the ability to measure something, rather than

first defining effectiveness and *then* determining a technology for measuring it (Goe et al., 2008).

Our current social and economic context has evolved to create a situation where highly effective teaching is viewed as the main key to student success. The advent of extremely efficient data systems, computerized longitudinal data collection and our ability to compare and contrast teachers, schools and districts rapidly has ushered in a new era in teacher evaluation (Darling-Hammond, 1999; Goe et al., 2008; Kupermintz, 2003). These advances in systems of student measurement have led to new methods of teacher measurement. These include value added systems that have been developed through this new technology; and other less complex systems that are based solely on yearly test scores, or checklists based on a single, short observation.

While this plethora of data is helpful in many ways, it has also become a burden to teachers. Student test scores have become one of the lone measures of teacher effectiveness. These scores allow no room or suggestion for teacher improvement, development, or growth. When we define teachers only by the scores their students receive, we are missing out on a great deal of what teachers bring to their student. Researchers such as Brophy and Good (1986), contend that there are other important outcomes besides students' performance on standardized tests that define effective teachers. More than 20 years ago, in their review of "process-outcome" research linking teacher behavior to student achievement, Brophy and Good (1986) made the following statement about their work:

The research discussed is concerned with teachers' effects on students, but it is a misnomer to refer to it as "teacher effectiveness" research, because this equates "effectiveness" with success in producing achievement gain. What constitutes

“teacher effectiveness” is a matter of definition, and most definitions include success in socializing students and promoting their affective and personal development in addition to success in fostering their mastery of formal curricula. (Brophy & Good, 1986, p. 328)

Teachers are expected to do more than teach purely academic skills. They should be recognized, mentored, and evaluated in these areas as well. A qualitative and quantitative definition of teacher effectiveness is necessary so that teachers, parents, students, and administrators can have a target.

Teacher’s Knowledge of Their Craft

A great deal of research has been done in the area of effective teaching. However, certain areas have emerged as being of greater importance to student growth and learning. Teacher pedagogical knowledge and skill is one of these areas. “Increases in student learning occur only as a consequence of improvements in the level of content, teachers’ knowledge and skill, and student engagement” (City, Elmore, Fiarman, & Teitel, 2009). Brophy (1988) used quantitative data to create a well-defined outline for what good teaching looks like. Brophy found that increasing active instruction time, or the time spent on academic activities was crucial to increasing student achievement (1988). He also found that good teaching pedagogy was not specific to different populations of students with various learning needs. If instruction is high quality, all students benefit, regardless if they have special learning needs (1988).

“Achievement gains are quantitatively linked to students’ opportunity to learn the material, and in particular, to the amount of active instruction and direct supervision of learning efforts that students receive from their teachers” (Brophy, 1988, p. 240). Brophy (1988) also found that the techniques teachers use are more important than the

materials. The materials or so-called “teacher-proof” programs are not a substitute for good teaching. No programs can substitute for highly effective teaching. “Administrators need to work with and through teachers, not through the materials” (Brophy, 1988, p. 243).

Pedagogical Skill

Teachers’ knowledge of the material is also a critical element of teacher effectiveness. Thus far, teacher knowledge has been almost universally quantified by years of teaching and courses taken. Teachers with more credits in certain areas are pre-supposed to be better prepared and thus more effective. Research has been mixed in this area, because much of it has focused not on inherent teacher skill and knowledge, but on the volume and quality of inputs and trainings provided to teachers (Hill, Rowan, Ball, 2005). Darling-Hammond (1999) found, based on a standardized assessment of teacher knowledge of subject matter, that this type of knowledge is correlated to achievement up to a certain grade level, but less important after that (Darling-Hammond, 1999). In addition, teacher intelligence has not been shown to be highly correlated with student achievement. Verbal ability, however, does show a greater degree of correlation. It may be that this is because teachers with greater verbal ability can convey material to their students more effectively (Murane, 1985, as cited in Darling-Hammond, 1999).

However, it is important to distinguish between teacher knowledge in a subject area (content area knowledge) and a deeper understanding of how to teach a particular subject area (pedagogical content knowledge). The difference between this becomes clear when one looks more closely at the research. Begle (1979) found that

... reviewing findings of the National Longitudinal Study of Mathematical Abilities, the number of credits a teacher had in mathematics *methods* [emphasis added] courses was a stronger correlate of student performance than was the number of credits in mathematics course. (as cited in Darling-Hammond, 1999, p. 8)

In a countrywide comparison, it was found that teachers in states with the most advanced teacher preparation and broad-based support programs “repeatedly led the nation in student achievement in the areas of reading and math” (Darling-Hammond, 1999, p. 17).

Pedagogical Content Knowledge

Another strand of research is beginning to receive more attention. Researchers are looking at how to “conceptualize teachers’ knowledge for teaching differently, arguing that teacher effects on student achievement are driven by teachers’ ability to understand and use subject-matter knowledge to carry out the tasks of teaching” (Hill et al., 2005, p. 372). It is not just knowledge of content, but the knowledge of how to teach content that influences a teacher’s effectiveness (Hill et al., 2005).

Dewey wrote about subject knowledge 100 years ago, however until recently, little effort had been made to tie methods and knowledge together. “Scholastic knowledge is sometimes regarded as if it were something quite irrelevant to method. When this attitude is even unconsciously assumed, method becomes an external attachment to knowledge of subject matter” (as cited in Ball, 2000, p. 241). How teachers approach their subject and their students may account for the varying effectiveness among similar teachers. “Teachers’ abilities to structure material, ask higher order questions, use student ideas, and probe student comments have also been found to be important variables in what students learn” (Darling-Hammond, 1999, p. 14).

Pedagogical content knowledge was more recently postulated to be an integral area in the study of teacher effectiveness by Lee Shulman (1986). He theorized that the way content was taught, and knowledge about how to teach each content area, was as important, or more so, than classroom management and other process-product manners of evaluating effectiveness (Ball, Thames & Phelps, 2007; Shulman, 2000). He felt that there was a certain type of knowledge that teachers had that was specific to teaching. This knowledge, he theorized, may even be subject-specific. It must also include the preconceptions and misconceptions that students bring with them to a particular subject (Shulman, 2000). This knowledge also included the idea that teachers need to be aware of how and where students misunderstand certain topics within a subject (Shulman, 2000). The manner in which a certain subject is taught is essential to increasing student understanding and performance. Pedagogical Content Knowledge was the term he developed for this type of knowledge. This concept struck a chord with many educators and theorists.

Pedagogical content knowledge pinpoints the value of strong, specific teacher knowledge of the skill and methods with which to teach each content area. “High quality instruction requires a sophisticated professional knowledge that goes beyond simple rules such as how long to wait for students to respond” (Ball et al., 2007, p. 8). Darling-Hammond (2006) found that the most successful, powerful teachers education programs approach content from a pedagogical perspective. These colleges took an approach that incorporated the learner and the subject simultaneously (Darling-Hammond, 2006). An example is in reading instruction: “There is a growing recognition that teaching reading requires a detailed knowledge of text, language, and reading process that goes

substantially beyond just being able to decode and comprehend text proficiently” (Ball et al., 2007, p. 17).

Ball, Rowan and Hill, among others, have taken Shulman’s theories and expanded on them. Shulman himself had called for a refinement of his thesis and a more structured definition of terms (Ball et al., 2007). By investigating one subject, Ball et al. (2007) found that more research into each subject area was necessary to specify the type and quality of knowledge necessary for each unique area. In this project, researchers studied teachers’ work—not the curriculum—but “everything that teachers do to support the learning of their students” (Ball et al., 2007, p. 22). She compared this to a “job analysis of teaching focusing on the actual work that teachers do” (Hill et al., 2000, p. 244). In this work, it is important to deconstruct one’s own knowledge of the subject to find the most critical aspects of it (Ball, 2000). Teachers must constantly assess themselves and their instruction (Wylie et al., 2009).

Some of the on-going research that stands out in this area involves assessing and targeting teachers’ “Mathematical Knowledge for Teaching.” A study regarding this area of knowledge found that students with low socio-economic status and students from minority backgrounds receive greater benefit from teachers with a deeper knowledge of how to teach mathematical content (Ball et al., 2007). In a longitudinal study, Ball et al. (2007) developed and validated surveys of mathematical knowledge for teaching. The study also set out to articulate, test, and refine categories of Mathematical Knowledge necessary for teaching. This work is ongoing, but preliminary findings show that the knowledge is multi-dimensional. “General mathematical ability does not fully account for the knowledge and skills entailed in teaching mathematics” (Ball et al., 2007, p. 28).

These surveys went beyond content knowledge assessments. They assessed the pedagogical knowledge teachers needed to most effectively teach mathematics. Some of the skills highlighted and studied by Ball et al. (2007) included choosing accurate descriptions, usable representations, error analysis and empathetic reasoning (p. 35). Ball et al. (2007) found that “more advanced math will not satisfy all demands of teaching. What seems to be more important is knowing the math used in teaching” (p. 38). Indeed, one question the research raised is whether content assessments for teachers have enough depth to cover how teachers teach each subject.

Ball also found that diversity and equity were not in opposition to this theory of specialized content knowledge for teaching. Strong content knowledge is inherent in seeing how others view things and how everyone differently understands each concept (Ball, 2000). Clearly, simply knowing about a subject does not make one uniquely qualified to teach it. Hill, Ball and Schilling’s 2008 study of 500 teachers conducted over three years identified four categories that attempted to conceptualize and quantify Pedagogical Content Knowledge, or as Ball termed “Knowledge of Content and Students” (p. 374). This new definition narrows Shulman’s idea to “content knowledge intertwined with knowledge of how students think about, know or learn about a particular (content area)” (Hill et al. 2008, p. 374).

The four categories researchers looked at were: a study of teacher knowledge of student errors and what they were and why they made them; interpreting student work as the display of content knowledge and understanding; identification of developmental processes and sequence, identifying what students learn first; and identifying common strategies student have to learn in order to process material (Hill et al. 2008).

Evidently, there is far more to content instruction than simply content knowledge. It is necessary that further research be accomplished in this area. Comparative research studying English teachers is currently underway. While the research is emerging in the areas of Math, Science and Technology, it is lacking in the areas of English, Language Arts, and Written Language. For a teacher to be ultimately effective, it is clear that Pedagogical Content Knowledge or Knowledge of Content and Students is crucial to cementing student understanding, promoting diversity, and increasing student achievement and motivation.

Teacher Behavioral Modalities

“The pursuit of knowledge is not a piece of content that can be taught. It is a value that teachers model” (Haberman, 2004, p. 52). Teacher’s behaviors and attitudes are important variables in student success and achievement, and many researchers and educators have stressed the need to include them in studies of teacher effectiveness and programs that develop and grow teachers (Rinaldo et al., 2005). Do great teachers possess a special, unique quality? Are great teachers born and not made? The less technical qualities that make some teachers more highly effective than others are very important factors to consider when creating a template a highly effective teacher.

A teacher who motivates a student to complete a difficult class, to come to school every day, or to finish high school is as effective as a teacher who consistently raises test scores and is a powerhouse of student achievement data (Wayne & Youngs, 2003). This is a more difficult area to quantify, yet it is just as essential to defining a highly effective teacher as are management techniques and pedagogical content

knowledge. “There has been a long-standing belief among educators that within the profession there exists distinguishable qualities between teachers who are considered to be ‘good’ teachers and those who are not” (Rinaldo et al., 2005, p. 43). The issue lies with identifying some of these qualities and then creating ways to develop and mentor them in teachers.

The behaviors valued in teachers have been emphasized more by implication than by study, analysis or recognition. When we talk about our favorite teacher, we speak of how we were led or motivated by them, or how their attitude and enthusiasm compelled us to focus on their class. It is difficult to represent the value that these intangibles have to students and to their success and achievements. Rinaldo et al. (2005), state that: “Although theoretical values are placed on the importance of such attributes as curiosity, imagination, empathy, innovation, interest, and compassion, few, if any, manifest themselves in the evaluation of what are construed as significant indicators of teacher competence” (p. 45).

After a review of over 300 pieces of professional literature, Goe et al. (2008) found that studies of teacher effectiveness indicated that effective teachers used inter-and intra-personal skills that set them above others. Collaboration, community-building, both within the classroom and among staff members, and positive contributions to attendance, graduation and attitude were found to be qualities of highly effective teachers (Goe et al., 2008). Highly effective teachers have interventionist beliefs about students, which may “lead to stronger relationships, increased self esteem, improved performance” (Rosenfeld & Rosenfeld, 2008). The most effective teacher wants to work with the student, and believes they can overcome challenges together. This is opposite to the belief that the

student is unfixable, and the problem lies within the student (Rosenfeld & Rosenfeld, 2008).

Goodlad (2004) found similar reasons to believe that certain teacher behavioral modalities were what truly made them great. The moral and ethical character of a teacher allowed them to serve the greater good by teaching students how to be caretakers of the democracy. “Those involved in the enterprise of schooling are consciously aware of the moral responsibilities inherent in teaching in a democracy” (Goodlad, 2004, p. 20). It is important to describe these qualities in terms that define what to look for and how to develop these ideals. Teachers apply critical thinking to model strong moral decisions and behavior that is not selfish, but works for the good of all.

Tichenor and Tichenor (2004) surveyed over 100 classroom teachers to find out what they felt was the most important factor in professional, effective teaching. The results found a strong character to be the most important characteristic of a teacher. While the answers varied—“caring, nurturing, flexible, displays confidence in students and the classroom, conscientious, creative, dedicated”—all focused on the moral, empathetic, and ethical soul of an effective teacher (Tichenor & Tichenor, 2004, p. 92).

There is a dearth of quantitative studies in this area. Measurable qualities have taken priority over less observable ones due to the emphasis on test scores through standardized testing (Rinaldo et al., 2005). Darling-Hammond (1999) found that

. . . research into teachers’ personality traits and behaviors has produced few consistent findings with the exception of studies finding a recurring positive relationship between student learning and teachers’ ‘flexibility, creativity or adaptability’ (Berliner & Tikunoff; Shalock, 1979; Walberg & Waxman, 1983). (p. 13)

The way a teacher approaches the subject is important as well. “Many researchers have established a positive correlation between teacher enthusiasm and student achievement” (Mowrer-Reynolds, 2008, p. 5).

Palmer (1998) wrote about how good teaching cannot be reduced to technique—“it must come from the identity and integrity of the teachers themselves” (p. 10). Palmer found a great deal of value in the heart and integrity of each individual teacher. The place where each teacher is coming from and who they are mean a great deal to how they teach. Good teachers open themselves up and become vulnerable to their students and school community (Palmer, 1998). “Intellect works in concert with feeling—if you are open to students minds, you must also be open to their hearts” (Palmer, 1998, p. 63). Effective teachers reveal a great deal of themselves to their students. Great teachers should “take risks and invite open dialogue”—much in the Socratic tradition (Palmer, 1998, p. 69). They do not hide their heart, and help students get in touch with themselves as well. To do that, each teacher has to have self-knowledge.

Self-reflection and self-evaluation are essential attributes of highly effective teachers (Rinaldo et al., 2005). The ability to continually self-assess is a teacher behavioral modality that is critical to improving practice and maintaining a high level of professional quality. Tichenor and Tichenor (2004) found that the most highly effective teachers were also those who were the most self-reflective. These teachers were constantly asking questions about student growth, learning, and how they could improve their craft (Tichenor & Tichenor, 2004). Highly effective teachers are constantly trying to improve their technique and methods within their craft. They are self-critical and

maintain high standards for themselves. They balance their self-confidence as teachers with constant analysis and reflection (Duncan-Andrade, 2007; Farr, Kamras, & Kopp, 2010; Lemov, 2010).

Star teachers, as highly effective teachers are termed by Haberman (1995), have certain qualities that encourage, motivate and energize students to learn. He finds that star teachers take problems in stride. For example, they do not feel that a child refusing to do homework, or with different needs or skills is out of the ordinary, or out of the range of their job or skills. Star teachers take this as a regular, expected occurrence in their day (Haberman, 1995). He found that these most effective teachers focused on effort rather than ability, and realized and accepted that they were personally accountable for each student's learning (Haberman, 2004).

Haberman recognized several teacher behavioral modalities amongst teachers he designated as 'star teachers.'

(T)heir persistence, their physical and emotional stamina, their caring relationships with students, their commitment to acknowledging and appreciating student effort, their willingness to admit mistakes, their focus on deep learning, and their organizational skills. (Haberman, 1995, 2004, p. 53)

He also feels there is an ideology common to star teachers. This entails behaviors such as taking the time to really listen to staff and students, collaboration, lifelong learning, and viewing student success as individual and of equal importance. They act as professionals and recognize their weaknesses and try to work through them (Haberman, 1995). These are important teacher behavioral modalities. However, what is encouraging is that while these skills may come more easily to some, they have been identified and could be mentored and brought forth in others.

The mindset of highly effective teachers is important to regard. Throughout the literature, highly effective teachers have been noted to be lifelong learners, and to be single minded in their belief that all students can learn. These teachers have the mentality that they can never give up, they can always to more, and they can always find a way to reach every student (Farr et al., 2010; Lemov, 2010).

Respect for each student and where they come from is a universal teacher behavioral modality of highly effective teachers. The idea that each student can learn and is worthy of our best efforts is crucial to motivation and a positive attitude. High expectations and requiring students to critically think about the content being taught enhances achievement and motivation (Allday, 2006; Delpit, 2006; Ladson-Billings, 1989; Lemov, 2010). Delpit (2006) found that we must “see the brilliance in each child,” teaching not out of pity but out of strength, almost forcing each one to learn (p. 221). This attitude is similar to that of the ‘star teacher’ who believes that individual student learning and achievement comes above all else.

Delpit’s (2006) research also revealed that students are more willing to put forth effort in a classroom where they feel as sense of belonging and feel cared for and accepted for who they are. This sense of caring, and a strong belief in the student themselves is a recurring key point to student success and achievement. It allows each student to recognize that their diverse qualities are valued by the teacher and within the classroom.

This theme recurs in the research accomplished by Ladson-Billings (1989). Strong ties with the students and the community where the student lives are integral to achievement, personal growth and attitude. There is great power in emphasizing

similarities between teacher and students and establishing strong ties with them (Ladson-Billings, 1989). A strong sense of self, community and culture are important for the teacher to be aware of and instill in their students. Ladson-Billings found that teachers “must consider student and community culture in the definition of effective teaching” (1989, p. 4). This is particularly true in communities with low income, disenfranchised students and high numbers of minority students. There are “community and cultural standards of excellence” that must be upheld by an effective teacher (Ladson-Billings, 1989, p. 8). These teachers must be aware of the culture of their classroom and school community and sensitive to it for each child.

Another aspect of classroom culture that is important to highly effective teaching is caring. In a quantitative study of second grade students, pre-service teachers and in-service teachers, all of those studied felt that to be perceived as caring was the most important teacher behavioral modality (Murphy, Delli, & Edwards, 2004). Noddings (2006) found that caring teachers are attentive and respond to student needs (Noddings, 2006). These needs can be ones the student is unaware of, and does not express interest in, and others that they are directly asking the teacher to meet (Noddings, 2006). The caring teacher meets the appropriate needs of her students, distinguishing the ones that are silly from those that are necessary (Murphy et al., 2004; Noddings, 2006). Duncan-Andrade (2007), found that building trust is at the basis of this relationship—often the school represents oppression. The highly effective teacher works to build trust and community within the classroom and school. This sense of caring, respect, trust, and of community motivates students to excel and learn and maintains “intrinsic interest” of the students (Noddings, 2006, p. 342).

After a review of over 300 empirical articles, Goe et al. (2008) found that the importance of teacher behavioral modalities often outweighed the more academic and technical strengths of teachers. Highly effective teachers were found to have a positive attitude and supportive classroom environment that led to “regular attendance, on time graduation, self-efficacy and co-operative behavior” (Goe et al., 2008, p. 8).

Collaboration and communication are other attributes of a highly effective teacher (Farr et al., 2010; Goe et al., 2008). This involves collaboration not only with school staff but also with parents and the community, leading to a deeper connection with the student and school at large.

Teacher behavioral modalities that define effective teachers remain difficult to quantify. The benefits imparted to the students are difficult to measure as well. Strong sense of self, work ethic, positive attitude and a connection to the community and the diversity found there are all taught to students through the efforts of highly effective teachers. Through investigation, and observation, some qualities have been identified that are clearly attributed to the most effective teachers. To enhance student motivation, great teachers create a classroom community that reflects respect and caring. Each student and their unique identity is valued, not ignored. The highly effective teacher takes the time to know each of their students, and where they come from. This not only reinforces a positive attitude, but a stronger work ethic as well.

Other qualities of effective teachers include the strong belief that each student can achieve. Hard work and effort is held above ability. Teachers hold themselves responsible for each student, and see teaching as who they are not what they do (Ladson-Billings, 1989). Effective teachers are not only teachers, they are also learners. Effective

teachers see reaching each student as part of their job, not something extra they have to do. The most effective teachers are always preparing to teach and seek new ways to reach and develop student knowledge (Duncan-Andrade, 2007). This attitude about the worth, value and future of all students pervades the research in this area.

Effective Teaching Practices: Management and Style

“Management is not so much knowing how to respond but how to prevent problems in the first place” (Brophy, 1986, p. 34). The area of effective management practices is one of the most widely studied and observed (Hill et al., 2005). The manner in which teachers organize their classroom, conduct their lessons and manage behavior is a more observable, and some feel more easily teachable, skill set than the two above (Brophy, 1988). However, some teacher behaviors have a more widespread effect than others. Techniques that ‘add’ time to the school day, foster student’s independence, and facilitate differentiation of instruction promote greater student achievement and motivation.

An element of classroom management this is teacher judgment. Teachers must make sure that tasks are of proper difficulty for each student and that pacing is appropriate to minimize frustration and maintain motivation. Lemov (2010), in researching the mechanics of teaching, studied and filmed teachers in over 100 schools. He found that slight changes in teacher behavior led to huge improvements in student response, on-task behavior, and thus academic success.

In an empirical study, Brophy (1974, 1988; Brophy & Good, 1986) found that classroom management skills were the teacher behavior most strongly correlated with

student gains. He found that “high-task engagement rates achieved through effective classroom management are among the most powerful correlates to student achievement” (Brophy & Good, 1986, p. 33). A highly organized classroom engages students, and improves on task behavior. As a result, more students have increased learning (Lemov, 2010; Mashburn et al., 2008). Teachers who are task oriented and spend most of their class time with academically oriented activities with clear objectives were found to be the most highly effective in terms of academic success and student engagement (Brophy & Good, 1986, p. 33).

Students who are engaged and on task are learning and retaining more than students who are disengaged. A highly effective teacher can foresee problems, and set up the classroom to prevent them. Teacher “withitness,” a term coined by Kounin in 1970 occurs when a teacher intervenes before a misbehavior occurs or spreads and the consequences are directed to the appropriate perpetrator (Irving & Martin, 1982). These management skills take place almost unconsciously to the highly effective teacher. They take action before a situation starts. While they may seem innate, these skills can be taught and mentored to struggling or beginning teachers.

Lemov (2010), identified techniques teachers can use to minimize delays and maximize academic learning time. He studied teachers in high poverty, high achievement schools to find out what the most effective teachers were doing to accomplish such this rate of achievement. Lemov found that there were concrete skills highly effective teachers were using to maintain high levels of student engagement and participation, and thus academic success. These skills are based in the areas of behavior management, pacing and lesson delivery.

The manner in which the teacher conducts questioning and response during a lesson is important in engaging all students (Brophy, 1988; Lemov, 2010). Both researchers found that it is important to react appropriately to students when they do not respond or do not know the answer. This contributes to the flow of the lesson and can enhance comprehension for all the students. Students cannot tune out of the lesson, and are thus more engaged in the process (Lemov, 2010). It is of equal importance to call on all students, not just those who know the answer. The feeling that they are welcome and necessary members in a discussion that is non-judgmental and positive helps students maintain engagement in topic areas they are unsure of.

Planning and structure are key to highly effective teaching. Well-planned lessons that have been practiced and are purposeful and engaging will lead to high academic achievement (Brophy, 1988; Farr et al., 2010; Lemov, 2010). When information is presented clearly, logically and with a variety of strategies, more students get more out of it. A well-planned lesson has a distinct structure, and uses openers, a hook, advance organizers, and outlines (Brophy & Good, 1986; Brophy, 1988; Lemov, 2010). Teachers use a variety of strategies to present and scaffold the lesson.

Most effective teachers use strategies that respond to student needs—active teaching. (e.g., direct and indirect instruction, experience-based and skill-based approaches, lecture and small group work) are typically most successful. The use of different strategies occurs in the context of “active teaching” that is purposeful and diagnostic rather than random or laissez faire and that responds to students’ needs as well as curriculum goals. (Good, 1983, as cited in Darling-Hammond, 1999, p. 14)

The pacing of a lesson is also a critical factor of classroom management. A poorly paced lesson—too fast or too slow—will cause many students to tune out either from boredom or frustration. Highly effective teachers, according to Lemov (2010)

provide the illusion of speed. The lesson moves along quickly, things are happening, but the topic is the same. To do this, it is important for teachers to know how long each activity within a lesson should take, and how to break it up into more manageable time frames for the students by providing different activities on the same topic (Lemov, 2010). Teachers must know what they are going to teach, and have many ways to present and practice it. This keeps all students engaged, and those that need more review or learning time receive it without the more advanced students becoming distracted.

Consistent behavioral expectations are another key management factor for highly effective teachers. Positive and proactive behavior management strategies are employed to create a classroom climate that fosters respect, high academic achievement, social competence and on task behavior (Lohrmann & Talerico, 2004). Highly effective teachers directly teach, practice and reinforce positive behavior and classroom procedures. Clear expectations, positive reinforcement in the form of encouragement and specific praise, and active supervision are crucial to designing a classroom behavior management system (Wheatley et al., 2009). Lemov (2010) asserts, “there’s one acceptable percentage of students following a direction: 100 percent. Less, and your authority is subject to interpretation, situation and motivation” (p. 168).

A highly effective teacher uses strong classroom management strategies to ensure high academic, social, and moral achievement for all students. Organization, classroom procedures and time management play an important role in creating an environment where all students are progressing, and respecting themselves and each other. Pacing and planning are used to differentiate instruction and maintain on-task

behavior. All of these techniques can be observed, evaluated and developed in pre-service and in-service teachers.

Current Systems of Teacher Evaluation

It is important to look at methods of teacher assessment and evaluation to determine what areas are being emphasized and which are being neglected. Current teacher evaluation processes also help point to the areas that are most ‘valued’ by administration and teacher training programs. Sometimes these are the more observable and measurable skills. If the systems of evaluation drive teacher mentoring and development, perhaps these need to be adjusted to include all areas of skill that encompass highly effective teaching. We need first to come to a consensus regarding what pieces form a highly effective teacher, then create the template by which this is evaluated.

There is little doubt that teacher effectiveness is of great influence on student achievement (Hanushek & Rivkin, 2010). It is a matter of how we are going to evaluate and mentor this that will make a great difference to our students. One method that is attaining popularity is the Value Added System of teacher evaluation and remuneration. Advances in data collection have influenced the development of this method (Kupermintz, 2003). This system looks at longitudinal student data and compares how each student showed improvement (or lack thereof) under different teachers. Hanushek and Rivkin (2010) found that “teacher quality varies substantially as measured by the value added to student achievement or future academic attainment” (Hanushek & Rivkin,

2010, p. 2). The data used to produce these measures are students' standardized test scores. Teachers are thus assessed by a single measure.

The Tennessee Value Added System is one such method that several states have adopted. Developed by Dr. William Sanders at the University of Tennessee, it uses test scores as the main measure of teacher effectiveness. The main flaw of this is that it does not take into account the many variables at play in the school environment. "School culture and climate, curriculum framework, and instructional approaches" are all factors in student achievement, according to Kupermintz (2003, p. 295). In addition, value-added scores "are not useful for formative purposes because teachers learn nothing about how their practices contributed to (or impeded) student learning" (Goe et al., 2008). Another important concern is that the value added system may leave more students behind because high student achievement is the ultimate goal and is also tied to teacher pay and evaluation (Kupermintz, 2003). This may create a system that focuses on students who are achieving already, not those in the most dire need.

A study of teacher evaluation in Colorado found that much of the current teacher evaluation procedures are based on accountability and are "comprised of summative evaluations that emphasize turning in paperwork" (Ramirez et al., 2010, p. 9). The assessments are based on checklists and standardized forms. There is very minimal collaborative input from staff members, and the assessments had little to do with follow-up programs of teacher mentoring and development. Researchers found that administrators and teachers saw it simply as a process that must be completed, with nothing for teachers to gain or grow from through the evaluation (Ramirez et al., 2010).

At a Northern California University, future administrators are being taught a model of teacher evaluation and development that is based on clinical supervision. The actual evaluative tools vary from school to school; however, there is a common template. The teacher sets personal goals for the year, and creates a plan for meeting them. The administrator plans one to three 15-minute observations throughout the year. Following the observation, the teacher and administrator meet to discuss the session (Glickman et al., 2010).

A charter school in Northern California has developed evaluations are based on the following criteria: pupil progress toward standards; establishment of a suitable learning environment; adherence to curricular objectives; instructional techniques and strategies, and professional growth activities (Chico Country Day School, 2008). All of the characteristics being evaluated are highly observable, technical skills that fall under the Classroom Management and Content Knowledge categories.

A mid-sized school district in Northern California, to be known heretofore as Northbrook School District, has been implementing a similar evaluation. This evaluation uses a rating scale and teacher observation. The tool includes five main areas four of which are self-explanatory. Assessing student learning; planning instruction and designing learning experiences for students; understanding and organizing subject matter for learning; and creating and maintaining effective environments for student learning all involve content knowledge or classroom management. The fifth area, engaging and supporting students in learning, is an area that could engage Teacher Behavioral Modalities. The benchmarks in this area include critical thinking and promotion of reflective learning for students (Chico Unified School District, 2003). What is still

lacking, however, is an evaluation piece that specifically targets and labels Teacher Behavioral Modalities that are representative of highly effective teachers.

A national study (Weisberg et al., 2009) concluded that most teacher evaluation systems lack meaning for participants in the process, have little to no impact, and tend toward ritual as opposed to substance (Ramirez et al., 2010). Less than 1% of teachers nationally received an unsatisfactory evaluation (Weisberg et al., 2009). Teachers have no plan for growth, and no target for professional development. The purpose of evaluation tools are called into question when it is assumed that they hold little meaning or weight for any of the stakeholders. It is important that teacher evaluation tools reflect the work that highly effective teachers do in the classroom. In this way, they can promote teacher development and mentoring in structured ways that are supported by current research.

Summary

The definition of a highly effective teacher is comprised of many elements. Evidence indicates that Pedagogical Content Knowledge, Classroom Management and Teacher Behavioral Modalities are critical pieces in defining what a highly effective teacher does. While a great deal of research has been conducted in the areas of Classroom Management and new research is emerging in the area of Pedagogical Content Knowledge, the area of Teacher Behavioral Modalities has received relatively little attention. Its importance, however, cannot be downplayed.

Teacher Behavioral Modalities promote positive behavior, on-task behavior, and pro-social skills. Students feel more confident in the classroom, and thus more

motivated to try their best. Families are more engaged and involved in the school and learning process. Students respect each other and the teacher. Teacher Behavioral Modalities promote student and family behaviors and interactions that promote increased learning and academic success. Including them in teacher evaluations would help promote these behaviors in the school and the universities. Teacher Behavioral Modalities are a valuable element of student success, and should be evaluated as such.

It is evident that current systems of evaluation lack a critical standard that is an essential element of highly effective teaching. Teacher Behavioral Modalities must be included in teacher assessments to aid in development and mentoring of highly effective teachers. Teacher Behavioral Modalities are necessary to promote students' successes, be they social, academic, or moral.

CHAPTER III

METHODOLOGY

This study began as a conversation I had with several other administrators and teachers regarding merit pay and teacher evaluations. I originally felt that merit pay, and pay for the most highly effective teachers was a good way to start to look at teacher compensation. However, when I began to look more deeply at how a ‘highly effective teacher’ was defined, I started to have doubts about this idea. There was no clear goal for teachers, no prescription for what was ‘highly effective’ or how to become more ‘highly effective.’ Some research had been done in this area, but very little had been done to look at all of the qualities that highly effective teachers bring to their classroom to ensure that their students grow academically, morally and ethically.

To compound this, I discovered, through talking with other educators in a Masters in Administration class, and through my own personal experience, that many of the current systems of teacher evaluation were not evaluating (or developing) many of the qualities of highly effective teachers (Chico Unified School District, 2003; Ramirez et al., 2010; Weisberg et al., 2009). I decided I wanted to look more closely at what these qualities were, and use this research to create a template to evaluate and develop teachers based on my definition of what the most highly effective teachers do and bring to their classrooms every day.

To do this, I needed to first look at what areas current evaluation tools were assessing and which domains were being overlooked. I wanted to evaluate how the domains found to be most valuable in my literature review were represented in the current evaluations.

I found through the literature review that the areas of expertise and the skills of highly effective teachers fell into three categories, which will heretofore be termed domains. These are, as referenced in the literature review, Classroom Management, Pedagogical Content Knowledge, and Teacher Behavioral Modalities. I decided to investigate how these domains were evaluated by the current teacher evaluation practices in the Northbrook school district. More specifically, I wanted to look at a key area that had come up many times in my research, and that I had also observed in my daily teaching practice—the area I have termed Teacher Behavioral Modalities. The area of Teacher Behavioral Modalities encompasses teacher qualities that have been called traits, intangible qualities or attributes (Polk, 2006; Rinaldo et al., 2005; Schulte et al., 2004). These areas include creating a positive classroom climate through valuing each student as an individual; self-reflection; and creating a culture of caring. The domain of Teacher Behavioral Modalities is developed in great detail in the literature review in Chapter II. Teachers bring so much more to their classrooms than test scores. The area of Teacher Behavioral Modalities is being undervalued by the merit pay movement and through the current system of evaluation that de-emphasizes personal relationships and community connections in favor of high stakes test scores (Ramirez et al., 2010; Chico Country Day School, 2008). I wanted to assess how, and if, Teacher Behavioral Modalities were currently being evaluated in this school district.

I chose two tools to examine. The first is in use by the ‘Northbrook’ School District, the second utilized by a local Charter School in the same district. Both evaluation tools are based on two 30-minute pre-determined observations, performed by the administrator, with a follow-up meeting to discuss the observation. In analyzing each tool, I looked at how each domain—Classroom Management, Pedagogical Content Knowledge and Teacher Behavioral Modalities—was represented and assessed. Did one domain take precedence over another? I wanted to know how and if those standards were defined, and what opportunities for development and enrichment were made available to teachers who wanted to improve their practice. To do this analysis, I used the system of open coding as defined through the process of constant comparative analysis, defined as “the process of selecting the core category and systematically relating it to other categories, and validating those relationships” (Strauss & Corbin, 1990, p. 116.) In analyzing the two current tools that evaluate teacher performance, I found the representation of the three domains to be unequal, and even lacking. In the first tool, which can be found in Appendix C, there are five headings. These are:

1. Engaging and Supporting Students in Learning.
2. Creating and Maintaining Effective Environments for Student Learning.
3. Understanding and Organizing Subject Matter for Student Learning.
4. Planning Instruction and Designing Learning Experiences for Students.
5. Assessing Student Learning.

Of these headings, the last four of the five are concerned mainly with the areas of Classroom Management and Pedagogical Content Knowledge.

Under each of the five headings on this evaluation tool is a checklist of items that the evaluator is asked to rank. For example, one of the items is: “establishing and maintaining standards for student behavior.” The evaluator is asked to rank these from 1-4, with 1 being a rating of “practice not consistent with minimum standards,” and 4 being “practice distinguished—exceeds standards.” The standards were not listed on the evaluation form or packet. There was also no area where a teacher could create a development plan to improve or enhance their skills in one or more of these areas.

Within this evaluation tool, what I am calling the Classroom Management domain is assessed under the heading of “Creating and Maintaining Effective Environments for Student Learning.” Pedagogical Content Knowledge is assessed under the heading “Understanding and Organizing Subject Matter for Student Learning.” Both domains are assessed when the evaluator looks at how instruction is planned (4) and learning is assessed (5). Each heading contains 5-6 subsets of one phrase each, describing in greater detail the desired teacher behavior in each area. An example of these subsets are these statements: “creating a physical environment that engages students”, and developing student understanding through instructional strategies that are appropriate to the subject matter” (Chico Unified School District, 2003).

The first heading “Engaging and Supporting Students in Learning” is the only one that touches on the domain of Teacher Behavioral Modalities. Within that category, just one phrase in the five-phrase subset approaches the domain of Teacher Behavioral Modalities. The evaluation form asks for a rating of how each teacher “connect(s) students’ prior knowledge, life experience, and interests with learning goals.” I felt that

stating this crucial element of teaching as an item to be ranked was an ineffective and summative method of assessment.

Missing elements in the domain of Teacher Behavioral Modalities include how the teacher has formed connections with the students and the students' families, and how the teacher honors the background of each student. Also absent from the form is how the teacher has formed connections with colleagues and created opportunities for collaboration. Another important area that is absent from this evaluation is how the teacher has demonstrated that he/she believes in each student, that they are each worthy and capable. These attributes from the domain of Teacher Behavioral Modalities are just a few that could be added to this tool to make it a more comprehensive evaluation of each teacher.

The second evaluation tool, which can be found in Appendix D, is used in the Northbrook district as well, at a Charter School. This tool is also in the form of a rating scale. There are three ratings: Meets Standards, Progress Evident and Progress Not Evident. There is again no listing of the expected 'standard.' There are again five headings:

1. Pupil Progress Towards Standards of Expected Achievement.
2. Establishment and Maintenance of Suitable Learning Environment.
3. Adherence to Curricular Objectives.
4. Instructional Techniques and Strategies.
5. Performance of Non-Instructional Duties and Responsibilities.

Of these headings, all of the areas concentrate on the domains of Classroom Management and Pedagogical Content Knowledge. The checklist has broadly stated

expectations in these domains. An example is: “The teacher is in command of his/her subject(s), understands the relevant information and central organizing concepts when planning short and long-term objectives” (Chico Unified School District, 2003). This assesses the teacher’s broad content knowledge, as does the category “uses appropriate instructional strategies.” The areas are general, however, and again lack an area or ideas for teachers to develop a plan for growth or enrichment.

One statement in this tool falls within the domain of Teacher Behavioral Modalities and it is “Works collaboratively with others to improve teaching/learning for all students.” Again, this statement lacks an area to show how the teacher accomplished this, or how it could be accomplished. There is no stated standard for teachers to meet or strive towards and no place for teachers to show or track their growth or development.

I found that both of the tools lack concrete examples for improvement in each domain, and examples of ways teachers could develop or demonstrate efforts in these areas. The use of a rating scale precludes this input. In addition, the standards teachers were striving to achieve were not stated anywhere in the assessment. Notably, both of the tools are also gravely lacking in evaluating the domain of Teacher Behavioral Modalities. I decided to use this information to develop a more purposeful, comprehension evaluation and development tool that will benefit teachers and the students they teacher. The purpose of this project is to create a template supporting the current evaluation tools that includes this very important domain.

My goal is that in creating a template for evaluating teachers in the area of Teacher Behavioral Modalities this will establish a model for growth and development of all teachers, while honoring the personal commitment and professional value systems I

have found highly effective teachers to hold (Duncan-Andrade, 2009; Farr et al., 2010; Goe et al., 2007; Haberman, 1995).

Phases

The design of my Evaluation and Development Tool had several phases. I began with a review of the literature, to help more clearly determine and categorize the many qualities that have been used to define the most highly effective teachers. From this I developed my Conceptual Framework (see below), which I used to design my Survey Questions (see Appendix A).

Following the Survey, I interviewed six teachers and three administrators using questions based on the survey responses. The interview questions can be found in Appendix B. The persons I selected to interview represented respondents from each school organization that I surveyed. I interviewed one administrator from each charter or district and two teachers from each school organization. This choice represents the total number of administrators who agreed to be interviewed, and a selection of a newer and a more experienced teacher from each school system.

I then used this information to create the criteria for my Evaluation and Development Tool. I used the *core categories of highly effective teachers* I found through my Conceptual Framework as a basis for the Evaluation and Development Template. I then solicited input from the three administrators and two teachers regarding the Evaluation and Development Template. Their suggestions are noted in the Results.

Conceptual Framework

My conceptual framework is based on the Venn diagram that displays each of the different domains studied: Pedagogical Content Knowledge, Classroom Management, and Teacher Behavior Modalities.

To create this Venn diagram, I first listed the all of characteristics I had found through my research in the Literature Review under each corresponding domain. I found that several of the characteristics overlapped. For example, Pedagogical Content Knowledge and Teacher Behavioral Modalities share the value of awareness of culture and community (Ladson-Billings, 1989), in that teachers are aware of how content is understood by children in different communities and from different backgrounds, and so they can design appropriate curriculum and instructional strategies for their students so the needs of all students are valued and deemed worthwhile.

I created the Venn diagram (Figure 1) to illustrate more clearly the degree to which each area intersected. At the center, I found three categories that intersected all three domains (Pedagogical Content Knowledge, Classroom Management, and Teacher Behavioral Modalities). This area is in red print. These categories are:

- ❑ Knowledge of Students, or knowing and understanding the unique qualities and backgrounds of each student so that appropriate curriculum and instructional strategies can be designed and utilized, and so individual student needs can be considered in the arrangement of the classroom. This attribute is also important to understand the choices students make, both socially and academically; and to effectively employ the use of diagnostic teaching, both behaviorally and in terms of content and lesson planning and pacing.

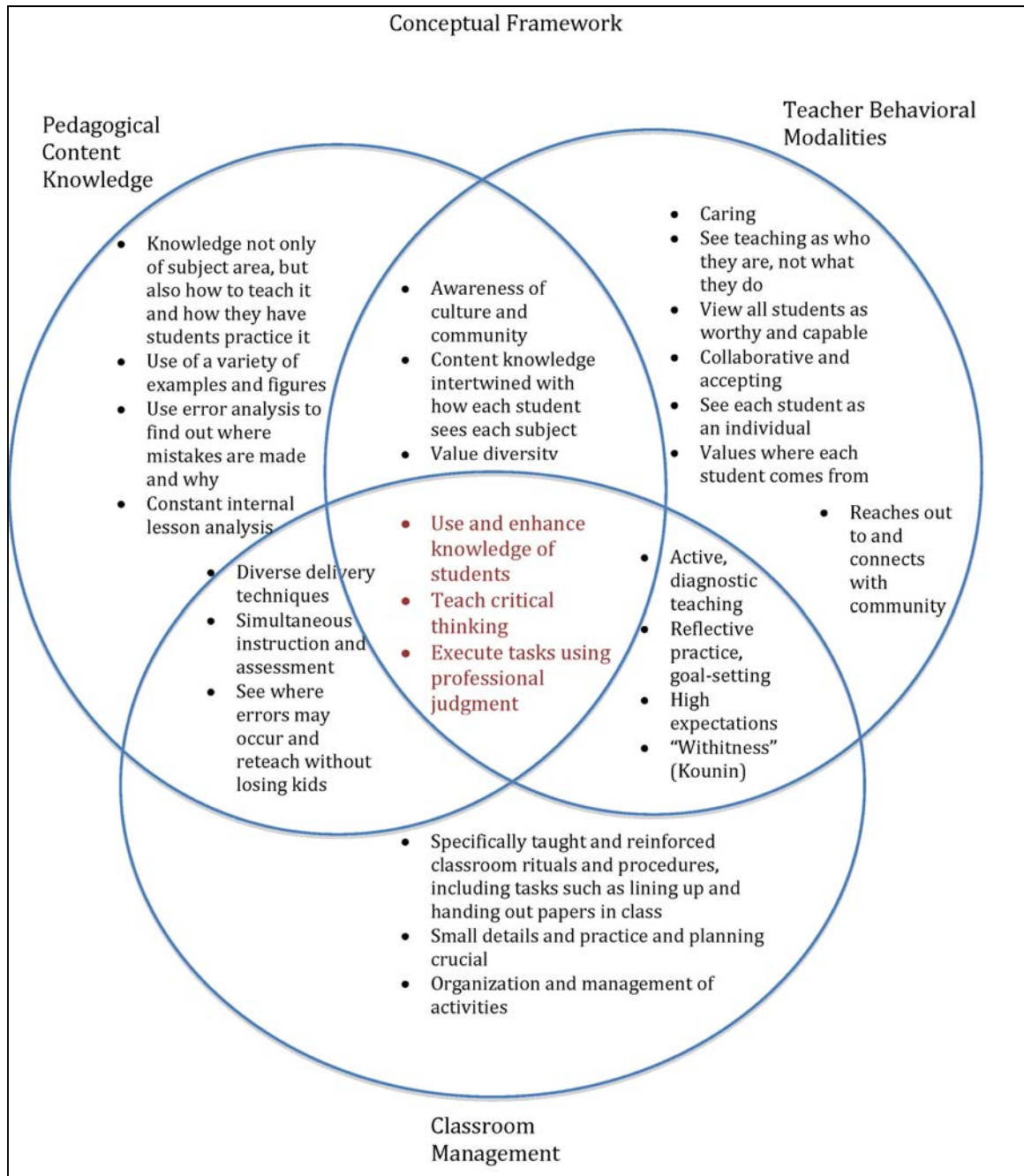


Figure 1. Venn diagram.

❑ Critical Thinking, or how teachers think about teaching and learning, the student's inclusion in learning, and the effect of what is taught has on students and others.

□ The Use of Professional Judgment, meaning that teachers are professionals who form decisions in the best interests of their students, setting professional goals, using reflective practice, and getting to know each student as an individual. Teachers use professional judgment to create and maintain high expectations, and make analytical decisions involving lesson pacing, error analysis, and constant self-analysis. These central themes, found in the center of the Venn diagram became what I have termed the *core categories of highly effective teachers*.

Each of these categories is influenced in different ways by the three domains of Classroom Management, Pedagogical Content Knowledge, and Teacher Behavioral Modalities. Because of this, the expression of these categories can vary depending on from which domain (or domains) they are being derived. To more clearly illustrate this, I created a series of teacher quality statements that highlight the integration of the core categories and each domain, based on the findings from the literature review (Figure 2).

An example of how different domains integrate with each category is evidenced by how the statement “awareness of how the content is understood by children from different backgrounds” illustrates how Pedagogical Content Knowledge can inform the attribute of Critical Thinking, while “maintaining climate of respect and trust” illustrates this using the perspective of Classroom Management. The domain of Teacher Behavioral Modalities illustrates this attribute through the statement “collaborates to access a variety of perspectives.”

Knowledge of Students:

Pedagogical Content Knowledge:

- Recognizes how students learn different concepts differently
- Is able to modify instruction when appropriate
- Presents content that is engaging for students

Classroom Management:

- Arranges the classroom to accommodate student needs
- Ability to keep students on task maximized by pacing

Teacher Behavioral Modalities:

- Sees all as worthy and capable individuals
- Values the background experience of students
- Communicates with families

Teach Critical Thinking:

Pedagogical Content Knowledge:

- Awareness of how students are socialized to learn particular content
- Awareness of how the content is understood by children from different backgrounds

Classroom Management:

- Maintaining climate of respect and trust
- Development of classroom rituals

Teacher Behavioral Modalities:

- Collaborates to access a variety of perspectives
- Empowers students to ask their own questions

Execute Tasks Using Professional Judgment:

Pedagogical Content Knowledge:

- Uses most effective strategies for particular content areas
- Simultaneously instructs and assesses instruction

Classroom Management:

- Designs effective classroom procedures
- Attention to detail and pursuit of best practices

Teacher Behavioral Modalities:

- Allows knowledge of student to inform decisions
- Uses reflective practices in daily practice and to set long term goals

Figure 2. Teacher quality statements.

Survey Design

I looked closely at how each domain specifically contributed to each core category and used this information to design my survey questions. For example, one

category was Knowledge of Students. I examined the intersection of Pedagogical Content Knowledge, Classroom Management, and Teacher Behavioral Modalities and how they each contributed to this category. In this way, each survey question was asking about a specific category and domain. For example: “Arranges the classroom to accommodate student needs” is specific to the domain of Classroom Management, within the category of Knowledge of Students; while “Sees all students as worthy and capable individuals” is specific to the domain of Teacher Behavioral Modalities, again within the category of Knowledge of Students. Another example using a different category is the following: “Empowers students to ask their own questions” is specific to the domain of Teacher Behavioral Modalities, under the category of Critical Thinking; while “Awareness of how content is understood by children from different backgrounds” is specific to the domain of Pedagogical Content Knowledge, again under the category of Critical Thinking.

The key question I had when designing the survey was the degree to which the area of Teacher Behavioral Modalities is respected and appreciated by teachers, administrators and university professors who instruct new teachers. In current teacher evaluation tools, this domain is not overtly assessed, and is thus not deemed to be as valued as the other areas (Chico Country Day School, 2008; Weisberg et al., 2009). It is evident that this area represents an important element of what highly effective teachers do. To represent it as such in an evaluation and development tool would emphasize how important it is to student’s academic and moral growth. The template I create will give examples of how to evaluate Teacher Behavioral Modalities in each of the core attributes of Knowledge of Students, Critical Thinking, and the Use of Professional Judgment.

It is crucial to pinpoint and develop the qualities, behaviors and habits of highly effective teachers so that all teachers can strive for this ideal. It is difficult to become more effective if one does not have a clearly defined goal or target to work towards. I decided to place statements regarding Teacher Behavioral Modalities alongside the more traditionally valued areas of Pedagogical Content Knowledge and Classroom Management. I wanted to find out what importance Teacher Behavioral Modalities would have alongside more easily observable and traditionally valued elements of highly effective teaching.

The survey consisted of seven questions. Three of the questions were Likert scale type, with a forced ranking of 5-7 items. Two of the questions asked participants to check all areas they felt were applicable. One of the questions was Yes/No/NA. One of the questions was open-ended, with an area for comments. The entire survey can be found in Appendix A.

There were two areas where respondents could make a comment in the survey. In one area, they were asked to comment regarding how they had rated several of the attributes, which were directly correlated to the domains. Also, open input was requested regarding what elements (if any) may be missing from the current evaluation tools. These evaluation instruments, which can be found in Appendix C and D, and referenced in the literature review, are based heavily in the domains of Pedagogical Content Knowledge and Classroom Management. Respondents were given space to comment up to five sentences regarding what they felt may be missing from the current evaluation tool. These comments were memoed and coded, and the information was used to design the interview questions and inform the evaluation and development template.

Survey Population

The survey was sent via email using the *Survey Monkey* online service to three different school entities in Northern California—two charter schools and the ‘Northbrook’ Unified School District--and to the education professors at one Northern California University. I chose to survey the professors because they are developing new teachers and creating programs that provided continued enrichment and growth for more experienced educators. I chose the other school entities because they are all in the same community, but each entity has a different philosophy of education, and thus the perspective on teacher effectiveness, evaluation and development may intersect or diverge.

The survey was sent out three times to each population to increase the rate of response. The final total of respondents was 66, out of a possible 644, with an acceptable response rate of 10.2%. Please see Table 1 for a respondent breakdown and Table 2 for a School Entity Breakdown. I also asked respondents to state the title that best described their employment—teacher, administrator or university professor.

Table 1

Respondent Breakdown

Job Description	Percentage of total respondents	Number of respondents
Teacher	60.6%	40
Administrator	10.6%	7
University Professor	28.8%	19

Table 2

School Entity Breakdown of Respondents

Entity	Number of Respondents
Charter School A	10
Charter School B	17
School District	21
University	17

Interview

I chose to interview nine respondents. The persons I have selected to interview represent respondents from each school organization that I surveyed. I interviewed 1 administrator from each charter or district and 2 teachers from each school entity. This choice represents the total number of administrators who agreed to be interviewed, and a selection of one newer and one more experienced teacher from each school entity. The respondents could choose to either write down their own responses to the questions, or have me take notes on their comments. Following the completion of the interviews, as mentioned, I used open and selective coding to analyze the responses. Based on this information, I developed the evaluation and development addendum, which can be found in Appendix E.

Evaluation and Development Template

This template was designed to assist school sites in developing an updated evaluation and development tool. To develop this template, I used the Teacher Quality

Statements that survey respondents had felt to be the most important for student achievement and highly effective teaching. I used the interviews to look more deeply at each of these teacher quality statements, and how they could be evaluated and developed in teachers. I then solicited input from school administrators at the two Charter schools, and from the Superintendent of Northbrook School District regarding the evaluation and development template I had created. The evaluation and development template can be found in Appendix F.

Method of Analysis

The comments were memoed and coded using the constant comparative method. Opening coding was used to compare different statements and comments respondents had made in the two comment sections on the initial online survey. Open coding has been defined as “the process of breaking down, examining and comparing data” (Strauss & Corbin, 1990, p. 61). Axial coding is “a set of procedures whereby data is put back together in new ways after open coding, by making connections between categories” and it was used to reconnect the data and create new questions based on the initial responses (Strauss & Corbin, 1990, p. 96). These questions became the interview questions. Both open and selective coding, or “the process of selecting the core category and systematically relating it to other categories, and validating those relationships” were then applied to the responses to the interview questions (Strauss, & Corbin, 1990, p. 116). The resulting data was used in the creation of the evaluation and development template.

CHAPTER IV

RESULTS

This project consisted of several phases and the results are divided into three sections. The first section is based on the responses to an anonymous online survey, which was developed and disseminated using *Survey Monkey*. These responses were used to create follow-up interview questions for a smaller, selective group of respondents. The second section discusses and analyzes the responses collected through the interviews and the key ideas gleaned from this research. The third area details the feedback received from administrators regarding the Evaluation and Development Template.

Online Survey

The survey was sent out online, using *Survey Monkey*, to the teachers and administrators at two charter schools and one entire school district in Northern California. It was also sent out to professors of education at a Northern California university. It consisted of ten questions.

The respondents to the online survey represented approximately 10% of the entire survey pool. Although 10% is not a large percentage, 66 respondents represents a significant number of responses. Of the 66 individuals who completed the survey, 40 were classroom teachers, seven school administrators and 19 university professors in the field of teacher education.

The first survey question asked: “What teacher attributes or qualities contribute to student success? Rank from most to least important.” Respondents were instructed to force rank the qualities from 1, being the most important to 7, being the least important. Teacher quality statements, from each of the three domains, Classroom Management, Pedagogical Content Knowledge, and Teacher Behavioral Modalities, were placed in random order. Those surveyed marked the two areas representative of Classroom Management to be of least importance. These teacher quality statements were: “arranges the classroom to accommodate student needs” and “ability to keep students on task.” The teacher quality statements which respondents perceived to be of greatest importance were “presents content that is engaging to students” (from the domain of Pedagogical Content Knowledge) and “recognizes how students learn concepts differently” (from the domain of Teacher Behavioral Modalities). Other teacher quality statements that respondents graded as very important, with a ranking of either a 1 or a 2, were “empowers students to ask their own questions” (from the domain of Teacher Behavioral Modalities) and “the ability to modify throughout a lesson” (from the domain of Pedagogical Content Knowledge).

The next question in the online survey asked: “Which of these teacher attributes enhances academic success? Check all that apply.” There was no forced ranking, and respondents could choose all of the qualities if they wished. The survey provided six teacher quality statements representing only the domain of Teacher Behavioral Modalities.

The purpose of this question was to find out if respondents saw value in the domain of Teacher Behavioral Modalities, as it pertains to students’ academic success. It

is evident that they do. Table 3 illustrates the questions and the percentage of those responding who felt that each of these qualities is important to a students' success.

Table 3

Attributes from the Domain of Teacher Behavioral Modalities Respondents Feel Are Valuable to a Student's Success

Teacher attributes deemed important to a student's success	Percentage	Number of respondents
View all students as worthy and capable individuals	98.4%	61
Values the background experience of students	85.5%	53
Communicates with families	93.5%	58
Collaborates with other teachers to access a variety of perspectives	90.3%	56
Empowers students to ask their own questions	90.3%	56
Allows knowledge of students to inform decisions	87.1%	54

The next question used the same teacher quality statements, but asked a different question. Respondents were asked to use a rating scale of “not at all, somewhat important, important, very important,” to determine which attributes were most important for a highly effective teacher. Of the respondents, 86.9% felt that “views all students as worthy and capable” was very important to highly effective teaching. Least important were “communicates with families” and “collaborates with other teachers to access a variety of perspectives.” These results are interesting because, while the same quality

statements were used in both questions, the amount of importance varied a great deal. Of the respondents, 93.5% felt that “communicates with families” was of great importance to a student’s academic success, but only 52.5% felt that it was very important to highly effective teaching.

The following question added a new layer to the responses. It asked: “When evaluating a teacher, which of the following do you feel is the most important in determining a high level of teacher effectiveness? Rank from 1-6, with one being the most important and six being the least important.” This question was force ranked and respondents were also given room to leave comments, either to elaborate on their response or to add an idea of their own. Interestingly, the teacher quality statement that was ranked number one was also ranked number four by nearly the same number of people; “Simultaneous instruction and assessment of their teaching” (from the domain of Pedagogical Content Knowledge) was ranked number one by 21.4% of respondents and number four by 25 % of respondents. This divide about its importance may indicate that wording of the question was confusing. The other reason may be that there are polarizing feelings about the relevance of this quality.

The same split occurred with the statement “valuing and including the background experience of students” (from the domain of Teacher Behavioral Modalities)—40.3% ranked it in the top two, and 42.1% ranked it in the bottom two ratings of importance. Clearly, respondents feel very strongly one way or the other about the significance of this quality.

The importance of other teacher quality statements was more apparent. Respondents felt that “forms decisions based on the best interests of their students” (from

the domain of Teacher Behavioral Modalities) was the most important element, with 40.8% placing it in their top two. Very surprisingly, the area of least importance, as ranked by the respondents, was “ability to keep students on task”(from the domain of Classroom Management), with 50.9% placing it in their bottom two, and 39.6% ranking it as the least important element when determining a teacher’s effectiveness.

The comments section helped to clarify some of the rankings in this question. Twelve comments were made in total. Of these, 42% stated that they were reticent to rank because they felt all of the categories were of high value. The same amount, 42%, stated that all of the areas were intertwined and could not accurately be separated when teaching or assessing teaching. One comment stated, “They should all be number one.” These comments underscore the survey participants’ beliefs in the importance of all three domains—Classroom Management, Teacher Behavioral Modalities and Pedagogical Content Knowledge.

Another area many respondents commented upon was a teacher’s ability to keep students on task. These comments helped to clarify the rankings found above. These respondents, 33% of those who made comments, felt that being on task was of low value because it becomes moot if the lesson is good. One person commented that “a good lesson=good kids.” Other comments added elements that were not part of the survey. One respondent wrote that a teacher’s adaptability was crucial to teacher effectiveness. This same individual felt that highly effective teaching was very difficult to quantify as it included so many elements.

The next question was a yes, no or not applicable response question. The survey asked: “Do you feel the current teacher evaluation tool assesses all areas

effectively?” Of respondents, 58.3% said no, 26.7% said yes, and 15% felt this statement was not applicable. The reason the box “not applicable” was included was because the survey was sent to university professors who may not be familiar with the tool. The responses to this question show that more than half of the respondents feel the current evaluation tool does not assess all areas of teacher quality effectively. Interestingly, administrators were split on this question, with 50% stating they felt it was effective and 50% stating that it was not.

The next question asked respondents to check teacher quality statements they felt should be added to the current evaluation tool. The reason this was included was to find out which areas respondents felt were important enough to include. The two that respondents felt most strongly about were “views all students as worthy and capable” and “collaborates with staff and school community to access a variety of perspectives.” These responses were interesting because collaboration had not received the highest ranking in any of the other survey questions. A teacher’s view of a student had received high rankings in previous questions, so this was clearly an area that respondents felt strongly and consistently to be very important to student achievement and highly effective teaching. One of the variables that may have caused these inconsistent rankings is respondent concern over how these elements could be assessed or evaluated.

The final question of the survey asked the open-ended question “what teacher attributes of highly effective teachers do you feel are missing from the current evaluation tool?” This question’s wording could have been improved so that it did not lead respondents to answer in one way or another. Nonetheless, there were 25 comments

directed towards this question in this section. After analyzing and coding these responses, there were several trends:

- ❑ Twelve percent felt that a teacher's ability to engage students and teach to different learning styles should be included.
- ❑ Twelve percent stated that involving families in their children's learning and communicating with parents was important.
- ❑ Twelve percent felt that not only a teacher's attributes were important, but that the method of evaluation should be different. These respondents felt that evaluators should come into their classrooms more frequently, unannounced, rather than once or twice a year for a scheduled visit.
- ❑ Twelve percent felt that valuing all of the families at the school was important.
- ❑ Twelve percent stated that the attributes listed in the survey should be included in the evaluation tool.

Other qualities of a highly effective teacher that respondents felt were important to include in an evaluation tool were: teach students to ask their own questions, teacher intellect, and a teacher's positive energy.

Summary

Constant comparative analysis was used to analyze the survey responses. In using this coding and analysis, several key areas became evident. Most importantly, the majority of respondents felt that the current evaluation tool was not adequate in assessing highly effective teachers. The results of the survey indicate that there are several areas

that could be added to the current tool to create a more focused evaluation and a target for teachers to aim towards. Respondents indicated overwhelmingly that all three domains have great value for student academic success and highly effective teaching.

Interestingly, the key elements respondents feel are missing from the current tool are from the domain of Teacher Behavioral Modalities.

Key Areas

Respondents had different feelings and expectations depending on the purpose of the teacher quality statement. For example, when asked what attributes contributed to student academic achievement, respondents felt that “presents content that is engaging to students” (from the domain of Pedagogical Content Knowledge) and “recognizes how students learn concepts differently” (from the domain of Teacher Behavioral Modalities) where the most important factors.

When asked which attributes contributed most to determining a teacher’s level of effectiveness, “valuing and including the background experience of students” (from the domain of Teacher Behavioral Modalities) and “simultaneous instruction and assessment” (from the domain of Pedagogical Content Knowledge) were ranked as most important. Most fascinating were which elements respondents felt were most necessary to include in the current teacher evaluation tool. These were different again, as “views all students as worthy and capable” (from the domain of Teacher Behavioral Modalities) and “collaborates with staff and school community to access a variety of perspectives” (from the domain of Teacher Behavioral Modalities) were selected by the greatest percentage of respondents.

Although the responses varied, it is clear that the area of Teacher Behavioral Modalities is one of great significance. Respondents chose teacher quality statements from this domain overwhelmingly in each question. I decided to find out more about this through a series of interviews. I wanted to address some questions I had, based on the survey results, and the comments sections within the survey.

As my end goal was to create an evaluation and development tool, I wanted to ensure that my interview questions kept this end result in focus. I thus chose to:

1. First look at how to evaluate and develop certain key areas that respondents had indicated were of high importance, such as teacher and community collaboration and showing students that they are worthy and capable.
2. Inquire as to why the prevailing domain of Classroom Management had been valued less by the survey group.
3. To address another element of evaluation that had been discussed in the comments area—how evaluations have been traditionally conducted.

Interviews

Interviews were conducted with nine respondents, who had left their name and email address and agreed to be contacted for an interview. I selected one administrator from each of the three school entities and two teachers from each school entity. I used constant comparative analysis to code and analyze their responses. The interview questions can be found in Appendix B.

The first question asked interviewees to explain how collaboration and communication with families and with other teachers might be evaluated. Of those interviewed, 29% felt that it was very difficult to collaborate with parents and that they

had tried and had varying success. Lists and examples were offered by 43% regarding how both of these activities could be accomplished successfully. A third of interviewees stated that collaboration was very subtle, and teachers could find out how very they were collaborating by how well they knew their students and what the parents told their supervisors or themselves in meetings.

Of greatest import in these responses were the specific ideas the interviewees discussed that described how to accomplish the goal of collaboration. In terms of parent and family collaboration, key techniques espoused included:

1. Parent newsletters and parent class meetings.
2. Keeping a record or log of parent contacts or attempts.
3. Whole school 'education' nights.
4. Brainstorming with teaching staff to develop an extensive **site-based** list of examples of ways to collaborate with families. From this list develop levels for each individual teacher to aim towards.
5. Evidence that the collaborative idea or activity was being used by the teachers involved.
6. Self-reflection regarding this piece to decide how well it was accomplished and what next steps to take, or how to move to the next level.

In terms of teacher collaboration, these approaches were suggested:

1. A measuring stick for collaboration developed by teachers at that site.
2. Brainstorm different levels of collaborative work—both in grade level and cross-grade level partner ships. Decide together what types of collaborative work can be done, with examples.

3. Small group presentations to the whole staff in 'expert' groups.
4. Identify key leaders to maintain vertical and horizontal communications among faculty.
5. Self-reflection and personal goal setting.

The ideas suggested are very rich and would involve staff commitment and buy-in. Many of the concepts develop and enhance staff collaboration even as the activity is performed. What is clear from the variety and depth of these responses is that if a school has a strong belief in the value of this idea, it can be accomplished.

The second question asked how teachers can show students that they are valuable, worthy and capable, and how an administrator might evaluate this skill. All but one respondent felt this was of great importance, generating a response to this question that was larger and more comprehensive than the responses to the other questions in the interview.

Since the response was so voluminous it was interesting that one interviewee felt that showing each student they were of value "didn't matter." This individual felt that "value doesn't matter—equal expectations do." The other respondents felt differently. Their strong convictions in this area are evident in the following list of ideas of how to demonstrate to students that they and their backgrounds are valued:

1. Thirty-three percent of respondents mentioned student of the week.
2. Fifty percent of respondents discussed lessons representative of cultural diversity and the varying student groups in the class. Ideas included: art projects, including a family crest; literature pieces with cultural significance; parent participation in curriculum; poetry and creative writing projects highlighting feelings, traditions and

memories in students' lives or their family background; and community circles or town hall meetings.

3. Fourteen percent—celebration of multi-cultural holidays.

4. Thirty-three percent mentioned personalized questions, and short, individual, caring interactions, in addition to non-contingent interactions, described as “having nothing to do (specifically) with teaching or learning.”

In terms of evaluation of this teacher quality, respondents again had a multitude of suggestions:

1. Forty-three percent stated that generating a list of activities for teachers would be an important place to start. Included in the list would be community building criteria developed by the faculty, including a list of activities and events to build individual and community rapport while wrapping in content at the same time.

2. Forty-three percent felt that student feedback was important to gauge success in this area. One respondent discussed student feedback, but negatively, stating that if “one or two students or parents didn’t like you, they could ruin the evaluation.”

3. Rubrics with diversity requirements for each instructional unit, as applicable.

4. Self-reflection was again an important element, according to 29% of respondents.

Once again, the depth of the responses indicates that this is an area with many possibilities for development and evaluation. A great deal of consideration and reflection produced these valuable ideas. They could be just the beginning of a comprehensive evaluation and development tool that places at its apex student success and the development of highly effective teachers.

The third question centered on the development of critical thinking—both asking critical questions and teaching critical thinking were pieces survey respondents had indicated to be an important element to evaluate. Interviewees were asked how the teaching of critical thinking fit into the current evaluation tool and how this skill could be further developed in teachers.

Part of the question asked whether or not this was being evaluated with the current evaluation tool. Of the interviewees, 33% stated that it was not evaluated at all. High stakes testing was indicated by 50% to have made it difficult for teachers to explore the skill of critical thinking. Of the interviewees, 33% stated that within their evaluation, critical thinking was a statement with a box to check beside it. Interviewees all had strong opinions on this topic, and shared ideas to improve practice and teacher evaluation and development. These ideas included:

1. Fifty-seven percent discussed some aspect of having the students guide the learning, either through project-based learning experiences; challenging questioning techniques; open-ended questions and student directed lessons.
2. To evaluate teachers, include an assessment of students' analytical skills, administered three times per year, to show growth.
3. Training in Bloom's taxonomy.
4. Base a portion of the evaluation on how a teacher both answers and asks questions in the classroom; and how they deliver positive feedback to a student when they "think outside the box."

5. Twenty-nine percent suggested trainings where teachers participate in activities for which there is no single right answer, rather that there are many right options.

The ideas for evaluation and development of this very difficult concept were very encouraging to me. Most teachers and administrators see the value of critical thinking and questioning, and have ideas to share regarding how to act upon the current dearth of this in the evaluation and development of teachers.

Notably, however, 29% of respondents discussed how standardized testing had shifted the focus from creativity to rote learning. One person commented that “teachers don’t try to think outside of the box, because they have been told by their district to teach the state curriculum and have poor results. The few teachers who evaluate the holes in the state curriculum and support it with other research-based, effective curriculum have greater success.” This discouraging comment only underscores the need for a revamped evaluation and development tool for teachers that is based on the research done here and referenced in the literature review.

The next interview question asked about an interesting result from the survey. I noted that many respondents from the survey had rated Classroom Management behind other teacher qualities. This question asked about this finding and asked how this result may have occurred. The answers were short to this question, but succinctly reflected how people felt about the importance of Classroom Management. Of those interviewed, 29% felt that if students feel safe and the lesson is engaging and appropriate, Classroom Management is less important than other areas. The rest of those interviewed, 71%, felt that Classroom Management was just as important, if not more so, than the other areas.

The underlying reason in all of the responses is that Classroom Management is a base for all of the other areas. One cannot teach concepts in a disorganized classroom. One cannot connect individually with students and families when the classroom has no structure.

The responses to this question created these questions for me: If Classroom Management is the base, what is the next level? How are we challenging teachers to go beyond basic Classroom Management? How is the current evaluation tool helping teachers set goals, and criteria for development beyond the basic? The responses to these questions, in conjunction with the very rich responses to the other survey questions, again validated the creation of a new template for the current evaluation tools. Teachers need enrichment, goals for growth, and a plan for development to grow from the base of Classroom Management. To assume they do not is to assume they are stagnant and lacking in professional comportment.

The final interview question was based on the manner in which teachers are currently assessed. Several comments from the survey, and my own analysis of the current evaluation tool, drew me to ask how the model of a 30-minute, planned, once a year observation could be adapted or reconfigured. There was some consensus in this area amongst respondents regarding how this could occur. Of the interviewees, 86% felt that more unannounced, casual observations should take place during the year. One stated: “as a professional, I really think more observations give administration a better idea of how effective a teacher is.” Other ideas included lengthening tenure to five years, so that administrators could get a better idea of the teacher’s quality and ability to get along with peers. Peer coaching was suggested by 33% of respondents, and 43%

encouraged the development of a professional growth plan using reflection and self-evaluation.

It was clear from the responses to this question that people felt the current method of planned observations was in need of reconfiguration.

Key Findings from Interviews

Several points were clarified for me through the process of the individual interviews.

1. Not only does the content of the current evaluation tool need revamping, but the process itself needs to be reconfigured.
2. Teacher behavioral modalities are critical areas to add to the current evaluation tool.
3. It is possible, through site-based teamwork and collaboration, to develop criteria for evaluating and developing Teacher Behavioral Modalities.
4. Teacher professionalism has been stifled through high stakes testing. Teachers no longer trust themselves to make decisions in the classroom, and are thus neglecting important elements of teaching and of their own growth and development.
5. Teacher Behavioral Modalities, Pedagogical Content Knowledge and Classroom Management are all of great importance to highly effective teaching and student success.

Input Regarding Evaluation and Development Template

Input regarding the evaluation and development template was solicited from three administrators. Two have responded. The comments were positive. The template is

inspiring one to begin to use authentic assessment with the staff. The administrator made suggestions regarding how the authentic assessment could be used. Ideas included a portfolio, and presentations to the staff during faculty meetings regarding learning process and implementation. The second administrator commented that the template was “easy to understand” and should be easy for staff to utilize.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Teachers are the most important variable in a student's school day (Darling-Hammond, 1996). "No other intervention can make the difference that a knowledgeable, skillful teacher can make in the learning process" (Darling-Hammond, 1997, p. 8). But what makes a teacher great? There are no set criteria specifically delineating the qualities of a highly effective teacher. This makes it challenging for teachers and administrators to set appropriate goals for useful and valid teacher evaluations that lead the way to productive professional development.

To begin to reform teacher evaluation, it is essential to first start with a goal or a definition for highly effective teaching. My research revealed the many elements and variables that compose highly effective teaching. I found these could be organized into three different domains. Classroom Management is the traditional area of focus for teacher evaluations. This area of effective management practices is one of the most widely studied and observed (Hill et al., 2005). This domain includes lesson pacing, teacher awareness, and the use of professional judgment to assess student learning and attention (Brophy & Good, 1986; Lemov, 2010). Research continues in this area, as indeed it is viewed as the basis of highly effective teaching.

Pedagogical Content Knowledge is a second domain of highly effective teaching. This idea was first postulated by Lee Shulman (1986) and emphasizes the need for specific skills and techniques to teach specific content areas. These skills go beyond basic content knowledge and include error analysis, and the presentation of examples for students that allow for greater understanding of each concept. Empathetic reasoning is an important element in this domain, as teachers who try to understand how each particular student can learn each concept achieve greater success (Ball et al., 2007).

The third area is a domain I have termed Teacher Behavioral Modalities. This domain includes high expectations, teacher collaboration, both with the staff and community, relationship building and the view that all students are worthy and valuable (Haberman, 1995; Lemov, 2010). Students are respected as individuals and encouraged to think critically about content and its impact on their environment (Delpit, 2006). These behaviors enhance student motivation, attendance rates, and student success, both moral and academic. Students are shown that teachers really care about them (Murphy et al., 2004; Noddings, 2006).

Each of these domains intersect to create a template for highly effective teaching. Through the creation of a Venn diagram to track the interactions of each domain, three categories emerged, each with elements from the three domains. These categories are: Knowledge of Students, Teaching Critical Thinking and the Use of Professional Judgment. Using these categories and the three domains, I created a survey to attempt to discover how administrators, teachers and university professors viewed the relevancy of each domain, and whether all three domains should be included in an

evaluation and development tool. The categories are important because they provide the structure and rationale behind the teacher quality statements in each domain.

Overwhelmingly, the survey and interview results indicated that all three domains are integral parts of highly effective teaching and should be included in an evaluation and development tool. While some had reservations regarding how this could be accomplished, the interview questions produced data in this area that is inspiring. A plethora of ideas for evaluation of teacher progress in each domain was produced, as were a multitude of ideas for teachers to improve in these areas within their classroom. These ideas can be found in Appendix E and F.

What began as a debate regarding merit pay evolved into an investigation into highly effective teaching. I discovered there are no easy answers when describing the work highly effective teachers do. I also discovered that it is essential that we try to create a template for this. A template that will serve several functions: to guide teachers and administrators in evaluation and development that move all teachers towards the ideal of ‘highly effective’; to inform the public that teaching is a profession, where individuals are called upon to use critical thinking and professional expertise to plan, form decisions, and collaborate with peers and the community; to guide further research in the area of highly effective teaching, so the template remains relevant as new ideas emerge; and to guide the education and development of pre-service teachers, so they enter the field better prepared to meet the exciting new challenges teaching will present.

The current evaluation tool de-professionalizes teaching—it makes it into a rote activity that requires few decisions or professional training. The formation of a tool that both assesses and develops the skills teachers need and use to create students who are

successful academically, morally and ethically is crucial to inspiring teachers to remain passionate and driven.

I would recommend that school staffs and school sites that are willing should start to work on developing an evaluation and development tool based on the template I have created, the research cited in the literature review, and in the survey and interview results. Research in this area continues to evolve with new developments in all three domains. It is important to start envisioning new, more comprehensive teacher evaluation and development tools that are based on this current research so that as it moves forward the evaluative tool can as well. There are many new pieces of research within these domains that would greatly enhance teacher practice.

This project is the first step in overhauling the entire evaluation and development tool. Still required are ways to pursue professional development and personal growth in essential areas of highly effective teaching. I would like to see a tool designed that more clearly delineates each domain described in the literature review and provides a clear structure with specific teacher quality statements, which include levels of proficiency and specific, site-based examples of how to perform within each domain. This process, being site-based, would engage teachers in the process of developing a document that is relevant to their practice. The survey and interview indicated that teachers and administrators have a wealth of ideas to share regarding best practices in all three domains.

In embarking on a project of this type, it is crucial to have not only a large survey or the teaching population but more personal, intensive interviews as well. The information gleaned from these two areas guided the creation of the evaluation and

development addendum, as well as highlighting the very real need for a completely updated evaluation and development tool.

The research that continues into each of the three critical domains of Pedagogical Content Knowledge, Classroom Management and Teacher Behavioral Modalities is also of vital importance. It is key to understand how these domains intersect so they can be accurately represented in a final evaluation and development tool. The categories of Critical Thinking, Knowledge of Students, and Use of Professional Judgment are important areas to consider when designing an evaluation and development tool. The use of the Venn diagram and corresponding Teacher Quality Statements I created would be a helpful tool to school sites hoping to begin work in this area.

I am very hopeful and inspired by what I learned particularly through the process of interviews. Teachers see value in how they teach and they value themselves and their abilities. When teachers use their professional skills to instruct, modify, listen, empower and *teach*—students soar—and so do the teachers.

REFERENCES

REFERENCES

- Allday, R. A. (2006). Prisoner perceptions of effective teacher behavior. *Education and treatment of children, 29*(4), 729-748.
- Archambault, R. (Ed.). (1964). *John Dewey on education*. Chicago, IL: University of Chicago Press.
- Ball, D. L. (2000). Bridging practices: Intertwining content and pedagogy in teaching and learning to teach. *Journal of Teacher Education, 51*(3), 241-247.
- Ball, D. L., Thames, M. H., & Phelps, G. (2007). Content knowledge for teaching: What makes it special? *Journal of Teacher Education, 59*(5), 389-407.
- Brophy, J. (1974). Teaching young children effectively. *Journal of Classroom Interaction, 9*(2), 3-8.
- Brophy, J. (1988). Research linking teacher behavior to student achievement: Potential implications for instruction of chapter 1 students. *Educational Psychologist, 23*(3), 235-286.
- Brophy, J., & Good, T. L. (1986). Teacher behavior and student achievement. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 328–375). New York, NY: Macmillan Publishing.
- Chico Country Day School. (2008). *Certificated assessment*. Chico, CA: Author.
- Chico Unified School District. (2003). *Certificated teacher observation/evaluation form*. Chico, CA: Author.

City, E., Elmore, R., Firaman, S., & Teitel, L. (2009). *Instructional rounds in education:*

A network approach to improving teaching and learning. Cambridge, MA:

Harvard Education Press.

Coffey, H. (n.d.). *Socratic method*. Retrieved from

<http://www.learnnc.org/lp/pages/4994?ref=search>

Darling-Hammond, L. (1996). The quiet revolution: Rethinking teacher development.

Educational Leadership, 53(6), 4–10.

Darling-Hammond, L. (1997). *Doing what matters most: Investing in quality teaching.*

Kutztown, PA: The National Commission on Teaching and America's Future.

Darling-Hammond, L. (1999). *Teacher quality and student achievement: A review of*

state policy evidence. Seattle, WA: Center for the Study of Teaching and

Policy, University of Washington.

Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary*

programs. San Francisco, CA: Jossey Bass.

Delpit, L. (2006). Lessons from teachers. *Journal of Teacher Education*, 57(3), 220- 231.

Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of*

education. New York, NY: Macmillan Co.

Duncan-Andrade, J. (2007). Ganstas, wankstas, and ridas: Defining, developing, and

supporting effective teachers in urban school. *International Journal of*

Qualitative Studies in Education, (20)6, 617-638.

Dwornik, I. A. (2003). A comparison of educational theory: Alfred Adler and John

Dewey. *The Journal of Individual Psychology*, 59(1), 52.

- Eliot, T. S. (1950) *Modern education and the classics in selected essays, new edition*. New York, NY: Harcourt Brace. (Original work published 1932)
- Farr, S., Kamras, J., & Kopp, W. (2010). *Teaching as leadership: The highly effective teacher's guide to closing the achievement gap*. San Francisco, CA: Jossey Bass.
- Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2010) *Supervision and instructional leadership: A developmental approach*. San Francisco, CA: Pearson.
- Goe, L., Bell, C., & Little, O. (2008). *Approaches to evaluating teacher effectiveness: A research synthesis*. Washington, DC: National Comprehensive Center for Teacher Quality.
- Goodlad, J. (2004). Democracy, schools and the agenda. *Kappa Delta Phi Record*, 41(1), 17-20.
- Haberman, M. (1995). *Star teachers of children in poverty*. West Lafayette, IN: Kappa Delta Pi.
- Haberman, M. (2004). Can star teachers create learning communities? *Schools as Learning Communities*, 61(8), 52-56.
- Hanushek, E. A., & Rivkin, S. G. (2010). *Using value-added measures of teacher quality (CALDER Policy Brief 9)*. Washington, DC: National Center for Analysis of Longitudinal Data in Education Research.
- Hill, H. C., Rowan, B., & Ball, D. L. (2005). Effects of teachers' mathematical knowledge for teaching on student achievement. *American Educational Research Journal*, 42(2), 371-406.

- Hill, H. C., Ball, D. L., & Schilling, S. G. (2008). Unpacking pedagogical content knowledge: Conceptualizing and measuring teachers' topic-specific knowledge of students. *Journal for Research in Mathematics Education*, 39(4), 372-400.
- Irving, O., & Martin, J. (1982). Withitness: The confusing variable. *American Educational Research Journal*, 19(2), 313-319.
- Kupermintz, H. (2003). Teacher effects and teacher effectiveness: A validity investigation of the Tennessee value added assessment system. *Educational Evaluation and Policy Analysis*, 25(3), 287-298.
- Ladson-Billings, G. (1989, May). *A tale of two teachers: Exemplars of successful pedagogy for black students*. Paper presented at the Educational Equality Project Colloquium. New York, New York.
- Lemov, D. (2010). *Teach like a champion: 49 techniques that put students on the path to college*. San Francisco, CA: Jossey-Bass.
- Lohrmann, S., & Talerico, J. (2004). Anchor the boat: A classwide intervention to reduce problem behavior. *Journal of Positive Behavior Interventions*, 6(2), 113-120.
- Mashburn, A. J., Pianta, R., Hamre, B. K., Downer, J. T., Barbarin, O., Bryant, D., . . . Howes, C. (2008). Measures of classroom quality in pre-Kindergarten and children's development of academic, language and social skills. *Child Development*, 79, 732-749.
- Mowrer-Reynolds, E. (2008) Preservice teacher perceptions of teacher effectiveness. *College Student Journal*, 42(1), 214-224.

- Murphy, P. K., Delli, L. M., & Edwards, M. N. (2004). The good teacher and good teaching: Comparing beliefs of second-grade students, preservice teachers and inservice teachers. *The Journal of Experimental Education*, 72(2), 69-92
- Noddings, N. (2006). Educational leaders as caring teachers. *School leadership and management*, 26(4), 339-345.
- Palmer, P. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life*. San Francisco, CA: Jossey-Bass.
- Polk, J. A. (2006). Traits of effective teachers. *Arts Education Policy Review*, 107(4), 23-29.
- Ramirez, A., Lamphere, M, Smith, J., Brown, S., & Pierceall-Herman, J. (2010, May). *Teacher evaluation in Colorado: A study of policy and practice in Colorado*. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Rinaldo, V. J., Denig, S. J., Sheeran, T. J., Cramer-Benjamin, R., Vermette, P. J., Foote, C. J., & Smith, R. M. (2005). Developing the intangible qualities of good teacher: A self-study. *Education*, 130(1), 42-52.
- Rosenfeld, M., & Rosenfeld, S. (2008) Developing effective teacher beliefs about learners: The role of sensitizing teachers to individual learning differences. *Educational Psychology*, (28)3, 245-272.
- Schulte, L., Edick, N., Edwards, S., & Mackiel, D. (2004). *The development and validation of the teacher disposition index*. *Essays in Education*, 12. Omaha, NE: University of Nebraska at Omaha.

- Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-145.
- Shulman, L. S. (2000). Teacher development: roles of domain expertise and pedagogical knowledge. *Journal of Applied Developmental Psychology* 21(1), 129-135.
- Springer, M. G., & Gardner, C. D. (2010). Teacher pay for performance: Context, status and direction. *Phi Delta Kappan*, 91(8), 8-15.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Newbury Park, CA: Sage Publications.
- Strickland, M., Weinstein, E., Thomas, J., Pierce, J., & Stuckey, A. (2003, April). *Of teacher dispositions, the ALCP and portfolios*. Retrieved from <http://www.cedu.niu.edu/lep/edpsych/faculty/pierce/research%20papers/Strickland%20et%20al%20paper.htm>
- Tichenor, M. S., & Tichenor, J. M. (2004). Understanding teachers' perspectives on professionalism. *The Professional Educator*, 27(1), 89-97.
- U.S. Department of Education. (2004). *No child left behind: A toolkit for educators*. Retrieved from <http://www2.ed.gov/teachers/nclbguide/nclb-teachers-toolkit.pdf>
- Wayne, A. J., & Youngs, P. (2003). Teacher characteristics and student achievement gains: A review. *Review of Educational Research*, 73(1), 89-122. doi: 10.3102/00346543073001089

- Weisberg, D., Sexton, S., Mulhern, J., & Keeling, D. (2009). *The widget effect: Our national failure to act on difference in teacher effectiveness*. Brooklyn, NY: The New Teacher Project.
- Wheatley, R. West, R., Charlton, C., Sanders, R., Smith, T., & Taylor, M. (2009). Improving behavior through differential reinforcement: A praise note system for elementary school students. *Education and Treatment of Children*, 32(4), 551-571.
- Wylie, E. C., Lyon, C. J., & Goe, L. (2009). *Teacher professional development focused on formative assessment: Changing teachers, changing schools*. Princeton, NJ: ETS.

APPENDIX A

SURVEY QUESTIONS

1. Informed consent.

2. Please select the title which best describes your position:

Teacher

Administrator

University Professor

3. What teacher attributes or qualities contribute to student success? Please rank from most important to least important, with 1 being the most important and 7 being the attribute you perceive to be the least important.

Recognizes how students learn different concepts differently

Arranges the classroom to accommodate student needs

Ability to keep students on task

Values background experience of students

Empowers students to ask their own questions

Ability to modify instruction throughout a lesson

4. Which of these teacher attributes enhance a student's academic success? Please check all that apply.

View all students as worthy and capable individuals

Values the background experience of students

Communicates with families

Collaborates with other teachers to access a variety of perspectives

Empowers students to ask their own questions

Allows knowledge of students to inform decisions

5. Using the following rating scale, what attributes do you think are important for a highly effective teacher? Not at all; Somewhat important; Important; Very important

Views all students as worthy and capable students

Values the background experience of students

Communicates with families

Collaborates to access a variety of perspectives

Empowers students to ask their own questions

Allows knowledge of students to inform decisions

6. When evaluating a teacher, which of the following do you feel is the most important in determining a high level of teacher effectiveness? Please rank from 1-6 with one being the most important.

Ability to keep students on task

Using appropriate examples and explanations when teaching specific content

Valuing and including background experience of students

Clear and effective classroom procedures

Forms decisions based on best interests of students

Simultaneous instruction and assessment of their teacher

Comments:

7. Do you feel the current teacher evaluation tool assesses all areas effectively?

Yes

No

N/A

8. Which of these attributes should be added to the current teacher evaluation tool to provide a more accurate definition of what highly effective teachers do?

Views all students as worthy and capable individuals

Values the background experience of students

Communicates with families

Collaborates with staff and school community to access a variety of perspectives

Empowers students to ask their own questions

Allows knowledge of students to inform decisions

N/A

9. What teacher attributes of highly effective teachers do you feel are missing from the current evaluation tool?
10. Please check the box below if you are interested in being interviewed based on the above survey. The interview will be 10 minutes or less, and will take place at your convenience, either on the phone or in person. Thank you very much for your participation. If you agree to be interviewed, please leave your name, phone number or email address in the box below.

APPENDIX B

QUESTIONS FOR INTERVIEW

1. Based on the survey, teacher collaboration—within the school and throughout the school community--appears to be an important area in defining teacher effectiveness. How could you evaluate teacher collaboration (a) with families and (b) with other teachers?
2. Another area that respondents felt was important was showing students that they are valuable, worthy and capable. How do teachers demonstrate to students that they value them, their families and their backgrounds? How might that be evaluated?
3. Those surveyed also emphasized the importance of teaching students to ask their own questions and to become independent thinkers. How does this fit into the current evaluation tool? How could this area be further developed in terms of evaluation of teachers, and the types of professional development with which they are provided?
4. An area that has been the traditional focus of teacher evaluation—classroom management—was perceived as being of lesser importance to student success than some of the other areas. Why do you think that is?
5. Several of the respondents commented that the current model of planned, 30 minute observations did not give an accurate measure of teacher effectiveness and ability. How could this model be adapted or reconfigured?

APPENDIX C

CERTIFICATED TEACHER OBSERVATION/ EVALUATION FORM

Source: Chico Unified School District. (2003). *Certificated teacher observation/evaluation form*. Chico, CA: Author. Reproduced with permission.

Chico Unified School District
1163 E. Seventh Street, Chico, California 95928 (530) 891-3000

Certificated Teacher Observation/Evaluation Form

- ☐ Observation
☐ Final Summative Eval.
☐ Alternative Assessment

Teacher's Name

School

Grade/Subject

Check One <input type="checkbox"/> Temporary <input type="checkbox"/> Probationary 1 <input type="checkbox"/> Probationary 2 <input type="checkbox"/> Permanent											
Rating <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">*1. Practice Not Consistent with Minimum Standards:</td> <td style="width: 50%; border: none;">Unsatisfactory – Does not meet the professional standards of competence</td> </tr> <tr> <td style="border: none;">2. Practice Developing – Meets Minimum Standards:</td> <td style="border: none;">Meets the professional standards of competence</td> </tr> <tr> <td style="border: none;">3. Practice Consistent with Professional Standards:</td> <td style="border: none;">Meets and occasionally exceeds professional standards of competence</td> </tr> <tr> <td style="border: none;">*4. Practice Distinguished – Exceeds Standards:</td> <td style="border: none;">Consistently exceeds the professional standards of competence</td> </tr> <tr> <td style="border: none;">N/A Not Observed/Not Applicable</td> <td></td> </tr> </table>		*1. Practice Not Consistent with Minimum Standards:	Unsatisfactory – Does not meet the professional standards of competence	2. Practice Developing – Meets Minimum Standards:	Meets the professional standards of competence	3. Practice Consistent with Professional Standards:	Meets and occasionally exceeds professional standards of competence	*4. Practice Distinguished – Exceeds Standards:	Consistently exceeds the professional standards of competence	N/A Not Observed/Not Applicable	
*1. Practice Not Consistent with Minimum Standards:	Unsatisfactory – Does not meet the professional standards of competence										
2. Practice Developing – Meets Minimum Standards:	Meets the professional standards of competence										
3. Practice Consistent with Professional Standards:	Meets and occasionally exceeds professional standards of competence										
*4. Practice Distinguished – Exceeds Standards:	Consistently exceeds the professional standards of competence										
N/A Not Observed/Not Applicable											
*Ratings of 1 and/or 4 require comments to support.											
1. ENGAGING AND SUPPORTING STUDENTS IN LEARNING											
	Rating										
1.1 Connecting students' prior knowledge, life experience, and interests with learning goals.											
1.2 Using a variety of instructional strategies to respond to students' diverse needs.											
1.3 Facilitating learning experiences that promote autonomy, interaction, and choice.											
1.4 Engaging students in problem solving, critical thinking, and other activities that make subject matter meaningful.											
1.5 Promoting self-directed, reflective learning for students.											
Comments:											
2. CREATING AND MAINTAINING EFFECTIVE ENVIRONMENTS FOR STUDENT LEARNING											
	Rating										
2.1 Creating a physical environment that engages students.											
2.2 Establishing a climate that promotes fairness and respect.											
2.3 Promoting social development and group responsibility.											
2.4 Establishing and maintaining standards for student behavior.											
2.5 Planning and implementing classroom procedures and routines.											
2.6 Using instructional time effectively.											
Comments:											
3. UNDERSTANDING AND ORGANIZING SUBJECT MATTER FOR STUDENT LEARNING											
	Rating										
3.1 Demonstrating knowledge of subject matter and student development.											
3.2 Organizing curriculum to support student understanding of subject matter.											
3.3 Interrelating ideas and information within and across subject matter areas.											
3.4 Developing student understanding through instructional strategies that are appropriate to the subject matter.											
3.5 Using materials, resources, and technologies to make subject matter accessible to students.											
Comments:											

4. PLANNING INSTRUCTION AND DESIGNING LEARNING EXPERIENCES FOR STUDENTS.		Rating
4.1 Drawing on and valuing students' backgrounds, interests, and developmental learning needs.		
4.2 Establishing and articulating goals for student learning.		
4.3 Developing and sequencing instructional activities and materials for student learning.		
4.4 Designing short-term and long-term plans to foster student learning.		
4.5 Modifying instructional plans to adjust for student needs.		
Comments:		
5. ASSESSING STUDENT LEARNING		Rating
5.1 Establishing and communicating learning goals for students.		
5.2 Collecting and using multiple sources of information to assess student learning.		
5.3 Involving and guiding students in assessing their own learning.		
5.4 Using the results of assessment to guide instruction.		
5.5 Communicating with students, families, and other audiences about student progress.		
Comments:		

Evaluator's Comments:

Teacher's Comments:

Evaluator's Name (type)

Teacher's Name (type)

Evaluator's Signature

Date

**Teacher's Signature

Date

**Signature does not indicate agreement

A written response may be attached within ten (10) working days.

Distribution: _____ Personnel
 _____ Supervisor
 _____ Evaluatee

APPENDIX D

CERTIFICATED TEACHER EVALUATION FORM

Source: Chico Country Day School. (2008). *Certificated assessment*. Chico, CA: Author. Reproduced with permission.

<div style="border-bottom: 1px solid black; margin-bottom: 10px;">Teacher's Name</div> <div style="border-bottom: 1px solid black; margin-bottom: 10px; width: 80%;"></div> <div style="display: flex; justify-content: space-between;"> School Grade </div>	<p style="text-align: center;">Check One</p> <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Probationary 1 <input type="checkbox"/> Probationary 2 <input type="checkbox"/> Temporary <input type="checkbox"/> Permanent </div> <div> MS = Meets Standards PE = Progress Evident NE = Progress Not Evident </div> </div>
--	--

Please check the standards covered by this assessment and prior assessment reports:

1. PUPIL PROGRESS TOWARD STANDARDS OF EXPECTED ACHIEVEMENT.	MS	PE	NE
a. The teacher regularly assesses student progress and provides feedback to students and parents.			
b. The teacher uses assessment information effectively in making instructional decisions.			
Comments:			
2. ESTABLISHMENT AND MAINTENANCE OF SUITABLE LEARNING ENVIRONMENT.	MS	PE	NE
a. The teacher is able to orchestrate learning in an environment that includes individual, small group, and large group instruction.			
b. The teacher addresses a variety of areas of student development while motivating and engaging students in learning.			
Comments:			
3. ADHERENCE TO CURRICULAR OBJECTIVES.	MS	PE	NE
a. The teacher makes knowledge accessible to all students based on the recognition of individual differences and employs effective practices with diverse groups.			
b. The teacher is in command of his/her subject(s), understands the relevant information and central organizing concepts when planning short and long-term objectives.			
c. The teacher plans for instruction; adheres to District curricular standards and State frameworks.			
Comments:			

4. INSTRUCTIONAL TECHNIQUES AND STRATEGIES.	MS	PE	NE
a. The teacher uses appropriate instructional strategies.			
b. The teacher makes instructional decisions based on theory and experience, asking for and/or responding to assistance when appropriate.			
c. As appropriate and available, the teacher integrates instructional technology into the learning process.			
Comments:			
5. PERFORMANCE OF NON-INSTRUCTIONAL DUTIES AND RESPONSIBILITIES.	MS	PE	NE
a. The teacher participates in professional growth activities to expand his/her repertoire and uses new knowledge and skill to improve his/her teaching.			
b. The performance of non-instructional duties and responsibilities, including supervision, participatory and advisory duties.			
c. Works collaboratively with others to improve teaching/learning for all students.			
Comments:			

Evaluator's Comments (continued):

Teacher's Comments:

☐ Meets Standards
 ☐ Progress Evident
 ☐ Progress Not Evident
 ☐ Unsatisfactory

Evaluator's Signature

Date

Teacher's Signature

Date

APPENDIX E

IDEAS FOR EVALUATION AND DEVELOPMENT OF TEACHER BEHAVIORAL MODALITIES

1. How can we show students they are worthy and valuable?

EVALUATION BY SCHOOL SITE ADMINISTRATOR

- Generate a list of activities for teachers to work on. This may include community building activities, parent volunteers, and school and classroom-wide events
- Student feedback
- Rubrics with diversity requirements for each unit
- Self-reflection and self-evaluation

IMPLEMENTATION

- Lessons representative of cultural diversity
- Art projects; a family crest
- Literature pieces with cultural significance
- Parent participation in curriculum
- Poetry and creative writing projects highlighting feelings
- Community circles or town hall meetings
- Celebration of multi-cultural holidays
- Non-contingent interactions, having nothing to do with teaching or learning (directly)

2. How can we evaluate teacher collaboration?

EVALUATION BY SCHOOL SITE ADMINISTRATOR

- A measuring stick for collaboration developed by teachers at that site
- Brainstorm levels of collaborative work, both in grade level and cross-grade level partnerships. Decide what types of collaborative work can be done, with examples.
- Evidence that the collaborative idea was being used or implemented by the teachers involved.

IMPLEMENTATION

- Small group presentations to larger group
- Identify key leaders to maintain vertical and horizontal communications
- Personal goal-setting and self-reflection

3. How can we evaluate parent/family collaboration?

EVALUATION BY SCHOOL SITE ADMINISTRATOR

- Record or log of parent contacts or attempts
- Brainstorming with staff to develop an extensive **site-based** list of examples of ways to collaborate with families. Each individual teacher can set personal goals in this area.

IMPLEMENTATION

- Site-based list of examples of ways to collaborate with families
- Whole school education nights
- Parent newsletters
- Parent meetings

4. How can we develop and evaluate critical thinking?

EVALUATION BY SCHOOL SITE ADMINISTRATOR

- How teachers pose and answer questions in the classroom
- Training in and use of Bloom's taxonomy
- Challenging questioning techniques
- Open-ended projects and lessons

IMPLEMENTATION

- Student guided learning
- Project-base learning experiences
- Teacher participation in open-ended questioning training, in which there is no right answer, but many right options

APPENDIX F

EVALUATION AND DEVELOPMENT TEMPLATE

Not all areas in this template were addressed in the confines of this project. Each domain, category and teacher quality statement is based on the research in the literature review and developed through my conceptual framework.

Appendix E offers ideas for evaluation and development in four different areas highlighted in the survey and interview.

Domain	Category	Teacher Quality Statement	Evidence of /Suggestions for Implementation
Teacher Behavioral Modalities	Knowledge of Students	Views all students as worthy and capable individuals	(Please see Appendix E)
		Values the background experience of students	
	Teach Critical Thinking	Collaborates to access a variety of perspectives	
		Empowers students to ask their own questions	
	Executes Tasks Using Professional Judgment	Allows knowledge of students to inform decisions	
		Sets personal goals, using reflective practices	
Classroom Management	Knowledge of Students	Arranges the classroom to accommodate student needs	
		Ability to keep students on task	
	Teach Critical Thinking	Development of classroom rituals that include all students	
		Maintain a climate of respect and trust	
	Executes Tasks Using Professional Judgment	Attention to detail in designing effective classroom procedures	

Domain	Category	Teacher Quality Statement	Evidence of /Suggestions for Implementation
		Employs management decisions based on research and experience	
Pedagogical Content Knowledge	Knowledge of Students	Recognizes how individual students learn concepts differently	
		Modifies instruction as appropriate, during lesson	
	Teach Critical Thinking	Indicates awareness of how students are socialized to learn particular content	
		Indicates awareness of how content is understood by children from different backgrounds	
	Executes Tasks Using Professional Judgment	Uses most effective teaching strategies for particular content areas	
		Simultaneously instructs and assesses instruction and lesson	