Using Inquiry-based Teacher Evaluation to Grow Teaching Practice

Patricia Maxfield

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Reading Committee:

Kenneth Zeichner, Chair

Stephen Fink

Anneke Markholt

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Abstract

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Patricia Maxfield

Chair of the Supervisory Committee:
Professor Kenneth Zeichner
Curriculum and Instruction

This project, based on a qualitative study, explores the impact of the use of an inquiry cycle within a teacher evaluation process on teaching practice and student learning. Combining the research on effective teacher networks, a research-based instructional framework and a teacher evaluation rubric based on the instructional framework, I explore how utilizing an inquiry cycle effects teacher learning about instructional practice. Findings suggest that the use of an inquiry cycle provides a structure for a growth orientation within the teacher evaluation process. Findings suggest that the inquiry cycle creates job-embedded learning opportunities for teachers and principals to work together on questions of instructional practice and student learning. Findings also suggest that the use of an instructional framework and rubric keep teachers and principals focused on manageable and measurable steps for improving instructional practice.

This study suggests that a strengths-based stance within an inquiry cycle helps to create a collaborative culture amongst teachers and principals, shifting the evaluation process from a compliance requirement to a learning process that impacts teacher learning with a direct connection to student learning behaviors. Implications for successful implementation of an inquiry-based teacher evaluation process are also considered.

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Finally, and most importantly, my husband Brian has been unwavering in his support from the germination of my idea to return to school. There are no words to express my appreciation for his smiles, his sacrifice of time together, and his willingness to do whatever was necessary so I could work and learn. Thank you from the bottom of my heart.

DEDICATION

To my mom, although you have been gone for twenty-five years, I could feel your presence with me each step of the way.

A Problem of Practice: Traditional Teacher Evaluation Does Not Promote Growth in Teaching Practice

Teacher evaluation has been routinized for decades, following a traditional model that was rarely implemented for the purpose of improving the professional practice of teaching, but was used to be compliant with state law and local collective bargaining agreements. This resulted in little impact on teaching practice (Duffett, Farkas, Rothertham, and Silva, 2008.) The problem of evaluation practice educators faced can be framed by the time that districts expended on a traditional teacher evaluation model that did not promote growth in teaching practice, the lack of ownership by teachers within the evaluation process and the absence of a clearly defined and shared understanding of teaching practice that teachers and principals could utilize to ground and develop their ongoing learning. Two questions flow from this problem of practice:

- How can districts more effectively use the time spent on teacher evaluation to improve teaching practice and student learning?
- Could the use of an inquiry cycle within a teacher evaluation process have a positive impact on teaching and learning?

While traditional teacher evaluation did not support teacher learning, new tools and methods could potentially provide opportunities for teachers to learn about practice while learning with and from practice.

Several bodies of research were examined to guide the study of the questions described in this project. There is reason to believe that a combination of research- based practices supporting the idea of professional networks and a research-based definition of the quality of instruction could result in utilizing evaluation resources and processes more effectively. First, we will

examine the traditional teacher evaluation process and the perceived impact that teachers felt it had on improving their instructional practice.

The traditional teacher evaluation process was heavy on checklist style mandates that were not connected to research supporting the growth of teaching practice. The evaluator, typically the building principal or vice-principal, engaged in a pre-conference with the teacher to identify what the teacher would be teaching, and what the principal would be looking for in his or her observation of instruction. The pre-conference was followed by a single classroom observation. The teacher or the principal typically set the date and time for the observation to occur. Within a few days after the observation was completed, the teacher and principal participated in a post-conference where the principal described what he or she saw during the observation and gave recommendations for improvement. A single lesson was the primary focus of the observation and following conversation. The final conversation of this observation process included the use of specific forms describing evaluation criteria important to a state or district. Often there has been little correlation between the state mandated teacher evaluation criteria and research on effective teaching practices. For example, prior to 2013, Washington state had only one evaluation criterion that spoke to instruction and the other six criteria spoke to topics like interest in students and pre-service preparation. Scholars who studied traditional teacher evaluation recommended that principals be prepared by experiencing twenty hours of training prior to engaging in this evaluation process. These scholars recommended that principals should develop skills in goal setting, specific techniques for collecting observation data, and strategies for conducting feedback conferences (Acheson, et al, 1987.)

In a study of teachers who experienced traditional teacher evaluation, only 26 percent of the teachers reported that their own most recent formal evaluation was "useful and effective." Forty-one percent said it was "just a formality," while another 32 percent said at best it was "well-intentioned but not particularly helpful" to their teaching practice. Almost seven in ten teachers said that when they heard a teacher at their school had been awarded tenure, they thought that it was just a formality and it had very little to do with whether a teacher is good or not" (Duffett, Farkas, Rothertham, and Silva, 2008, p.3.) This research suggests that a single observation is of little value to improving the instructional practice of a teacher (Kennedy, 2007.) Teacher evaluation has not helped to address the inability of our schools to assess instructional performance accurately or to act on this information in meaningful ways (Weisberg, Sexton, Mulhern, Keeling, 2009.) In addition to the ineffectiveness of this process, there are states (such as Michigan) in which teacher evaluation historically occurred once every three years, leaving teachers without any evaluative feedback on their teaching practice for two-thirds of their professional lives.

Many studies have furthermore found that factors used to monitor classroom quality such as teacher education, class size or the use of a curriculum, have little or no relationship to observed quality or to child outcomes (Pianta, 2003.) These are the same measures used in the traditional model for teacher evaluation. We know this model has not resulted in growth of teaching practice or improved outcomes for student learning. Given the lack of connection and significance to teacher and student learning in the current teacher evaluation process, the old process should not be a difficult tradition to give up. Perhaps it is time for a new model!

Components of a Teacher Evaluation Process That Supports Teacher Learning

While the literature indicates that traditional teacher evaluation has not had a positive impact on improving teacher practice, the literature is equally clear that the quality of the teacher is the most significant in-school factor in improving student learning (Haycock, 1998; Hattie, 2003.) Barth (1990) states there is

> " …probably nothing within a school (that) has more impact on students in terms of skill development, self-confidence, or classroom behavior than the personal and professional growth of the teacher." (p.49)

An inquiry-based teacher evaluation process could potentially be used to improve teacher practice and student learning if it addressed the professional learning needs identified by teachers. This could be accomplished in a new teacher evaluation process by incorporating together:

1. A research-based instructional framework and rubric used to assess teaching practice,
2. A cycle of inquiry grounded in teaching practice, observation and feedback, and
3. Identification and inclusion of student learning needs in the inquiry / professional learning process.

This study focused on the impact an inquiry-based teacher evaluation model might or might not have on the improvement of teaching practice. The research-based instructional framework and

rubric are tools to support inquiry with a focus on teacher's day-in and day-out practice, not a single lesson. Each of these tools and processes are explained in further detail below.

Using a Research-based Instructional Framework and Rubric

While there is a body of research that indicates that out-of-school factors are a great influence on student learning, I am focusing on the factors that teachers and principals have control over. Because the school-related competencies of children are influenced by the quality of their experiences in educational settings, it is logical to assess the quality of those settings and to have accountability standards for classrooms (Pianta, 2003).

Instructional frameworks are a relatively new tool in the delineation of teacher quality. Research-based instructional frameworks draw from empirically based studies of teaching and coaching practice and descriptions of practice from expert observers. (Fink and Markholt, 2011.) Observation frameworks can be used to assess the quality of educational settings by identifying the most influential components of instruction (MET, 2012.) The Measures of Effective Teaching Study (MET, 2012) analyzed the relationships of five different instructional frameworks to student learning and found that all five instruments were positively associated with student achievement gains. This stands in contrast to historical measures of teacher practice that included teaching experience and graduate degrees and that did not take into account a teacher's actual practice or its impact on student learning.

Programs of research have established that the kind of instruction and interactions with adults that occur for children in pre-kindergarten and early elementary settings have reliable and

detectable effects on children's achievement and social competence (Barnett, 1995; Howes, Phillipsen, & Peisner-Feinberg, 2000; Meyer, Waldrop, Hastings, & Linn, 1993; Morrison, 1999; National Institute for Child Health and Human Development [NICHD] Early Child Care Research Network [ECCRN], 1996; in press a; in press b; Peisner-Feinberg & Burchinal, 1997; Ripple, Gilliam, Chanana & Zigler, 1999.) The MET study (MET, 2012) replicated these findings and furthermore demonstrated the importance of the use of a framework when observing teachers for evaluative purposes. In fact, they found the use of a framework they studied when observing teachers for evaluative purposes was

…"positively associated with student learning gains." (p.6)

Instructional frameworks provided the frame during the observation process to identify and give feedback around a teacher's strengths and to address specific weaknesses in a teacher's practice (MET, 2012.)

The 5 Dimensions of Teaching and Learning Instructional Framework™ and the 5D+ Teacher Evaluation Rubric™ were the framework and rubric used in this study to create a common vision and language for instructional practice and were used as the basis for this inquiry-based teacher evaluation guide. The 5 Dimensions of Teaching and Learning (5D) Instructional Framework developed by the Center for Educational Leadership at the University of Washington (see Appendix 1) is a set of descriptions of teaching behaviors, based on research and the work of practitioners. The practices highlighted in the framework are linked to improved student learning, as described by the framework. Its purpose is to emphasize continuous improvement and support for teachers and principals to enhance their instructional expertise. The

instructional framework creates a common language and vision for high quality instruction that is ideally shared by everyone in a school district. A common language of instruction is foundational to powerful discourse about effective teaching, instructional feedback, and the collection and use of formative and summative assessment data across a system. Three types of sources were investigated to develop the 5D instructional framework:

1. empirically- based studies of teaching and coaching practice,
2. practitioner-oriented prescriptions and frameworks for instructional and coaching practice, and
3. descriptions of practice from an identified panel of expert observers who included instructional coaches and school administrators that worked daily with teachers on improving their practice.

The 5 Dimensions of Teaching and Learning Instructional Framework describes five important dimensions of instructional practice that create a picture of learning. Planning for *Purpose* includes connecting lessons to standards, a broader purpose and transferable skills, and providing relevancy in learning for students. It requires that teachers plan for and implement units and lessons in ways that students are clear about what they are learning, why they are learning, and how they will know they have been successful. The *Student Engagement* dimension includes ensuring that the intellectual work a student is asked to engage in is rigorous and utilizes discipline-specific strategies that allow the student to authentically engage in learning. A teacher uses the *Curriculum & Pedagogy* dimension to ensure that their curriculum is aligned across standards, tasks and materials. Teachers must know their content well so they can plan for and implement strategies that ask students to think and act within the discipline they are

studying, (e.g. math students think and act like mathematicians). Teachers address the differing learning needs of their students, scaffold lessons to make the learning accessible and release responsibility for learning to their students. In the *Assessment for Student Learning* dimension teachers and students formatively assess learning progress and identify next steps in the progression of learning. The *Classroom Environment & Culture* dimension addresses how teachers and students utilize physical space, collaborative learning routines and norms for learning to create a learning environment that is safe, respectful and productive.

The 5D+ Teacher Evaluation Rubric (see Appendix 2) is a set of indicators connected to each of the 5 Dimensions as well as professional practice expectations that describe the progression of teaching practice in the 5D instructional framework. The development of the 5D+ rubric included a review of the research on instructional practice, aligning the rubric to the 5D instructional framework, a pilot study in two school districts, practitioner focus groups in rural and urban school districts, and two psychometric reviews by an assessment expert. While the 5D instructional framework provided the common language for the observation of instruction in this study, the 5D+ rubric provided the continuum of practice to guide the next steps of teachers and principals as they worked together to improve teaching practice.

A Cycle of Inquiry Grounded in Teaching Practice, Observation and Feedback

A cycle of inquiry is a process of *goal setting*, *study and action*, *feedback* and *new practice*. The research in support of using inquiry as a key part of professional learning is strong. Effective teacher learning involves teachers both as learners and as teachers, and allows them to struggle with the uncertainties that accompany each role. It must be:

- "Experiential, engaging teachers in concrete tasks of teaching, assessment, observation, and reflection that illuminate the processes of learning and development.
- Grounded in inquiry, reflection, and experimentation that are participant-driven (that is, learners take responsibility for posing questions and exploring answers.)
- Collaborative and interactional, involving a sharing of knowledge among educators and a focus on teachers' communities of practice rather than individual teachers.
- Connected to and derived from teachers' work with their students.
- Sustained; ongoing and intensive; supported by the modeling, coaching, and collective problem-solving around specific problems of practice.
- Connected to other aspects of school change."

(Darling-Hammond and McLaughlin, 1996, p.203)

Beyond individual teacher inquiries, research suggests that when all teachers in a school engage in cycles of inquiry, that school can start to develop an inquiry-focused culture (Copland, 2003.) When educators create a culture of inquiry, professional learning eventually comes to be expected, sought, and an ongoing part of teaching and school life (Lieberman, 1995; McClure, 1991; McLaughlin, 1991; Smith & Wigginton, 1991.) A key characteristic of professional learning is that the life span of the learning is not one or two days, but instead becomes part of the expectation for the teacher's role and an integral part of the culture of the school (Lieberman, 1996.) As Lieberman states:

> "Teachers who engage in these new professional opportunities often find themselves in an exciting and powerful cycle: the more they learn, the more they open up to new possibilities and the more they seek to learn more" (1996, 189-190.)

Goal setting, study and action and feedback are several important ideas to understand about the aspects of inquiry cycles. *Study and action* and *feedback* are main parts of the inquiry cycle leading to *new practice* and will be explained in more detail below.

Goal Setting

Goal setting is a fairly common practice in many fields. It includes examining what the teacher knows and can do and determining what a reasonable next step in their practice might be.

Study and Action

Classroom observation is critical to the study and action part of the inquiry cycle. By using observation to assess classroom processes evaluators can gauge the need for alterations in training, curriculum implementation, or resource allocation that, in turn, could produce better classroom quality (Pianta, 2003.) These observations should use an instructional framework that recognizes teaching as complex (Donaldson, 2009) and support the differentiation of feedback (Donaldson & Peske, 2010.) Large-scale observation studies have shown that stand-alone training materials and coding guides can be developed and used successfully to ensure reliable coding of instructional frameworks and rubrics during the observation process (Pianta, 2003.) This coding allows for analysis of instructional practice connected to the instructional framework.

Feedback

Feedback to teachers on instructional practice, a form of individualized coaching, occurs throughout the *study and action* process. A principal or coach collects instructional practice data during classroom observations, and then codes the observational evidence, creating a data set to be used to plan and give feedback. For instance, Pianta and colleagues provided teachers with feedback on their interactions with students using a combination of video and text, with results indicating that ongoing engagement in a cycle of feedback produced significant gains in the quality of teachers' interactions with students (Pianta, 2003.) Utilizing the inquiry cycle with feedback allows teachers to actively engage in experiences with others that are sustained over time, and to reflect on the process as well as the content of what is actually being learned (Darling-Hammond and McLaughlin, 1996,) leading to *new practice* on the part of the teacher.

Traditional evaluation called for teachers to receive feedback once or twice per year in the year they were evaluated. The infrequency with which teachers received feedback, and the fact that the feedback was given at the end of the school year, with little or no feedback during the academic year, resulted in the feedback having little impact on teacher or student learning. This left little opportunity for teachers to actually improve their practice and impact the students sitting in their classroom during the traditional evaluation process. Utilizing multiple inquiry cycles gives teachers the opportunity to reflect on their practice and work to improve the learning of students in their classroom on an ongoing basis. The 5D+ Inquiry Cycle was used in this study to support and implement the *goal setting*, *study and action*, *feedback* and *new practice* aspects of an inquiry cycle. (See Figure 1 for the 5D+ Inquiry Cycle.)

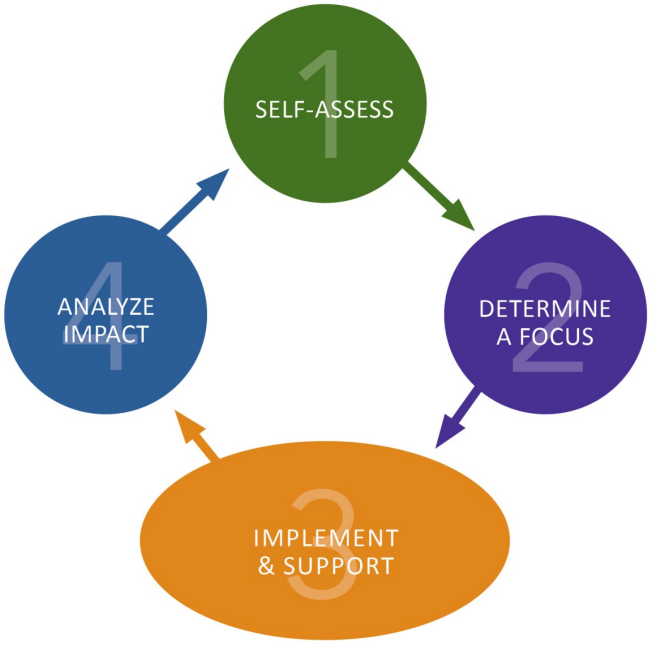

Figure 1 – 5D+ Inquiry Cycle

1. SELF-ASSESS: Teacher self-assesses to identify an area of focus.

2. DETERMINE A FOCUS: Teacher and principal analyze evidence to identify an area of focus. ***Based on the responses in the self-assessment, what is your area of focus? What kind of evidence will you collect?***

3. IMPLEMENT & SUPPPORT: Teacher and principal engage in study and learning around area of focus.

4. ANALYZE IMPACT: Teacher and principal analyze the results of their work. *Based on your inquiry, what did you learn about your practice as it impacts student learning?*

Step 1 of the 5D+ Inquiry Cycle calls for teachers to engage in a three-step process of *self-assessing their teaching practice*. Teachers:

- Examine student work, classroom-based assessment data, and feedback from students in order to answer the question, "What are the learning strengths and learning challenges of my students?"
- Consider building and district learning goals and instructional initiatives. They reflect on and answer the question, "How do these goals and initiatives support the learning

challenges of my students?"

- Assess instructional practice using the 5 Dimensions of Teaching and Learning (5D) instructional framework and the 5D+ Teacher Evaluation Rubric (5D+.) Teachers cite evidence from their day-to-day classroom practice to support a self-assessment score for each rubric indicator. A classroom observation by the principal or another teacher to collect instructional practice data may occur, or instructional practice data from the previous year may be used. Teachers then identify the rubric indicators that represent strengths and the rubric indicators that represent learning opportunities within their own practice.

When the three-step self-assessment is complete, teachers take the data from the student work, the building instructional initiatives, the instructional practice data, and the scored 5D+ rubric to meet with their principal / evaluator to determine an area of focus.

In Step 2 of the inquiry cycle, a conversation occurs between the principal and teacher to *determine an area of focus.* The teacher and principal work together to analyze the evidence from the self-assessment to ensure alignment with district / building goals and to set instructional practice goals. They identify the teacher practice and student learning evidence that will demonstrate meeting the instructional practice and student learning goals at the end of the inquiry cycle. This becomes the teacher's area of focus for the duration of the inquiry cycle, approximately one semester in length. Steps 1 and 2 of the 5D+ Inquiry Cycle accomplish the *goal setting* part of an inquiry cycle.

The third step in the inquiry cycle is *implement and support*. The teacher and principal spend the bulk of their time, approximately 3 months, during the inquiry cycle in this step. Here the teacher and principal engage in study and learning around the area of focus. Processes for this step include formative feedback cycles connected to the teacher's area of focus, targeted feedback cycles that zero in on very specific aspects of the teacher's area of focus, professional collaboration such as professional learning communities, team time, etc., and other non – job embedded professional development. (See Appendix 4.)

Research indicates that a reliable teacher evaluation requires that data be collected over multiple observations (MET, 2012.) In the model studied that resulted in the inquiry-based teacher evaluation recommendations stated below, these observations were shorter in length, approximately 15 minutes instead of a full class period, and were scheduled to occur at various points in the day. The 5D+ inquiry process utilizes formative feedback cycles for teacher observation and feedback based on the teacher's identified area of focus. In a formative feedback cycle, the evaluator or colleague observes in the classroom and then engages in a process of instructional data analysis to identify feedback for the teacher connected to the teacher's area of focus. These feedback cycles occur 4-6 times over the course of the school year, or 2-3 times within a single inquiry cycle. (See Appendix 4.) Targeted feedback cycles are shorter observation cycles that target a specific slice of practice within the area of focus. The third step in the 5D+ Inquiry Cycle provides the structures and processes for both *study and action* and *feedback* parts of an inquiry cycle.

Step 4 in the inquiry cycle is the *analysis of the impact* of the study on teaching practice and student learning behaviors. The principal and teacher collaboratively examine the instructional practice and student learning data, aligning the data to the 5D+ rubric to determine how the instructional practice has grown or shifted. Together they decide what the area of focus for the next inquiry cycle should be, based on the data that was analyzed. A strengths-based stance is used throughout this process, engaging the principal and teacher in co-learning. Step Four of the 5D+ Inquiry Cycle completes the inquiry cycle by identifying and analyzing *new practice* and connecting the results of that analysis to the next round of *goal setting.*

If we combine the use of an instructional framework and rubric and an inquiry cycle focused on teacher learning with what has been learned about the use of teacher networks, we have the potential for using a new evaluation process to support teacher learning and development. It is important that the new teacher evaluation process be approached, not from the standpoint of management and control, but from that of the norms and agreements of communal relationships (Bardach in Cohen et al, 2007.) It is critical that a principal take a strengths-based, inquiry stance in inquiry cycle work. Instead of targeting individuals and attempting to provide them with directives around new skills or perspectives, networks concentrate on building communities of teacher learners. Creating this evaluation process and implementing it by providing profession-wide capacity building creates strategies for wide sharing of research and good practice, recognizes successful classroom and school practices, and enables expert teachers and principals to provide leadership to the system as a whole. These are critical to the success of growing teaching practice through inquiry-based teacher evaluation (Darling-Hammond and Lieberman, 2012.)

Identification and Inclusion of Student Learning Needs in the Inquiry Process

One might think that teacher learning opportunities would reflect what effective teachers do to grow student learning, but professional development typically occurs in the absence of a direct link to actual teaching behavior in classrooms, particularly for already-trained and certified teachers (Caspary, 2002.) In most cases, the assessed outcome of most professional development activities is whether or not the teacher attended the activity, not whether actual practice or quality improved in the classroom for teachers and students (Pianta, 2003.) Historically, most of the in-service or professional development that teachers experience has been formal in nature; unattached to classroom life, full of abstract ideas with little attention paid to ongoing support for continuous learning and changed practices (Lieberman, 1996.)

A cycle of inquiry process that includes classroom observation steps is key to successfully completing the inquiry process in a manner that impacts student learning. Classroom observation links professional development with the actual experiences of children in classrooms. In a study of Pre-K to Grade 3 classrooms, systematic observations provided a mechanism for linking child and teacher outcomes (Pianta, 2003.) In this way, observations of classrooms fill a critical niche in the development of an evaluation system capable of making measurable and observable changes in classroom experiences that produce developmental gains for children.

We know from research that high-quality instruction can be defined by research-based instructional frameworks and improved through the use of observation and feedback. Inquiry

cycles, tied to teacher evaluation, could help prevent the kind of teaching that results in classrooms that are generally well-organized and busy places, but that are low on "intentionality," a term that refers to directed, designed interactions between children and teachers in which teachers purposefully challenge, scaffold, and extend children's skills (Pianta, 2003.) It could also address classrooms that are environments that can be characterized as socially positive but instructionally passive: where children listen and watch; where much time is spent on routines or management of materials; and children have little direct contact with teachers in instructional interactions (NICHD ECCRN, 2003).

This study utilized the research-based 5D instructional framework, the 5D+ rubric and the 5D+ inquiry cycle to engage teachers and principals in an inquiry-based teacher evaluation process to determine the impact inquiry might have on instructional practice and student learning.

Applying the Literature about Inquiry, Professional Collaboration, and Teacher Growth to Teacher Evaluation

Shifting from traditional teacher evaluation to inquiry-based evaluation practice requires a change in principal and teacher habits and practices. To identify these shifts in practice, let us first examine what the literature says about structures and practices that support teacher learning.

The development and use of professional teacher networks has been shown to hold great promise linking the assessment of teaching practice to student learning. For decades, teachers have chosen to participate in collegial networks (see box below) because they provide opportunities for professional collaboration and they restore in veteran teachers a sense of purpose and efficacy (Lieberman & McLaughlin, 1996.) Networks, such as the National Writing Project at the University of California at Berkeley, have offered a way for teachers to experience growth in their careers through deepened and expanded classroom expertise and new leadership roles (Bascia & Carter; Fine, Lord, Smith & Wigginton, Lieberman & McLaughlin, 1996.) Networks typically identify a focus of activity and thus target a specific component of the teacher community. Those who join a network establish a sense of identity through the pursuit of activities related to their common interests and objectives (Lieberman & McLaughlin, 1996.)

Traditionally, networks have provided the added benefit of giving teachers firsthand experience with a constructivist notion of teaching and learning that is central to conceptions of higher-order thinking and problem solving that students need in order to perform at high levels. When constructing ideas about practice with colleagues, teachers act as experts and apprentices,

teachers and learners. Members of some networks report an intellectual and emotional stimulation that gives them the courage to engage students differently in the classroom (Lichtenstein, et al.; Little & McLaughlin, as cited in Lieberman & McLaughlin, 1996.)

Successful networks have several key attributes at their core (see Figure 2.) These attributes allow teachers to become committed to change, willing to take risks, and dedicated to self-improvement (Lieberman & McLaughlin, 1996.)

Attributes of Successful Networks

- Address tough and enduring problems of teaching
- Create a community that encourages discourse and exchange among members
- Provide teachers with a sense that their knowledge of students and schooling is respected.
- The content of the work is "owned" by teachers.

(Lieberman & McLaughlin, 1996)

Figure 2

Networks provide the support, expertise, and encouragement necessary for teachers to implement innovative ideas, yet their greatest assets may also be their greatest weakness (Lieberman & McLaughlin, 1996.) External networks create assets like new structures for teacher involvement and learning outside of their workplaces. These structures potentially result in new norms of collegiality, a broadened view of leadership, enhanced teacher perspectives on students' needs, opportunities for teachers to be both learners and partners in the construction of knowledge, and an authentic professional voice for teachers. All these attributes are critical to improving teaching practice.

External networks have some big advantages for teachers, including nurturing teacher and student learning. However, when teacher learning occurs in an optional network, it is often

outside of the teacher's school and classroom. External networks pull teachers from their schools and immediate collegial ties. This can create a divide amongst teachers within a school between those who have participated in the network and those who have not (Lieberman & McLaughlin, 1996.) Teacher evaluation, a process that everyone must experience, could benefit from leveraging the best features of networks within an inquiry process.

Implemented correctly, a new teacher evaluation system can potentially create meaningful networks for teachers within and across schools in a system. Using a common process of inquiry to create a network and grounding teacher learning in an instructional framework and rubric, inquiry can create the intellectual and emotional stimulation that gives teachers the courage to engage students differently. Engaging all teachers in an inquiry process could address the drawbacks that have been found to be associated with some voluntary teacher networks. As stated by Lieberman and McLauglin (1996).

> **"**If reformers can't mandate teacher commitment, motivation, and willingness to change, then they must find the means to engender these attitudes." (p.66).

The question before us as professionals is, "Can teacher evaluation be the mandate and can inquiry, utilizing the attributes of networks, be the means?"

If we combine the recommendations from the MET 2012 study and the recommendations from Allen, et al (2011) that evidence-based coaching be provided to teachers, we can see the potential for using a new teacher evaluation process to support teacher learning and development

(See Figure 3.) Research asserts that evaluation systems should include multiple measures like classroom observations and student learning data. Classroom observations have the potential to identify strengths and address specific weaknesses in teachers' practice (MET, 2012.) Observing classroom practice using a research-based instructional framework and a strengths-based stance (building upon what a teacher does well instead of identifying deficits in their practice) allows teachers and principals to examine instructional practice through the lens of its impact on student learning (MET, 2012.) Individualized coaching for teachers, specific to their identified learning needs, can potentially lead to substantial improvements in student achievement (Allen, et al, 2011.) Coaching instructional practice using the same research-based instructional framework, strengths-based stance and student learning data or evidence can potentially result in improved teacher and student learning (MET, 2012.)

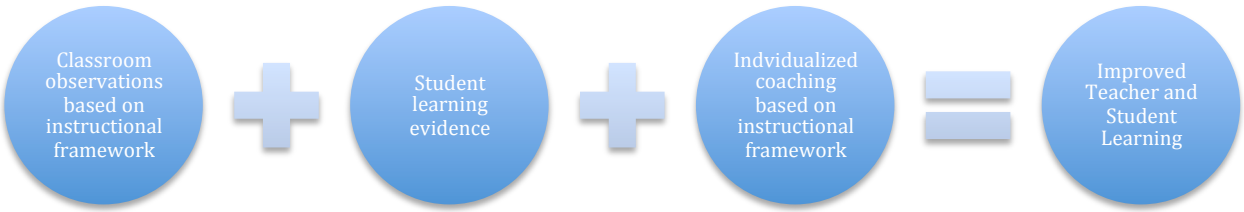

Figure 3 – Improved Teacher and Student Learning

The data from this kind of evaluation process, combining classroom observation with student learning data and individualized coaching could help prevent the kind of teaching that the National Institute of Child Health and Human Development (NICHHD) describes as existing in average PK-3 classrooms where instruction is delivered in a whole-group setting, there is a positive social environment, and there are low levels of child productivity and engagement in academic activities. These environments have been characterized as socially positive but instructionally

passive: children listen and watch; much time is spent on routines or management of materials; and children have little direct contact with teachers in instructional interactions. This appears to be increasingly the case as children move from first to third grade—the classroom becomes even more passive, in the sense that in third grade over 90% of observed occasions on a typical day involved whole-class instruction or individual seatwork (NICHD, 2003.) Despite being generally well-organized and busy places, classrooms appear low on intentionality, a term that refers to directed, designed interactions between children and teachers in which teachers purposefully challenge, scaffold, and extend children's skills (Pianta, 2003.) These findings underscore the importance of teacher learning to continually grow teaching practice that creates challenging and engaging learning opportunities for students. An instructional framework provides the research, vision and exemplars of such teaching practice.

Cautions Regarding This Study

Before we can fully determine a response to the question of combining teacher inquiry networks with teacher evaluation to improve teaching practice, there are still several questions yet to be answered about the new teacher evaluation process and teacher learning. We must also consider the drawbacks to be addressed in order to use teacher evaluation to successfully grow teacher practice.

Close monitoring of professional development implementation has not been effective in improving teaching practices through traditional staff development offerings. Traditional forms of oversight or evaluation of teachers are destructive of the trust, the sense of safety, and the supportive professional collegiality that are crucial to a strong network for teachers. Likewise,

Lieberman and McLaughlin (1996) have challenged us to consider how the quality of networks can be continuously evaluated and improved. The participants engaged in networks need to reflect on and modify their own practices and obtain useful feedback. Without procedures for ongoing outside review, networks can become victims of familiar practices and unchallenged assumptions (Lieberman & McLaughlin, 1996.) The 5D+ Inquiry Cycle addresses this concern by engaging teachers in at least two inquiry cycles in an academic year, with 2-3 formative observations with feedback within each inquiry cycle. This allows the quality of teacher learning to be continuously evaluated and improved by providing both an "outside the classroom" perspective from the principal and an "inside the classroom perspective" from the teacher.

Another question is how teachers and principals will obtain the knowledge and skills to engage in this kind of inquiry. When policies urge change in practice, they often create incompetence by requiring practitioners to do things that they do not know how to do (Bardach in Cohen et al, 2007.) The Council of Chief State School Officers cautioned that there has been too much focus on evaluations themselves and not enough on the evaluators who will be using them and how they are trained, especially in terms of giving feedback to teachers for improvement (McGuinn, 2012.) Districts need to think long term about how to produce a large, stable and effective supply of administrators with the training, technical expertise and field experience to address the current human-capital, validity and reliability challenges around teacher evaluation reform. In the current study that is the basis for recommending inquiry-based teacher evaluation, I addressed this question by ensuring that study principals had ongoing training over several years on the 5D Instructional Framework, the 5D+ Teacher Evaluation Rubric and the 5D+ Inquiry Cycle.

Finally, there are some who are concerned about using a mandated teacher evaluation process to inform teacher learning, believing that measuring teachers and developing teachers are different purposes with different implications and that each system would need to be designed differently (Marzano, 2012.) One study looked at the effects of teacher evaluation on student achievement and found that teachers are more effective at raising student achievement during the school year when they are being evaluated than they were when they weren't being evaluated, and they are even more effective in the years after evaluation. Post-evaluation improvements in performance were largest for teachers whose performance was weakest prior to evaluation, suggesting that rigorous teacher evaluation may offer a new way to think about teacher professional development (EdNext, 2012.)

Networks and Inquiry

If teacher evaluation can be successfully used to improve student achievement, both in the evaluation year and in the following year, and if working with teachers and principals in networks of choice gives teachers experience and courage to continuously engage in trying on new practices in the classroom, then it makes sense for educators to learn from effective teacher learning practices within networks and apply those practices to the new teacher evaluation process. A comparison of the principle ideas that underscore teacher networks and an inquiry cycle demonstrates that the positive attributes of teacher networks can also be found in inquiry cycles. (See Figure 4.)

Principle Ideas of Teacher Networks (Lieberman & McLaughlin, 1996)	**Principle Ideas of Inquiry** (CEL 5D+ Inquiry Cycle)
Address tough and enduring problems of teaching	Address area of focus identified by self-assessment against instructional framework and rubric
Create a community that encourages discourse and exchange among members	Create community through collaborative implementation of and support for area of focus
Provide teachers with a sense that their knowledge of students and schooling is respected.	Identifies and builds on teacher strengths in teaching practice
The content of the work is "owned" by teachers.	Teacher has a strong voice in developing the area of focus

Figure 4 – Comparison of Teacher Networks and Inquiry

This leads to the question of how to alleviate the problems of networks, their being optional and outside of school, without compromising their benefits? A potential strength of professional networks is the ownership teachers in networks often feel over the learning they engage in (Lieberman and McLaughlin, 1996.) Ensuring that the inquiry networks address the learning needs defined by teachers is crucial. Having teachers assess their practice against a research-based instructional framework and then using that assessment to prioritize their areas for learning gives teachers a voice in what instructional practices they will learn about and why they will focus on them. Teachers can be trained to use the instructional framework to assess their practice, and then to combine that assessment with student learning data from their current classroom to identify areas of strength and areas for growth. Teachers within and across schools can identify areas for growth and then focus their evaluation on these areas. Teachers will be more likely to demonstrate the professional authority to guide their own learning on behalf of

their students if they are working on an area of practice that they have chosen. In addition, if a principal carefully takes a strengths-based stance throughout the evaluation / inquiry process, the principal and teacher would engage in learning around a common area of study similar to the learning that networks have provided for teachers.

A second factor in implementing an inquiry- based teacher evaluation that improves teacher and student learning is a commitment by the people in a school system to the ongoing learning of the principals, assistant principals and teachers who are engaged in an inquiry-based teacher evaluation, giving feedback and coaching teachers. This principal and teacher learning can be developed and shared if it is made public, much like the medical profession where doctors who are learning a new surgical procedure assume they will be observed by others and that their work will be written up in a professional journal so other doctors can learn as well. Opening educational practice up to the same kind of professional learning and observation provides an opportunity for best practices to be developed, shared and refined. Additionally, reliable observational assessment of classroom practice holds great promise for education accountability models that not only rely on student outcomes, but also assess and provide objective feedback to teachers. This feedback needs to be linked to empirically-based supports for teachers that increase the use of effective practices and ultimately improve student learning (Pianta, 2003.)

A strength of networks lies in their flexibility where the agendas are in a constant state of refinement, rather than irrevocably fixed in time and place (Lieberman and McLaughlin, 1996.) In the 5D+ inquiry based teacher evaluation process, teachers engage in two inquiry cycles each academic year, allowing for refinement and flexibility within a single inquiry cycle and across

both inquiry cycles. The inquiry cycles themselves create the opportunity for the advantages of a professional network to occur between the principal and teacher, resulting in more frequent feedback and reflection on the teaching and learning process than occurred during the traditional evaluation process. Creating a relationship between principals and teachers grounded in the principles of professional networks to grow teacher practice can become the foundation of teacher evaluation that will impact teacher instructional practice and student learning.

Research Strategy

The literature indicated that using the characteristics of teacher networks in combination with the use of an inquiry cycle in K-12 teacher evaluation could positively impact teacher practice. I engaged in a qualitative study of sixteen K-12 teachers from two different districts and four K-12 principals from one of these districts to determine the impact of inquiry-based teacher evaluation on the teaching practice of elementary, middle and high school teachers. The 5 Dimensions of Teaching and Learning™ instructional framework (Appendix 1) and the 5D+ Teacher Evaluation Rubric™ (Appendix 2) were used to define and measure teaching practice. The 5D+ inquiry process (Appendix 3) was used to collect instructional practice evidence to assess teacher practice. I wanted to determine:

- How does the use of a multi-stage inquiry cycle within the new teacher evaluation process impact teacher and student learning?
- How is this impact different from what is known from the literature about the impact of the traditional evaluation process?

This project focused on the impact of a teacher directed inquiry cycle on individual teacher practice and student learning within a teacher evaluation process. Conceptually, the project provided a frame for managing the tension between teacher evaluation that results in continuous teacher learning and impacts teaching practice and the traditional notion that teacher learning and teacher evaluation must be separate activities.

Methodologically (see Appendix 6 for more detail) I conducted a qualitative study of sixteen K-12 teachers in two school districts (District A and District B) and four principals in one of those districts (District A) using the 5 Dimensions of Teaching Learning Instructional Framework, the 5D+ Teacher Evaluation Rubric as tools in support of the 5D+ Inquiry Cycle. Both District A and District B engaged in comprehensive training for evaluators and District B provided the same training for teachers as well. Both districts implemented the inquiry cycle as designed (see Figure 1.)[1]

Principals and teachers were from districts that provided one year of professional development to principals (District A) or to principals and teachers (District B) for implementing the 5D+ Teacher Evaluation process (See Figure 5.) The 5D instructional framework created a common frame to observe instruction and a common language with which to talk about instruction. Additionally, the professional development included one year of the 5D+ inquiry process and the 5D+ teacher evaluation rubric prior to or in tandem with implementing the new teacher evaluation process during the 2013-14 school year. District A didn't provide direct professional development to teachers and principals simultaneously, but principals were charged with providing professional development to teachers who were to be evaluated using the new tools and processes during year three.

[1] Teachers were randomly selected from a pool of teachers who were evaluated using the 5D+ Teacher Evaluation Rubric and the 5D+ Inquiry Cycle during the 2013-14 school year. Eight teachers participated via online survey (District A) and eight teachers participated via focus group (Districts A and B.) Principals were selected from District A to represent elementary, middle and high school levels.) Results from these four groups were compared.

	District A Professional Development	District B Professional Development
Participants in PD provided by an external provider	• 0 teachers • 14 principals • 5 central office leaders	• 200 teachers • 36 principals • 3 central office leaders
Year 1	• Five days for principals, one day on each of the 5 Dimensions of Teaching & Learning	
Year 2	• Seven days for principals on inquiry-based teacher evaluation using the 5D+ rubric and 5D+ inquiry cycle	• District wide focus on the 5 Dimensions of Teaching and Learning as an instructional framework
Year 3	• Implemented the 5D+ Teacher Evaluation Process with 1/3 of teachers • Principals trained teachers	• Five days for principals and teachers together on inquiry-based teacher evaluation using the 5D+ rubric and 5D+ inquiry cycle • Implemented the 5D+ Teacher Evaluation Process with 1/3 of teachers

Figure 5 – District A & B Professional Development

I examined the impact of the 5D+ inquiry process on teacher's thinking and practice. I collected perceptual data from teachers and principals. The design of the questions provided teachers and principals open-ended questions without being guided to specific responses.

Data was collected from principals using a focus group discussion process. (See Appendix 9 for principal questions.) Data was collected from teachers via an online survey and two separate focus groups. (See Appendices 7 and 8 for teacher online survey and teacher focus group questions.) Online and focus group participants were from primary, intermediate, middle and high school grade levels. The purpose of the teacher online survey was to identify areas for

deeper discussion with the teacher focus groups. The focus groups were used to help spur teacher thinking and responses as they reflected on their individual practice and the impact the 5D+ inquiry cycle had on their practice, if any. The goal was to identify what aspects of the 5D+ inquiry cycle impacted teacher and student learning, and what, if any aspects of the 5D+ inquiry cycle hindered teacher and student learning. Survey and focus group data was analyzed using a grounded theory qualitative method process.

What I learned from the analysis of the data collected was that using the 5D+ inquiry process significantly changed the dynamic and impact of teacher evaluation. Teachers found it more meaningful than previous evaluation practice. It created a positive learning environment that resulted in changes in instructional practice and changes in the way that students learned. The changes in the ways that students learned appeared to be directly connected to the teacher's area of focus during the 5D+ inquiry cycle. For example, teachers whose area of focus was learning targets reported that students learned more related to the targets and could articulate clearly what they were learning and why.

According to the teachers and principals in this study, the use of the 5D Teaching and Learning Instructional Framework, the 5D+ Teacher Evaluation Rubric and the 5D+ inquiry cycle were crucial factors in this impact on instructional practice, while the positive stance of the principal was an integral component to teacher growth. An analysis of the qualitative data resulted in the data separating into several categories of impact. These included the *5D framework and 5D+ rubric*, the *5D+ inquiry cycle*, *implementation requirements*, *implementation challenges*, *helpful resources* and *impact on student learning.*

Learning from Inquiry-based Teacher Evaluation

The sixteen teachers and four principals in this study experienced professional development focused on understanding instructional practice through the lens of the 5 Dimensions of Teaching and Learning Instructional Framework, the 5D + Teacher Evaluation Rubric and the 5D+ Inquiry Cycle. They identified multiple ways that this strengths-based evaluation process impacted teacher learning. Teachers and principals described a process that was significantly different from traditional evaluation, both in terms of process and its impact on teacher and student learning.

Analyzing the perceptual data from teachers and principals in the study resulted in the identification of five major components of the inquiry based teacher evaluation process that were crucial to growing teaching practice and positively impacting student learning behaviors. They were also the factors that differentiated inquiry- based teacher evaluation from traditional teacher evaluation. These components are:

- The 5D Framework and the 5D+ Teacher Evaluation Rubric,
- The 5D+ Inquiry Cycle,
- Implementation Requirements,
- Implementation Challenges,
- Helpful Implementation Hints.

In addition, teachers described the impact that the inquiry- based teacher evaluation process had on student learning. Summaries of principal and teacher perceptions within each

component of the studied inquiry- based teacher evaluation process are described below and are captured in Figure 6.

Principal Perspectives

The 5D Framework and the 5D+ Teacher Evaluation Rubric

Principals believed that the 5D instructional framework provided the common language that allowed for better coaching of teachers. The instructional framework and rubric combined helped to keep their focus on good practices, allowing teachers to stay focused on specific aspects of instructional practice and to both see and make small steps towards improvement. Likewise, these tools provided the language to support teachers in goal setting.

Principals reported that the two tools help to change the quality of the conversations principals had with teachers. They believed that the tools provided more specificity and focus to these conversations. The tools also helped to reduce teacher perception of principal bias and whim in the conversations between the principal and teacher. This allowed principals to de-personalize the learning and evaluation process for teachers. Feedback was not about the person, it was about instructional practice and the instructional evidence of that practice.

Principals also believed that the two tools were important to use in other building and district structures for teachers to improve their practice. e.g. staff meetings, team meetings, professional learning community meetings. They believed that the use of a framework and rubric removes opinion so together you can move to strategies.

The 5D+ Inquiry Cycle Process

Principals stated that the 5D+ Inquiry Cycle kept them focused on instruction over the course of the entire school year. It created a structural venue for teachers to be reflective. The inquiry cycle tool started teachers verbalizing what success might look like in their practice and in their students' learning within a specified time period. Principals felt that the tool made teacher's work on their instructional practice more tangible.

Principals appreciated that the inquiry process created an evidence-based process to resolve disagreement between an evaluator and teacher. Disagreement was often the result of differing understandings of what the rubric meant. Unpacking those different understandings of the rubric helped to resolve disagreement. This kept the focus on improvement. Principals withheld summative judgment until the teacher had the chance to improve. Principals believed that this was a major factor in teacher growth and improvement.

According to principals, the inquiry process also provided evidence to determine where a teacher's practice fell on the rubric. This resulted in measurable instructional practice goals that were more grounded in data, either from a baseline observation at the beginning of the year or from previous years observation data. It provided an opportunity for checking half way through the school year to assess how the teacher had grown and to reset goals accordingly. Part of the evidence collecting process and resultant conversation connected student growth in learning to instructional practice. Teachers could visualize their instructional goals and resultant student learning. Principals felt that this was an important leverage point for teachers to grow their practice.

Implementation Requirements

Principals believed that implementing the 5D instructional framework, 5D+ teacher evaluation rubric and 5D+ inquiry process with fidelity to the research in the framework and the provided training was crucial to getting growth in teaching practice and student learning behaviors. They believed that engaging in this training over time was important in order to be able to see the teacher evaluation process differently. Principals consistently used the different teacher evaluation process. This allowed teachers to believe the new process was different from traditional teacher evaluation processes.

Initially principals believed that the rubric was too long. By the end of the year principals believed that having a lot of indicators in the rubric was a good thing because it allowed teachers to "breathe." Teachers were able to see they had areas where they were distinguished. Teachers could then have some indicators that were basic and not feel like they were ineffective, but that they had areas for growth. This allowed teachers to be able to hear feedback and accept it in ways they weren't able to before.

Principals stated that the mid-year inquiry conference called for in the inquiry cycle provided teachers an opportunity to see the whole of their practice. They could look at their instructional practice data across indicators and see they had areas of practice that they didn't need to worry or think about because the data clearly indicated they were proficient or distinguished in that indicator. This allowed them to hone in on the important areas they had identified as their area of focus to work on. Principals also stated that connecting the teacher's area of focus to building

goals helped leverage the building's instructional practice work for teachers. Teachers could see the purpose and connection behind building goals and their own instructional practice.

Implementation Challenges

Principals that were a part of this study reported a steep learning curve to learn and implement the rubric and inquiry process. They believe that principals must know the rubric well in order to give a teacher good feedback and not penalize the teacher because the principal didn't know how to observe instruction, how instructional practice aligned to the rubric or how to coach a specific instructional practice. Being accountable for the entire rubric can feel overwhelming to teachers and principals at first. Once there is deeper understanding of the rubric this goes away.

The new process requires principals to spend time differently. It also takes more time because teachers ask more questions and engage in the evaluation process differently.

Helpful Implementation Hints

Principals that were part of this study identified several factors that made an inquiry-based teacher evaluation process easier or more efficient to implement. They believed it was beneficial to use observed instructional practice and student learning data to determine an area of focus during the pre-inquiry cycle conference. This was a new practice for them. Principals also recommended blocking out adequate time on their calendars to complete all inquiry cycles prior to the beginning of the school year. (See Appendix 5.) They believed it was important to teach staff to support them in order to adhere to the calendar. They also believed this helped to set instruction as a priority for all staff.

Principals reported that it was important for them to help teachers see their area of focus as a manageable chunk of practice teachers would focus on for a few weeks, rather than multiple practices that must be observed in a single high-stakes observation. Principals in this study utilized the area of focus, observation and feedback process in other professional development structures as well, such as teachers recording their practice and analyzing the video with colleagues during team time.

Finally, principals stated that it was important to let go of less effective habits such as observing one or two times for longer periods of time, conferencing about a single lesson instead of ongoing practice, or the principal telling a teacher to work on a practice that isn't connected to their area of focus. They also found it important to adhere to the classroom observation calendar, (e.g. don't let teachers delay the area of focus conversation until "they have more time to think or collect data,") as the conversation is precisely what they need to be able to identify their next steps. (See Appendix 5 for a sample observation calendar.)

Comparison of Principal and Teacher Perspectives

Component	Principals	Teachers
5D Instructional Framework and 5D+ Evaluation Rubric	• Provided common language and focus for coaching teachers • Improved the quality of conversation around teaching practice • Kept conversations evidence based, not personal • Important to use in other professional development structures	• Provided common language for teachers and principals • Helped articulate and measure progress towards goals • Instructional conversations were more purposeful and meaningful • Kept conversations evidence based, not personal
5D+ Inquiry Cycle	• Kept principals and teachers focused on tangible instructional improvement for the entire year • Provided for evidence based reflection, goal setting and conversation • Connected student learning to teacher instructional practice	• Helped teachers improve their practice by keeping focused on evidence, not bias or past practice • Gave teachers ownership of their learning • Deepened professional conversations • Provided a common language that focused feedback • Reduced evaluation anxiety by focusing on ongoing practice
Implementation Requirements	• Use the framework, rubric and inquiry cycle with fidelity • Quality on-going training • Multiple inquiry cycles support ongoing teacher growth • Used inquiry cycles to support building and district learning goals	• Principal support was crucial • Knowing the framework, rubric and inquiry cycle well • Quality on-going training
Implementation Challenges	• There is a steep learning curve to shift principal practice • Principals must know the framework and rubric well • Time must be spent differently	• Learning the entire framework and rubric
Helpful Implementation Hints	• Use instructional practice data to set individual and building goals • Create an observation schedule before school starts • Let go of less effective habits	• Engage in constant conversation • Collaborate with content colleagues to identify evidence • Feedback comes in various ways • Expect relationships to change

Figure 6

Teacher Perspectives

The 5D Framework and the 5+ Teacher Evaluation Rubric

Teachers believed that the framework and rubric helped teachers to articulate goals within their area of focus and measure strides towards accomplishing them. These two tools helped teachers and principals to identify and analyze instructional practice evidence that would indicate the successful accomplishment of the teacher's area of focus. There was as much evidence identified in the conversation part of the inquiry cycle as in the observation. There was little need for teachers to provide additional artifacts as evidence.

Teachers reported that the conversations between a principal and teacher then revolved around the actual evidence from observations and the evidence the teacher wanted to see as a result of their inquiry. The instructional practice evidence collected during observations connected instructional practice to student growth. Principals and teachers believed that their conversations around instructional practice data provided more purpose, meaning and direction to teachers practice.

In addition, teachers believed the framework and rubric helped resolve disagreement between the principal and teacher if or when it occurred. The use of these tools reduced or eliminated principal bias. Teachers and principals could point to the framework and analyze what was and wasn't happening. Part of the resultant conversation was around evidence missed in the observation process.

The 5D+ Inquiry Cycle Process

Teachers reported that the 5D+ Inquiry Cycle process was the best and most important part of the new evaluation system. It's a process that helped teachers learn their craft. It focused teaching on the framework and rubric instead of personal bias or past practice. The inquiry cycle provided questions and a frame to initiate and support teacher learning. In addition, the inquiry cycle helped unpack specific aspects of teaching like learning targets, questioning, and giving ownership to students.

Teachers stated that the inquiry cycle involved teachers in forming their area of focus, giving them ownership of their learning. The area of focus was based on the learning needs of their students and was within their content area. It created a common inquiry language that provided clarity to teachers around what the principal was looking for during the observation and feedback process.

> *"For a teacher with a lot of experience, the evaluation process had become a downer. Your years of practice were reduced to a series of check boxes, satisfactory or unsatisfactory. The inquiry cycle let me delve into my strengths and places I am not so strong. The target of good practice didn't move with the whims of a new administrator or the interests of the principal. It was helpful to know clearly what the targets were and where I was in that spectrum."*
>
> High School World Language Teacher

Teachers reported that the area of focus within the inquiry cycle focused the attention of the teacher and principal on what the teacher needs to improve upon, instead of a wide spectrum of teaching practice. This focus allowed for actual change in practice to occur. Teachers could specifically describe how their instructional practice was different as a result of engaging in the 5D+ inquiry cycle. Their descriptions of what was different mirrored their area of focus, either

their personal area of focus or their buildings area of focus or both, (e.g. learning targets, collecting and using formative assessment data, planning for more than just content).

Teachers believed that the depth of professional conversations the inquiry cycle evoked between principal and teacher and within Professional Learning Communities was unparalleled in previous practice. Conversations about evidence of instructional practice and resultant student learning hadn't happened before. Tying the instructional practice and student learning evidence to the area of focus made the conversations deeper and more valuable.

> *"The inquiry cycle is like a spiral, as you go through the steps of the cycle, the steps focus the questions you're asking about your practice and what you are looking at. As a result of those questions, you are going deeper."*
>
> High School Math Teacher

The inquiry cycle also allowed the teacher and principal to view the same practice through different lenses. This provided an opportunity for the teacher to look at practice from inside the classroom, the principal to look at practice from outside the classroom, and then together engage in conversation about instructional practice that was more rich and meaningful than either could do alone. While the use of the framework and rubric helped to resolve disagreements between the principal and teacher, multiple conversations within the inquiry also helped to accomplish this.

Teachers stated that the threatening aspect of evaluation went away as a result of the conversations with the principal. Teachers were comfortable saying where they got stuck and asking for other perspectives on their practice. Teachers believed that getting feedback from an

administrator and other teachers became more powerful the longer the cycle was used. Without the inquiry process, teachers and principals would be back to traditional evaluation where the principal has his or her interpretation of the evaluation criteria, forms an opinion and shows the teacher at the end of the year where the teacher fell on the scale. Teacher evaluation would return to a series of check off boxes.

Implementation Requirements

Teachers were unanimous in their belief that principal support was important to making an inquiry-based teacher evaluation process different from previous evaluation experiences. Their description of principal support included:

- help to set the area of focus. The principal knew what the teacher was working on.
- the strengths-based stance of the principal. Teachers felt their principal was working with them to improve their practice, not to find what was wrong with their practice and telling them to figure out how to fix it.
- multiple observations followed up by instructional data analysis and conversation with the teacher around the area of focus. This allowed teachers to continuously monitor their area of focus. The teacher was not surprised by what the principal said about their practice at the end of the year. They were able to make

> *"There is a shift from observing and evaluating one lesson to collaboratively reflecting on daily practice. It starts out with trying to make sure you're doing all the pieces and then shifts from "I have to do this" to just what you do. It focuses and clarifies what I do as a teacher. When the light bulb goes off about the fourth session, it is not another layer of stuff to do, it is the best thing I have done in my 40 years of teaching. It's added relevancy to what I do."*
>
> Elementary Teacher

changes mid-stream due to the continuous feedback process embedded in the inquiry cycle.

- principal provided professional development by indicator, specific to a teacher's content area. This allowed teachers to see how the parts fit into the whole. This enabled them to have an area of focus while at the same time feel comfortable with being evaluated on all indicators.
- having administrators in teachers' rooms more often so they were in touch with what teachers were trying on in their practice.

Teachers identified several key teacher actions that made the inquiry cycle effective.

1. Teachers should engage in the self-assessment prior to meeting with the principal / evaluator.
2. Conversations with the principal included the comparison of perspectives from outside (principal) and inside (teacher) the classroom.
3. Understanding the framework / rubric so that all are on the same page.

In addition to these key teacher actions, teachers believed that the instructional data analysis (noticing and wondering) process helped to clarify instructional purpose for the principal and teacher. It was another strategy that helped to identify and resolve areas of potential disagreement between the principal and teacher. All of these actions helped the teacher be reflective about the effectiveness of their practice instead of defensive or dismissive.

Comprehensive training was the final element identified by teachers that was crucial to the successful implementation of an inquiry based evaluation process. This included principals and

teachers taking a deep dive into each of the dimensions, connecting instructional practice to student learning, and learning how to analyze instructional practice data that was observed in the classroom. Teachers believed that ongoing professional development for inquiry-based teacher evaluation needs to include "why are we are doing this?" as well as the "how we can accomplish it together." Teachers believed both the formal professional development and the ongoing conversations that clearly connected district and building initiatives to the framework and rubric were important teacher learning opportunities that helped to ensure successful implementation. Examples of district and building initiatives included professional learning communities, training on student engagement strategies and implementing state standards.

Implementation Challenges

Teachers believed the inquiry process could be improved if the language in the framework and rubric were clearer and less open to interpretation (not requiring multiple emails to understand how the instructional practice evidence aligned to the rubric), with less frequency language as well. In addition to the language in the rubric, teachers stated that it was a challenge to learn all the indicators.

Teachers stated that while learning the process side-by-side with their administrator was helpful, it was problematic to not become too immersed in learning the requirements of the principal role. While teachers did not necessarily understand the purpose of the entire instructional data analysis process, they knew their principals completed the analysis process. Teachers did, however, appreciate the noticing and wondering steps in the analysis process. Teachers did not understand that in order to get to noticings and wonderings that were actually

connected to the area of focus, principals needed to script and code. Likewise, teachers did not understand that developing their own analysis skills could contribute to their own and their colleagues growth in teaching practice.

Helpful Implementation Hints

Teachers reported that the frequent and ongoing conversation between the teacher and the administrator made a huge difference in improving teacher practice. These conversations often included unconventional formats. Some conversations were face-to-face, but not scheduled and not in the principals' office. Other conversations were electronic. The content of these conversations varied as well. Some encompassed the full analysis process, others just parts of the process. Scripts were sent to teachers, read by the teachers and principal questions were answered close to when the observation occurred. This provided the opportunity for teachers to receive feedback in a timely way. Sometimes just reading the script pointed out the teacher's next step, e.g. a teacher could see where he/she was redundant. Reading the script showed the teacher that she could have moved on sooner. For both conventional and unconventional conversation formats to be successful, teachers believed it was important that the script be descriptive, specific and non-judgmental. This kept the conversation between the principal and teacher on the practice, not the person.

Teachers described changed relationships as a result of co-inquiry between the teacher and principal. Learning the rubric and the inquiry process side by side, the teacher and administrator created a learning relationship that was different from previous principal/teacher relationships. Some teachers believed the relationship between the teacher and principal wasn't different, but

the principal's relationship with classroom teaching was radically changed. Principals understood their teachers' practice and had learning-focused relationships with students.

Teachers reported a change in the expectation for the level of engagement from teachers during all kinds of professional development experiences. The building focus was integrated into the inquiry cycle. As a result, teachers more consistently implemented the building instructional practice goals into their daily practice. It became systemic instead of each teacher going their own way. Having a focus as a building and a focus as a district let teachers look at peers objectively, think about the instructional tools they were using and how they could apply them in their own classrooms. Teachers stated that peer observation time should be embedded into the professional practice of teachers.

Teachers believed that collaborating with content area colleagues around what evidence does/doesn't look like was valuable to their professional learning. This happened formally through established processes like professional learning communities or team time and informally by connecting with teacher peers who went through training at the same time.

Finally, most teachers stated that they felt it was efficient to use instructional practice data from the previous year's evaluation in combination with student data from the current year to help determine their area of focus. The exception was if the principal was new to the building. Then, teachers believed, both the instructional practice and student data should be drawn from the school year that the evaluation is to occur.

Impact on Instructional Practice and Student Learning

Each teacher in the study could describe changes in their instructional practice and the resultant impact on students that they believed was a result of engaging in the inquiry-based teacher evaluation process. The descriptions of impact were tightly correlated to their area of focus. The following are quotes from seven different teachers that are examples of these descriptions of impact.

- "I ask more questions and give fewer answers, resulting in students doing more of the thinking." (Elementary Teacher)
- "There is more student talk connected to the content of the lesson." (High School Math Teacher)
- "Learning targets and goals are clear to students. Students learned more as a result of being clear about what they were learning." (Elementary Teacher)
- "Students are setting and tracking their own learning goals. While I had done goal setting with students before, I never got back to tracking the goals with students." (Elementary Teacher)
- "There is more student locus of control in my practice. Lessons and tasks are more student directed, less teacher directed." (High School Teacher)
- "I am not using different assessment tools and rubrics, but I am handling the tools differently. I am asking students to empower themselves to know their goals and assess their own learning progress." (Middle School Teacher "A")
- "It takes time for the kids to learn and do this kind of goal setting, but it results in more student ownership and more effective use of time later because the students own the goals." (Middle School Teacher "B")

Teachers believed there was a clear connection between what the teacher is working on and the impact the teacher's work has on student learning.

Summary of Principal and Teacher Perspectives

This summary of data collected from teachers and principals across two school districts shows that using the 5D+ inquiry process had a marked and significant impact on growing teacher practice within the parameters of a new teacher evaluation model. Teachers found the evaluation process more meaningful than traditional evaluation practice. There was significant overlap in what teachers and principals found useful about using an instructional framework, rubric and an inquiry cycle for teacher evaluation. Both teachers and principals felt the framework provided a common language and kept the conversations safer, focusing on the framework instead of the teacher. This allowed the conversation to result in feedback that the teacher could act on instead of becoming defensive. Both the principals and the teachers initially felt there was a steep learning curve due to the depth and length of the rubric. After using the rubric within inquiry cycles for a year, both principals and teachers felt the length of the rubric was an asset, not a detriment.

While using an inquiry cycle to grow teaching practice within teacher evaluation was the focus of this study, an unintended finding was the importance of the use of an instructional framework and rubric as tools in support of the inquiry cycle to both guide and frame teacher and principal learning. Teachers and principals believed that the use of the 5D Teaching and Learning Instructional Framework, the 5D+ Teacher Evaluation Rubric and the 5D+ inquiry

cycle were important tools to accomplish a positive adult learning environment that resulted both in changes in instructional practice and in the way that students learned.

Conclusions and Recommendations

Traditional teacher evaluation has often been an exercise in compliance that has not led to changed instructional practice or to improvement in student learning. Teacher evaluation has been completed in isolation from colleagues with a focus on a single lesson. At the outset of this project, there was a widely held belief that teacher evaluation was not impacting teaching practice or student learning. I held an equally deep belief that teachers worked hard, were reflective, and committed to their students' learning. As a result of these deeply held beliefs, I set out to answer two questions about how to impact teaching practice effectively.

- How might the use of a multi-stage inquiry cycle within the new teacher evaluation process impact teacher and student learning?
- How is the impact of a multi-stage inquiry cycle teacher evaluation process different from what is known from the literature about the impact of the traditional evaluation process?

Asking these questions of teachers and principals provided answers that are encouraging and exciting. Principals and teachers believed that the potential impact on teaching practice is strong and positive. There is a powerful connection between inquiry-based teacher learning and potential impact on student learning behaviors.

One striking aspect of listening to the teachers and principals talk about using inquiry to grow teacher practice within teacher evaluation was how easily and accurately the new vocabulary around inquiry evaluation was used. Terms like self-assessment, mid-year post-inquiry cycle conference, scripting, coding, noticing and wondering are all new terms to the evaluation process. The vocabulary was used to correctly describe the process in which teachers

and principals were engaging. It was used with confidence. Teachers and principals were clear on what they were talking about and understood each other as they spoke. This is evidence that teachers and principals received training in some manner, either through a job-embedded process or a more traditional professional development process. It is also evidence that teachers and principals were owning the inquiry-based evaluation process. It had become how they do business, how they think, and how they learn together.

The principals and teachers involved in this study substantiated what has been found in prior studies (Desimone, et al, 2002,) that professional development that is job embedded and relevant to the teacher is important to successful implementation of teaching practices in the classroom. We know from the work done in other countries like Finland, that if we want to enable teachers to really change the way they work, then they must have opportunities to talk, think, try out, and hone new practices, which means they must be involved in learning about, developing, and using new ideas with their students (Lieberman, 1996.) It would be unreasonable to assume that inquiry-based teacher evaluation could impact teacher practice and student learning without a strong model for teachers and principals to learn the new process. This model needs to include both the new learning and the opportunity for practicing the new learning in a low stakes, non-evaluative environment (Desimone, et al, 2002.) District A did this by providing five days of professional development for teachers and principals side-by-side. Assignments were given for both teacher and principals to practice their new learning in-between sessions. District B accomplished this by providing seven days of training for principals for a whole year prior to requiring principals to implement the new process. Assignments were given to principals to complete with pilot teachers in-between sessions to develop the inquiry-based skill set.

Summary of Conclusions

The conclusions for this study were corroborated across all studied groups. Both teachers and principals reported that engaging in the 5D+ Inquiry Cycle is what makes this evaluation process different from traditional teacher evaluation. The 5D+ Inquiry Process requires teachers to verbalize what success might look like in their practice and in their students learning behaviors. It requires teachers to identify areas of strength and opportunity for growth in teaching practice. It asks teachers to connect their students' learning to the instructional practice they are working on. Teachers can then identify student learning behaviors that are stronger as a result of their engaging in this inquiry-based teacher evaluation process.

Principals and teachers reported that the 5D+ rubric helps keep principals and teachers focused on strong instructional practices and allows teachers to see and make manageable and measurable steps towards improvement. It provides clarity to teachers around what the principal is looking for during the evaluation process. This common language helped teachers to see their instructional practice goals as research-based instead of the personal opinion of their principal.

Principals and teachers believed that the strengths-based stance inherent in the 5D+ Inquiry Process helped to create a collaborative culture amongst teachers and principals. Teachers sought out other teachers' perspectives when they got stuck in their practice. Teachers valued the feedback based on instructional data that was provided by their principals and actively worked to incorporate the feedback connected to their area of focus into their daily classroom practice.

Teachers stated that having administrators in classrooms more frequently resulted in principals that were more in touch with their teachers' practice and with their students as learners. Teachers felt their principals were working with them to improve their practice instead of trying to find what was wrong with them.

This study utilized the 5Dimensions of Teaching and Learning Instructional Framework, the 5D+ Teacher Evaluation Rubric and the 5D+ Inquiry Cycle as tools to support inquiry-based teacher evaluation. It is this author's belief that other research-based instructional frameworks and rubrics might obtain similar results, but that question was not within the scope of this study.

Recommendations

In order to successfully implement an inquiry-based teacher evaluation process that impacts teacher and student learning, the summarized perceptual data indicate that several factors must be in place. (See Figure 6.)

1. The 5D Teaching and Learning Instructional Framework, the 5D+ Teacher Evaluation Rubric, and the 5D+ Inquiry Cycle must be implemented with fidelity to the framework, rubric and inquiry cycle. According to the teachers and principals in this study, the inquiry cycle, grounded in a research-based framework and rubric is what made this evaluation process a growth opportunity for teachers.

2. The strengths-based stance of the principal results in deeper conversations about teaching practice than principals or teachers have experienced in their previous professional careers. The conversation with the administrator is only as strong as the administrator's skill set. This requires that the principal learn a new skill-set, and be willing to work to remove previous evaluation habits from their practice. It requires a sense of reciprocal accountability on the part of the principal and teacher for both to be learners of the process, and to support each other in their learning. Principals are learning and trying on new coaching / evaluation practices with their teachers. Teachers are learning and trying on new instructional practices in the classroom. The ultimate result of this reciprocal accountability is ongoing conversations about instructional practice and student learning.

Implementation Recommendations

1. Fidelity of Implementation

2. Strengths-based Stance

3. Ongoing Connection Between Instructional Practice and Student Learning

4. Learning New Practice and Habits is Hard and Worth It

Figure 7

3. The area of focus conversations that occur pre, mid and post-inquiry cycle need to include the connection between the practice that is the teacher's instructional practice goal and student learning behaviors that become the teacher's student learning goal. Teachers and principals find it easy to talk about what they want students to do. I believe it is much more difficult to talk about what they want their students to learn as a result of

the teacher's instructional practice. For example, educators find it fairly easy to say they want their students to be able to do double digit multiplication with 95% accuracy. This is what they want their students to do. It is more difficult for them to describe how students will know the role of place value in multiplication and how multiplication is addition in a different form. Historically it has been even more difficult to get teachers to engage in conversation around how their instruction has resulted in students learning these concepts. The perceptual data shows that formative feedback conversations that occur throughout the inquiry process keep teachers and principals grounded in the connection between instructional practice and student learning.

4. Principals and teachers should expect anxiety or concern for both the principal and teacher at the beginning of this process. There will be concern around the amount of new vocabulary to be learned. There will be unease around the frequency of classroom observations. There will be concern around time and scheduling. There will be anxiety around observing for all of the indicators in the rubric. All this tension diminishes as more training occurs and as teachers and principals practice and become more comfortable with the process. Getting comfortable around the new process changes the relationship between the principal and the teacher. They become co-learners. It also changes the relationship between the principal and students. Principals become part of the student learning process and know their students in ways they have not before.

This project assessed the impact of an inquiry-based teacher evaluation process that utilizes aspects of professional networks as teachers and principals engage in learning about instructional

practice together. Together the teachers and principals engaged in this study built a stronger understanding of the parameters for an inquiry-based teacher evaluation system that impacts teacher practice and student learning.

Bibliography

A nation at risk: The imperative for educational reform (1983). Report by National Commission on Excellence in Education.

Acheson, K. & Gall, M. (1987). Techniques in the clinical supervision of teachers: Preservice and inservice applications. Second Edition. White Plains: Longman Inc.

Allen, J.P., Pianta, R.C., Gregory, A., Mikami, A.Y., & Lun, J. (2011) "An interaction-based approach to enhancing secondary school instruction and student achievement." *Science* 333(6045):1034-37.

Barth, R. (1990). *Improving schools from within.* San Francisco: Jossey-Bass.

Barnett, W. S. (1995). Long-term effects of early childhood programs on cognitive and school outcomes. *Future of Children, 5*.

Bascia, N. (1991, April) *The trust agreement projects: Establishing local professional cultures for teachers.* Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Berliner, D. C. (1984, February). Remarks to the Governor's Task Force on Teacher Education, University of Arizona, Tucson.

Bill & Melinda Gates Foundation (2010). Working with Teachers to Develop Fair and Reliable Measures of Effective Teaching (MET Project white paper). Seattle, WA: Author, 1. Retrieved December 16, 2010, from http://www.metproject.org/downloads/met-framing-paper.pdf.

Briggs, D., & Dominque, B. (2011, February). *Due diligence and the evaluation of teachers.* National Educational Policy Center. University of Colorado, Boulder.

Carter, B. (1991, April) *The Stanford/Schools Collaborative: Building an inquiring community of practitioners and researchers.* Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Caspary, K. (2002). California's pioneering training and retention initiatives for early childhood educators. Berkeley, CA: PACE.

Center for American Progress. (2011). Teaching children well: New evidence-based approaches to teacher professional development and training. November.

City, E., Elmore, R., Fiarman, S., & Teitel, L. (2009). Instructional Rounds. Cambridge: Harvard Educational Press.

Cohen, D., Moffitt, & Goldin. (2007) Policy and practice: The dilemma. Electronically published May 22, 2007, *American Journal of Education* 113 (August 2007)

Cohen, D.K., Raudenbush, S.W. & Ball, D.L. (2003). Resources, instruction, and research. *Educational Evaluation and Policy Analysis, 25(2), 119-142.*

Cochran-Smith, M., & Fries, M. (2005). Researching teacher education in changing times: politics and paradigms. In M. Cochran-Smith, & K. Zeichner (Eds.), *Studying teacher education, The report of the AERA panel on research and teacher education*. Mahwahm NJ: Lawrence Erlbaum Publishers.

Copland, M.. (2003) Leadership of Inquiry: Building and Sustaining Capacity for School Improvement. *Educational Evaluation and Policy Analysis,* December, 25, 3750395.

Corcoran, S. (2010). Can teachers be evaluated by their student's test scores? Education Policy for Action Series. Annenberg Institute for School Reform, Brown University.

Darling-Hammond, L. & Lieberman, A. Teacher education around the world: What can we learn from international practice? In Darling-Hammond, L. & Lieberman, A. (Eds.). *Teacher education around the world.* (pp. 130-150.) New York: Routledge.

Darling-Hammond, L. & McLaughlin, M. Teacher education around the world: What can we learn from international practice? In Darling-Hammond, L. & Lieberman, A. (Eds.). *Teacher education around the world.* (p.203.) New York: Routledge.

Delandshere, G. & Petrosky, A. (2010). The use of portfolios in preservice teacher education: A critical appraisal. In M. Kennedy (Ed.), *Teacher assessment and the quest for teacher quality: A handbook.* (pp. 9-42). San Francisco: Jossey-Bass.

Desimone, L.M., Porter, A., Garet, M.S., Yoon, K.S., & Birman, B.F. (2002). Effects of professional development on teacher's instruction: results from a three-year longitudinal study. *Educational policy and analysis.* Vol 24. No 2. (pp. 81-112). American Educational Research Association.

Donaldson, M.L. (2009). *So long, Lake Wobegon? Using teacher evaluation to raise teacher quality.* Washington, DC: Center for American Progress. Retrieved from www.americanprogress.org/issues/2009/06/pdf/teacher_evaluation.pdf.

Donaldson, M.L., & Peske, H. (2010). *Supporting effective teaching through teacher evaluation: A study of teacher evaluation in five charter schools.* Washington, DC: Center for American Progress.

Duffett, A., Farkas, S., Rothertham, A.J., & Silva, E. (2008). *Waiting to be won over: Teachers speak on the profession, unions, and reform.* Washington, DC: Education Sector.

Fine, M. (1991). *On charters: Creating uncommon communities for urban adolescents in their public high schools.* Unpublished manuscript.

Fink, S. & Markholt, A. (2011). Leading for instructional improvement: How successful leaders develop teaching and learning expertise. San Francisco: Jossey-Bass.

Gathering feedback for teaching: Combining high-quality observations with student surveys and achievement gains. (2012). Bill and Melinda Gates Foundation Research Paper. January.

Hattie, J. (2003). *Teachers make a difference: What is the research evidence?* Australian Council for Educational Research: University of Auckland.

Haycock, K. (1998). *Good teaching matters*. Education Trust: Washington, DC.

Henderson, A., & Mapp, K. (2002). A new wave of evidence: The impact of school, family and community connections on student achievement. Synthesis for Southwest Educational Lab. Austin.

Hines, L. (2010). Disposition assessment: The science and psychology of teacher selection. In M. Kennedy (Ed.), *Teacher assessment and the quest for teacher quality: A handbook.* (pp. 43-66). San Francisco: Jossey-Bass.

Howes, C., Phillipsen, L., & Peisner-Feinberg, C. (2000). The consistency and predictability of teacher- child relationships during the transition to kindergarten. *Journal of School Psychology, 38(2),* 113-132.

Jamentz, K. (1996). Assessment as a heuristic for professional practice. In M. McLaughlin & I. Oberman (Eds.), *Teacher learning: New Policies, new practices.* pp.53-62. New York: Teachers College Press.

Kane, T.J. & Staiger, D.O., et al. (2012, January). Gathering Feedback for Teaching: Combining High-Quality Observation with Student Surveys and Achievement Gains (MET Project research paper). Seattle, WA: Bill & Melinda Gates Foundation. Retrieved January 18, 2012, from http://www.metproject.org/reports.php.

Kennedy, Mary M., "Monitoring and Assessing Teacher Quality," (paper presented at the annual meeting of the American Educational Research Association, Chicago, April 2007).

Kennedy, M. (2012) Teacher Assessment and the Quest for Teacher Quality: A Handbook. Jossey-Bass. M. Kennedy et al. (Ed.). San Francisco

Larrivee, B., & Cooper, J. (2006). An educator's guide to teacher reflection. Cengage Learning.

Lichtenstein, G., McLaughlin, M., & Knudsen, J. (1992). Teacher empowerment and professional knowledge. In A. Lieberman (Ed.), *The changing contexts of teaching: National Society for the Study of Education Yearbook (pp. 37-58).* Chicago: University of Chicago Press.

Lieberman, A. (Ed.). (1995) *The work of restructuring schools: Building from the ground up.* New York: Teachers College Press.

Lieberman, A. & McLaughlin, M. (1996). Networks for educational change. In M. McLaughlin & I. Oberman (Eds.), *Teacher learning: New Policies, new practices.* pp. 63-72. New York: Teachers College Press.

Little, J. W., & McLaughlin, M. W. (1991) *Urban math collaboratives: As the teachers tell it.* Stanford, CA: Center for Research on the Context of Teaching.

Lord, B. (1991, April) *Subject area collaboratives, teacher professionalism and staff development.* Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Marzano, R. J. (2012). *The two purposes of teacher evaluation.* Educational Leadership, 70(3), 14-19. ASCD.

McClure, R. (1991). Individual growth and institutional renewal. In A. Lieberman & L. Miller (Eds.), *Staff development for Education in the 90s* (pp. 221-241). New York: Teachers College Press.

McGuinn,P. (2012). The state of teacher evaluation reform: State education agency capacity and the implementation of new teacher evaluation systems. Center for American Progress, November Report.

McLoughlin. M. (1991). Enabling professional development: What have we learned? In A. Lieberman & L. Miller (Eds.). *Staff development for Education in the 90s* (pp. 61-82). New York: Teachers College Press.

McLaughlin, M.W., & Oberman, I. (Eds.) (1996) *Teacher Learning: New Policies, New Practices*. editors. Teachers College Press. 1996.

Meyer, L.A., Wardrop, J.L., Hastings, C.N., & Linn, R.L. (1993). Effects of ability and settings on kindergarteners' reading performance. *Journal of Educational Research, 86(3),* 142-160.

National Institute of Child Health and Human Development, Early Child Care Research Network (1996). Characteristics of infant child care: Factors contributing to positive caregiving. *Early Childhood Research Quarterly, 11(3),* 269-306.

National Institute of Child Health and Human Development, Early Child Care Research Network (1999). Child outcomes when child care center classes meet recommended standards for quality. *American Journal of Public Health, 89*, 1072-1077.

National Institute of Child Health and Human Development, Early Child Care Research 26 Network (2002). The relation of global first-grade classroom environment to structural classroom features and teacher and student behaviors. *The Elementary School Journal, 102(5)*, 367-387.

National Institute of Child Health and Human Development, Early Child Care Research Network (in press a). Social functioning in first grade: Prediction from home, child care and concurrent school experience. *Child Development*.

National Institute of Child Health and Human Development, Early Child Care Research Network (in press b). Class size in first grade: Relations with classroom process and child outcomes. *Educational Evaluation and Policy Analysis*.

National Institute of Child Health and Human Development, Early Child Care Research Network (2003). A day in third grade: Observational descriptions of third grade classrooms and associations with teacher characteristics. Manuscript in preparation.

Peisner-Feinberg, E.S., & Burchinal, M.R. (1997). Relations between preschool children's child-care experiences and concurrent development: The Cost, Quality, and Outcomes Study. *Merrill-Palmer Quarterly, 43(3),* 451-477.

Pianta, R. C. (2003, March). Professional development and observations of classroom process. Paper presented at the SEED Symposium on Early Childhood Professional Development, Washington, DC.

Pianta, R. C. (2003, October). *Standardized classroom observations from pre-K to third grade: A mechanism for improving quality classroom experiences during the P-3 Years.* Unpublished paper. University of Virginia.

Pianta, R. C. & Hamre, B.K. (2009) Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. Educational Researcher, March, vol. 38 no. 2, pp.109-119.

Pressley, M. (2002). Comprehension strategies instruction: A turn-of-the-century status report. In C.C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (pp. 11–27). New York: Guilford.

Ripple, C. H., Gilliam, W. S., Chanana, N., & Zigler, E. (1999). Will fifty cooks spoil the broth? The debate over entrusting Head Start to the states. *American Psychologist, 54,* 327-343.

Rivkin, S., Hanushek, E. and Kain, J. (2005.) Teachers, schools, and academic achievement. *Econometrica,* Vol. 73, No. 2 (March) pages 417– 458.

Seashore-Louis, K., Leithwood, K., Wahlstrom, K., & Anderson, S. (2010). Investigating the links to improved student learning: Final report of research findings. Final Report to The Wallace Foundation.

Smith, H., & Wiggington, E., with Hocking, K., & Jones, R. E. (1991). Foxfire teacher networks. In A. Lieberman & L. Miller (Eds.), *Staff development for education in the 90s* (pp. 193-220). New York: Teachers College Press.

Taylor, S. & Tyler, J. (2012). Can teacher evaluation improve teaching? In *EducationNext,* Fall.

Weisberg, D., Sexton, S., Mulhern, J, & Keeling, D. (2009) The widget effect: Our national failure to acknowledge and act on differences in teacher effectiveness. The New Teacher Project.

Appendix 1: 5 Dimensions of Teaching and Learning Instructional Framework

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5 Dimensions of Teaching and Learning™

Instructional Framework Version 4.0

5D™	Subdimension	The Vision	Guiding Questions
Purpose	Standards	• The lesson is based on grade-level standards, is meaningful and relevant beyond the task at hand (e.g., relates to a broader purpose or context such as problem-solving, citizenship, etc.), and helps students learn and apply transferable knowledge and skills. • The lesson is intentionally linked to other lessons (previous and future) in support of students meeting standard(s).	• How do the standard and learning target relate to content knowledge, habits of thinking in the discipline, transferable skills, and students' assessed needs as learners (re: language, culture, academic background)? • How do the standard and learning target relate to the ongoing work of this classroom? To the intellectual lives of students beyond this classroom? To broader ideals such as problem-solving, citizenship, etc.? • What is the learning target(s) of the lesson? How is it meaningful and relevant beyond the specific task/activity? • Is the task/activity aligned with the learning target? How does what students are actually engaged in doing help them to achieve the desired outcome(s)? • How are the standard(s) and learning target communicated and made accessible to all students? • How do students communicate their understanding about what they are learning and why they are learning it? • How does the learning target clearly communicate what students will know and be able to do as a result of the lesson? What will be acceptable evidence of student learning? • How do teaching point(s) support the learning needs of individual students in meeting the learning target(s)?
	Learning Target and Teaching Points	• The learning target is clearly articulated, linked to standards, embedded in instruction, and understood by students. • The learning target is measurable. The criteria for success are clear to students and the performance tasks provide evidence that students are able to understand and apply learning in context. • The teaching points are based on knowledge of students' learning needs (academic background, life experiences, culture and language) in relation to the learning target(s).	
Student Engagement	Intellectual Work	• Students' classroom work embodies substantive intellectual engagement (reading, thinking, writing, problem-solving and meaning-making). • Students take ownership of their learning to develop, test and refine their thinking.	• What is the frequency of teacher talk, teacher-initiated questions, student-initiated questions, student-to-student interaction, student presentation of work, etc.? • What does student talk reveal about the nature of students' thinking? • Where is the locus of control over learning in the classroom? • What evidence do you observe of student engagement in intellectual, academic work? What is the nature of that work? • What is the level and quality of the intellectual work in which students are engaged (e.g. factual recall, procedure, inference, analysis, meta-cognition)? • What specific strategies and structures are in place to facilitate participation and meaning-making by all students (e.g. small group work, partner talk, writing, etc.)? • Do all students have access to participation in the work of the group? Why/why not? How is participation distributed? • What questions, statements, and actions does the teacher use to encourage students to share their thinking with one another, to build on one another's ideas, and to assess their understanding of one another's ideas?
	Engagement Strategies	• Engagement strategies capitalize on and build upon students' academic background, life experiences, culture and language to support rigorous and culturally relevant learning. • Engagement strategies encourage equitable and purposeful student participation and ensure that all students have access to, and are expected to participate in, learning.	
	Talk	• Student talk reflects discipline-specific habits of thinking and ways of communicating. • Student talk embodies substantive and intellectual thinking.	

5D™	Subdimension	The Vision	Guiding Questions
Curriculum & Pedagogy	Curriculum	• Instructional materials (e.g., texts, resources, etc.) and tasks are appropriately challenging and supportive for all students, are aligned with the learning target and content area standards, and are culturally and academically relevant. • The lesson materials and tasks are related to a larger unit and to the sequence and development of conceptual understanding over time.	• How does the learning in the classroom reflect authentic ways of reading, writing, thinking and reasoning in the discipline under study? (e.g., How does the work reflect what mathematicians do and how they think?) • How does the content of the lesson (e.g., text or task) influence the intellectual demand (e.g. the thinking and reasoning required)? How does it align to grade-level standards? • How does the teacher scaffold the learning to provide all students with access to the intellectual work and to participation in meaning-making? • What does the instruction reveal about the teacher's understanding of how students learn, of disciplinary habits of thinking, and of content knowledge? • How is students' learning of content and transferable skills supported through the teacher's intentional use of instructional strategies and materials? • How does the teacher differentiate instruction for students with different learning needs—academic background, life experiences, culture and language?
	Teaching Approaches and/or Strategies	• The teacher makes decisions and utilizes instructional approaches in ways that intentionally support his/her instructional purposes. • Instruction reflects and is consistent with pedagogical content knowledge and is culturally responsive, in order to engage students in disciplinary habits of thinking. • The teacher uses different instructional strategies, based on planned and/or in-the-moment decisions, to address individual learning needs.	
	Scaffolds for Learning	• The teacher provides scaffolds for the learning task that support the development of the targeted concepts and skills and gradually releases responsibility, leading to student independence.	
Assessment for Student Learning	Assessment	• Students assess their own learning in relation to the learning target. • The teacher creates multiple assessment opportunities and expects all students to demonstrate learning. • Assessment methods include a variety of tools and approaches to gather comprehensive and quality information about the learning styles and needs of each student (e.g., anecdotal notes, conferring, student work samples, etc.). • The teacher uses observable systems and routines for recording and using student assessment data (e.g., charts, conferring records, portfolios, rubrics). • Assessment criteria, methods and purposes are transparent and match the learning target.	• How does the instruction provide opportunities for all students to demonstrate learning? How does the teacher capitalize on those opportunities for the purposes of assessment? • How does the teacher gather information about student learning? How comprehensive are the sources of data from which he/she draws? • How does the teacher's understanding of each student as a learner inform how the teacher pushes for depth and stretches boundaries of student thinking? • How do students use assessment data to set learning goals and gauge progress to increase ownership in their learning? • How does the teacher's instruction reflect planning for assessment? • How does the teacher use multiple forms of assessment to inform instruction and decision-making? • How does the teacher adjust instruction based on in-the-moment assessment of student understanding?
	Adjustments	• The teacher uses formative assessment data to make in-the-moment instructional adjustments, modify future lessons, and give targeted feedback to students.	
Classroom Environment & Culture	Use of Physical Environment	• The physical arrangement of the room (e.g., meeting area, resources, student seating, etc.) is conducive to student learning. • The teacher uses the physical space of the classroom to assess student understanding and support learning (e.g., teacher moves around the room to observe and confer with students). • Students have access to resources in the physical environment to support learning and independence (e.g., libraries, materials, charts, technology, etc.).	• How does the physical arrangement of the classroom, as well as the availability of resources and space to both the teacher and students, purposefully support and scaffold student learning? • How and to what extent do the systems and routines of the classroom facilitate student ownership and independence? • How and to what extent do the systems and routines of the classroom reflect values of community, inclusivity, equity and accountability for learning? • What is the climate for learning in this classroom? How do relationships (teacher-student, student-student) support or hinder student learning? • What do discourse and interactions reveal about what is valued in this classroom? • What are sources of status and authority in this classroom (e.g., reasoning and justification, intellectual risk-taking, popularity, aggressiveness, etc.)?
	Classroom Routines and Rituals	• Classroom systems and routines facilitate student responsibility, ownership and independence. • Available time is maximized in service of learning.	
	Classroom Culture	• Classroom discourse and interactions reflect high expectations and beliefs about all students' intellectual capabilities and create a culture of inclusivity, equity and accountability for learning. • Classroom norms encourage risk-taking, collaboration and respect for thinking.	

Appendix 2: 5D+ Teacher Evaluation Rubric

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5D+™ Teacher Evaluation Rubric

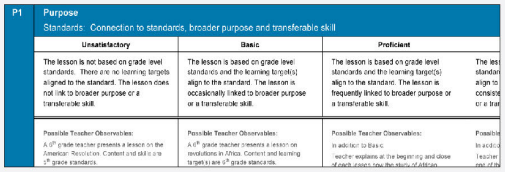
We know that building the capacity of teachers will lead to better instruction and greater learning for all students. Helping educators understand what good teaching looks like is at the heart of the Center for Educational Leadership's 5D+ Teacher Evaluation Rubric – a growth-oriented tool for improving instruction.

Dimensions of the 5D+ Teacher Evaluation Rubric

The 5D+ Teacher Evaluation Rubric is based on the 5 Dimensions of Teaching and Learning (5D) instructional framework, which is derived from an extensive study of research on the core elements that constitute quality instruction. These core elements have been incorporated into the 5D framework and 5D+ rubric as five dimensions – Purpose, Student Engagement, Curriculum & Pedagogy, Assessment for Student Learning, and Classroom Environment & Culture – which are divided into 13 subdimensions. The 5D+ rubric also includes Professional Collaboration and Communication, which is based on activities and relationships that teachers engage in outside of classroom instruction.

Organization of the 5D+ Teacher Evaluation Rubric

The 5D+ rubric is composed of 37 indicators of teacher performance, each appearing on a separate page of the rubric. In the example below: the dimension is Purpose, the subdimension is Standards, and the indicator is Connection to Standards, Broader Purpose and Transferable Skill. The pages are color-coded by dimension.



P1	Purpose Standards: Connection to standards, broader purpose and transferable skill			
	Unsatisfactory	Basic	Proficient	
	The lesson is not based on grade level standards. There are no learning targets aligned to the standard. The lesson does not link to broader purpose or a transferable skill.	The lesson is based on grade level standards and the learning target(s) align to the standard. The lesson is occasionally linked to broader purpose or a transferable skill.	The lesson is based on grade level standards and the learning target(s) align to the standard. The lesson is frequently linked to broader purpose or a transferable skill.	The les standar align to consis or a tra
	Possible Teacher Observables: A 6th grade teacher presents a lesson on the American Revolution. Content and skill are 6th grade standards.	Possible Teacher Observables: A 6th grade teacher presents a lesson on revolutions in Africa. Content and learning target(s) are 6th grade standards.	Possible Teacher Observables: In addition to Basic: Teacher explains at the beginning and close of each lesson how the study of African	Possible In addi Teacher one of th

Performance Levels

Performance levels within each indicator are used to delineate teaching practice, from unsatisfactory to basic, proficient and distinguished. The sophistication of teaching practice and the role of students increase across the levels of performance. The language describing each performance level has been carefully examined by a psychometrician to assure clarity, to avoid the risk of a teacher being rated more than once for similar teaching behavior, and to ensure that each indicator evaluates only one aspect of teaching practice. A careful analysis of instructional practice leads to the determination of a teacher's performance level on each indicator.

Resources and Support

This 5D+ Teacher Evaluation Rubric is available as a pdf on the University of Washington Center for Educational Leadership website at www.k-12leadership.org/teacher-eval. You will also find associated resource materials and a description of the services CEL can provide to support your implementation.

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5D+™ Teacher Evaluation Rubric

	Purpose			
	Unsatisfactory	**Basic**	**Proficient**	**Distinguished**
P1	**Standards: Connection to standards, broader purpose and transferable skill**			
	The lesson is not based on grade level standards. There are no learning targets aligned to the standard. The lesson does not link to broader purpose or a transferable skill.	The lesson is based on grade level standards and the learning target(s) align to the standard. The lesson is occasionally linked to broader purpose or a transferable skill.	The lesson is based on grade level standards and the learning target(s) align to the standard. The lesson is frequently linked to broader purpose or a transferable skill.	The lesson is based on grade level standards and the learning target(s) align to the standard. The lesson is consistently linked to broader purpose or a transferable skill.
P2	**Standards: Connection to previous and future lessons**			
	The lesson is rarely or never linked to previous and future lessons.	The lesson is clearly linked to previous and future lessons.	The lesson is clearly linked to previous and future lessons. Lessons build on each other in a logical progression.	The lesson is clearly linked to previous and future lessons. Lessons build on each other in ways that enhance student learning. Students understand how the lesson relates to previous lesson.
P3	**Teaching Point: Teaching point(s) are based on students' learning needs**			
	Teacher rarely or never bases the teaching point(s) on students' learning needs – academic background, life experiences, culture and language.	Teacher bases the teaching point(s) on limited aspects of students' learning needs – academic background, life experiences, culture and language.	Teacher bases the teaching point(s) on the learning needs – academic background, life experiences, culture and language – for some groups of students.	Teacher bases the teaching point(s) on the learning needs – academic background, life experiences, culture and language – for groups of students and individual students.
P4	**Learning Target: Communication of learning target(s)**			
	Teacher rarely or never states or communicates with students about the learning target(s).	Teacher states the learning target(s) at the beginning of each lesson.	Teacher communicates the learning target(s) through verbal and visual strategies and checks for student understanding of what the target(s) are.	Teacher communicates the learning target(s) through verbal and visual strategies, checks for student understanding of what the target(s) are and references the target throughout instruction.
P5	**Learning Target: Success criteria and performance task(s)**			
	The success criteria for the learning target(s) are nonexistent or aren't clear to students.	The success criteria for the learning target(s) are clear to students. The performance tasks align to the success criteria in a limited manner.	The success criteria for the learning target(s) are clear to students. The performance tasks align to the success criteria.	The success criteria for the learning target(s) are clear to students. The performance tasks align to the success criteria. Students refer to success criteria and use them for improvement.

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	Student Engagement			
	Unsatisfactory	**Basic**	**Proficient**	**Distinguished**
SE1	**Intellectual Work: Quality of questioning**			
	Teacher rarely or never asks questions to probe and deepen students' understanding or uncover misconceptions.	Teacher occasionally asks questions to probe and deepen students' understanding or uncover misconceptions.	Teacher frequently asks questions to probe and deepen students' understanding or uncover misconceptions. Teacher assists students in clarifying their thinking with one another.	Teacher frequently asks questions to probe and deepen students' understanding or uncover misconceptions. Teacher assists students in clarifying and assessing their thinking with one another. Students question one another to probe for deeper thinking.
SE2	**Intellectual Work: Ownership of learning**			
	Teacher rarely or never provides opportunities and strategies for students to take ownership of their own learning to develop, test and refine their thinking.	Teacher occasionally provides opportunities and strategies for students to take ownership of their learning. Locus of control is with teacher.	Teacher provides opportunities and strategies for students to take ownership of their learning. Some locus of control is with students in ways that support students' learning.	Teacher consistently provides opportunities and strategies for students to take ownership of their learning. Most locus of control is with students in ways that support students' learning.
SE3	**Engagement Strategies: High cognitive demand**			
	Teacher expectations and strategies engage few or no students in work of high cognitive demand.	Teacher expectations and strategies engage some students in work of high cognitive demand.	Teacher expectations and strategies engage most students in work of high cognitive demand.	Teacher expectations and strategies engage all students in work of high cognitive demand.
SE4	**Engagement Strategies: Strategies that capitalize on learning needs of students**			
	Teacher rarely or never uses strategies based on the learning needs of students – academic background, life experiences, culture and language of students.	Teacher uses strategies that capitalize and are based on learning needs of students – academic background, life experience and culture and language of students – for the whole group.	Teacher uses strategies that capitalize and are based on learning needs of students – academic background, life experiences, culture and language of students – for the whole group and small groups of students.	Teacher uses strategies that capitalize and build upon learning needs of students – academic background, life experiences, culture and language of students – for the whole group, small groups of students and individual students.
SE5	**Engagement Strategies: Expectation, support and opportunity for participation and meaning making**			
	Teacher rarely or never uses engagement strategies and structures that facilitate participation and meaning making by all students. Few students have the opportunity to engage in quality talk.	Teacher uses engagement strategies and structures that facilitate participation and meaning making by students. Some students have the opportunity to engage in quality talk.	Teacher sets expectation and provides support for a variety of engagement strategies and structures that facilitate participation and meaning making by students. Most students have the opportunity to engage in quality talk.	Teacher sets expectation and provides support for a variety of engagement strategies and structures that facilitate participation and meaning making by students. All students have the opportunity to engage in quality talk. Routines are often student-led.
SE6	**Talk: Substance of student talk**			
	Student talk is nonexistent or is unrelated to content or is limited to single-word responses or incomplete sentences directed to teacher.	Student talk is directed to teacher. Talk associated with content occurs between students, but students do not provide evidence for their thinking.	Student-to-student talk reflects knowledge and ways of thinking associated with the content. Students provide evidence to support their thinking.	Student-to-student talk reflects knowledge and ways of thinking associated with the content. Students provide evidence to support their arguments and new ideas.

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	Curriculum & Pedagogy			
	Unsatisfactory	**Basic**	**Proficient**	**Distinguished**
CP1	**Curriculum: Alignment of instructional materials and tasks**			
	Instructional materials and tasks rarely or never align with the purpose of the unit and lesson.	Instructional materials and tasks align with the purpose of the unit and lesson.	Instructional materials and tasks align with the purpose of the unit and lesson. Materials and tasks frequently align with student's level of challenge.	Instructional materials and tasks align with the purpose of the unit and lesson. Materials and tasks consistently align with student's level of challenge.
CP2	**Teaching Approaches and/or Strategies: Discipline-specific conceptual understanding**			
	Teacher rarely or never uses discipline-specific teaching approaches and strategies that develop students' conceptual understanding.	Teacher occasionally uses discipline-specific teaching approaches and strategies that develop students' conceptual understanding.	Teacher frequently uses discipline-specific teaching approaches and strategies that develop students' conceptual understanding.	Teacher consistently uses discipline-specific teaching approaches and strategies that develop students' conceptual understanding.
CP3	**Teaching Approaches and/or Strategies: Pedagogical content knowledge**			
	Instruction is rarely or never consistent with pedagogical content knowledge and does not support students in discipline-specific habits of thinking.	Instruction is occasionally consistent with pedagogical content knowledge and supports students in discipline-specific habits of thinking.	Instruction is frequently consistent with pedagogical content knowledge and supports students in discipline-specific habits of thinking.	Instruction is always consistent with pedagogical content knowledge and supports students in discipline-specific habits of thinking.
CP4	**Teaching Approaches and/or Strategies: Teacher knowledge of content**			
	Teacher demonstrates a lack of knowledge of discipline-based concepts by making content errors.	Teacher demonstrates a basic knowledge of how discipline-based concepts relate to or build upon one another.	Teacher demonstrates a solid understanding of how discipline-based concepts relate to or build upon one another. Teacher identifies and addresses student misconceptions in the lesson or unit.	Teacher demonstrates an in-depth understanding of how discipline-based concepts relate to or build upon one another. Teacher identifies and addresses student misconceptions that impact conceptual understanding over time.
CP5	**Teaching Approaches and/or Strategies: Differentiated instruction**			
	Teacher rarely or never uses strategies that differentiate for individual learning strengths and needs.	Teacher occasionally uses strategies that differentiate for individual learning strengths and needs.	Teacher frequently uses strategies that differentiate for individual learning strengths and needs.	Teacher consistently uses strategies that differentiate for individual learning strengths and needs.
CP6	**Scaffolds for Learning: Scaffolds the task**			
	Teacher rarely or never provides scaffolds and structures that are related to and support the development of the targeted concepts and/or skills.	Teacher provides limited scaffolds and structures that may or may not be related to and support the development of the targeted concepts and/or skills.	Teacher provides scaffolds and structures that are clearly related to and support the development of the targeted concepts and/or skills.	Teacher provides scaffolds and structures that are clearly related to and support the development of the targeted concepts and/or skills. Students use scaffolds across tasks with similar demands.
CP7	**Scaffolds for Learning: Gradual release of responsibility**			
	Teacher rarely or never uses strategies for the purpose of gradually releasing responsibility to students to promote learning and independence.	Teacher occasionally uses strategies for the purpose of gradually releasing responsibility to students to promote learning and independence.	Teacher frequently uses strategies for the purpose of gradually releasing responsibility to students to promote learning and independence.	Teacher consistently uses strategies for the purpose of gradually releasing responsibility to students to promote learning and independence. Students expect to be self-reliant.

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	Assessment for Student Learning			
	Unsatisfactory	**Basic**	**Proficient**	**Distinguished**
A1	**Assessment: Self-assessment of learning connected to the success criteria**			
	Students are rarely or never given an opportunity to assess their own learning in relation to the success criteria for the learning target.	Students are occasionally given an opportunity to assess their own learning in relation to the success criteria for the learning target.	Students frequently assess their own learning in relation to the success criteria for the learning target.	Students consistently assess their own learning in relation to the success criteria and can determine where they are in connection to the learning target.
A2	**Assessment: Demonstration of learning**			
	Assessments are not aligned with the learning targets.	Assessment tasks are partially aligned with the learning targets, allowing students to demonstrate some understanding and/or skill related to the targets.	Assessment tasks are aligned with the learning targets, allowing students to demonstrate their understanding and/or skill related to the learning targets.	Assessment tasks are aligned with the learning targets and allow students to demonstrate complex understanding and/or skill related to the learning targets.
A3	**Assessment: Formative assessment opportunities**			
	Teacher rarely or never provides formative assessment opportunities during the lesson.	Teacher only provides formative assessment opportunities to determine students' understanding of directions and task.	Teacher provides formative assessment opportunities that align with the learning target(s).	Teacher provides a variety of strategies for formative assessment that align with the learning target(s).
A4	**Assessment: Collection systems for formative assessment data**			
	Teacher rarely or never uses an observable system and/or routines for recording formative assessment data.	Teacher has an observable system and routines for recording formative assessment data and occasionally uses the system for instructional purposes.	Teacher has an observable system and routines for recording formative assessment data, uses multiple sources and frequently uses the system for instructional purposes.	Teacher has an observable system and routines for recording formative assessment data, uses multiple sources and consistently uses the system for instructional purposes.
A5	**Assessment: Student use of assessment data**			
	Students rarely or never use assessment data to assess their own learning.	Students occasionally use assessment data to assess their own learning, determine learning goals and monitor progress over time.	Students frequently use assessment data to assess their own learning, determine learning goals and monitor progress over time.	Students consistently use assessment data to assess their own learning, determine learning goals and monitor progress over time.
A6	**Adjustments: Teacher use of formative assessment data**			
	Teacher rarely or never uses formative assessment data to make instructional adjustments, give feedback to students or modify lessons.	Teacher uses formative assessment data to modify future lessons.	Teacher uses formative assessment data to make in-the-moment instructional adjustments, modify future lessons and give general feedback aligned with the learning target.	Teacher uses formative assessment data to make in-the-moment instructional adjustments, modify future lessons and give targeted feedback aligned with the learning target to individual students.

	Classroom Environment & Culture			
	Unsatisfactory	**Basic**	**Proficient**	**Distinguished**
CEC1	**Use of Physical Environment: Arrangement of classroom**			
	Physical environment of the room is unsafe and the arrangement gets in the way or distracts from student learning and the purpose of the lesson.	The physical environment is safe but the arrangement neither supports nor distracts from student learning or the purpose of the lesson.	The physical environment is safe, and the arrangement supports student learning and the purpose of the lesson.	The physical environment is safe, and the arrangement supports student learning and the purpose of the lesson. Teacher and students use the physical arrangement for learning.
CEC2	**Use of Physical Environment: Accessibility and use of materials**			
	The resources, materials and technology in the classroom do not relate to the content or current units studied, or are not accessible to all students to support their learning during the lesson.	The resources, materials and technology in the classroom relate to the content or current unit studied and are accessible to all students but are not referenced by teacher.	The resources, materials and technology in the classroom relate to the content or current unit studied, are accessible to all students and are intentionally used by teacher to support learning.	The resources, materials and technology in the classroom relate to the content or current unit studied, are accessible to all students and are intentionally used by both teacher and student to support learning. Students are familiar and comfortable with using the available resources.
CEC3	**Classroom Routines and Rituals: Discussion, collaboration and accountability**			
	Routines for discussion and collaborative work are absent, poorly executed or do not hold students accountable for their work and learning.	Routines for discussion and collaborative work are present, but may not result in effective discourse. Students are held accountable for completing their work but not for learning.	Routines for discussion and collaborative work have been taught, are evident, and result in effective discourse related to the lesson purpose. With prompts, students use these routines during the lesson. Students are held accountable for their work and learning.	Routines for discussion and collaborative work have been explicitly taught, are evident, and result in effective discourse related to the lesson purpose. Students independently use the routines during the lesson. Students are held accountable for their work, take ownership for their learning and support the learning of others.
CEC4	**Classroom Routines and Rituals: Use of learning time**			
	Teacher or students frequently disrupt or interrupt learning activities, which results in loss of learning time. Transitions are disorganized and result in loss of instructional time.	Teacher or students occasionally disrupt or interrupt learning activities, which results in some loss of learning time. Some transitions are disorganized and result in loss of instructional time.	Learning time is mostly maximized in service of learning. Transitions are teacher-dependent and maximize instructional time.	All available time is maximized in service of learning. Transitions are student-managed, efficient, and maximize instructional time.
CEC5	**Classroom Routines & Rituals: Managing student behavior**			
	Teacher rarely or never responds to student misbehavior by following classroom routines and/or building discipline procedures. Student behavior does not change or may escalate.	Teacher responds to student misbehavior by following classroom routines and/or building discipline procedures, but with uneven student behavior results.	Teacher responds to student misbehavior by following classroom routines and building discipline procedures. Student misbehavior is rare.	Teacher responds to student misbehavior by following classroom routines and building discipline procedures. Student behavior is appropriate. Students manage themselves, assist each other in managing behavior, or there is no student misbehavior.

	Classroom Environment & Culture			
	Unsatisfactory	**Basic**	**Proficient**	**Distinguished**
CEC6	**Classroom Culture: Student status**			
	Teacher does not develop appropriate and positive teacher-student relationships that attend to students' well-being. Patterns of interaction or lack of interaction promote rivalry and/or unhealthy competition among students or some students are relegated to low status positions.	Teacher demonstrates appropriate teacher-student relationships that foster students' well-being. Patterns of interaction between teacher and students may send messages that some students' contributions are more valuable than others.	Teacher and students demonstrate appropriate teacher-student and student-student relationships that foster students' well-being and adapt to meet individual circumstances. Patterns of interaction between teacher and students and among students indicate that all are valued for their contributions.	Teacher and students demonstrate appropriate teacher-student and student-student relationships that foster students' well-being and adapt to meet individual circumstances. Patterns of interaction between teacher and students and among students indicate that all are valued for their contributions. Teacher creates opportunities for students' status to be elevated.
CEC7	**Classroom Culture: Norms for learning**			
	Classroom norms are not evident and/or do not address risk taking, collaboration, respect for divergent thinking or students' culture.	Classroom norms are evident and encourage risk taking, collaboration, respect for divergent thinking and students' culture. Teacher and student interactions occasionally align with the norms.	Classroom norms are evident and encourage risk taking, collaboration, respect for divergent thinking and students' culture. Teacher and student interactions frequently align with the norms.	Classroom norms are evident and encourage risk taking, collaboration, respect for divergent thinking and students' culture. Teacher and students refer to the norms and/or interactions consistently align with the norms. Students remind one another of the norms.

	Professional Collaboration & Communication			
	Unsatisfactory	**Basic**	**Proficient**	**Distinguished**
PCC1	**Professional Learning and Collaboration: Collaboration with peers and administrators to improve student learning**			
	Teacher rarely or never collaborates with peers or engages in reflective inquiry for the purpose of improving instructional practice or student learning.	Teacher collaborates and engages in reflective inquiry with peers and administrators for the purpose of improving instructional practice and student learning. Teacher provides minimal contributions.	Teacher collaborates and engages in reflective inquiry with peers and administrators for the purpose of improving instructional practice and student learning. Teacher contributes to collaborative work.	Teacher collaborates and engages in reflective inquiry with peers and administrators for the purpose of improving instructional practice, and student and teacher learning. Teacher occasionally leads collaborative work.
PCC2	**Professional Learning and Collaboration: Professional and collegial relationships**			
	Teacher rarely or never develops or sustains professional and collegial relationships for the purpose of student, staff or district growth. Teacher may subvert professional and collegial relationships.	Teacher develops limited professional and collegial relationships for the purpose of student, staff or district growth.	Teacher develops and sustains professional and collegial relationships for the purpose of student, staff or district growth.	Teacher develops and sustains professional and collegial relationships for the purpose of student, staff or district growth. Teacher serves as a mentor for others' growth and development.
PCC3	**Communication and Collaboration: Parents and guardians**			
	Teacher rarely or never communicates in any manner with parents and guardians about student progress.	Teacher occasionally communicates with all parents and guardians about goals of instruction and student progress, but usually relies on only one method for communication or requires support or reminders.	Teacher communicates with all parents and guardians about goals of instruction and student progress and uses multiple tools to communicate in a timely and positive manner. Teacher effectively engages in two-way forms of communication and is responsive to parent and guardian insights.	Teacher communicates with all parents and guardians about goals of instruction and student progress using multiple tools to communicate in a timely and positive manner. Teacher considers the language needs of parents and guardians. Teacher effectively engages in two-way forms of communication and is responsive to parent and guardian insights.
PCC4	**Communication and Collaboration: Communication within the school community about student progress**			
	Teacher maintains minimal student records. Teacher rarely communicates student progress information to relevant individuals within the school community.	Teacher communicates student progress information to relevant individuals within the school community; however, performance data may have minor flaws or be narrowly defined (e.g., test scores only).	Teacher maintains accurate and systematic student records. Teacher communicates student progress information to relevant individuals within the school community in a timely way, accurately, and in an organized manner, including both successes and challenges.	Teacher maintains accurate and systematic student records. Teacher communicates student progress information to relevant individuals within the school community in a timely way. Teacher and student communicate accurately and positively about student successes and challenges.

	Professional Collaboration & Communication			
	Unsatisfactory	**Basic**	**Proficient**	**Distinguished**
PCC5	**Professional Responsibilities: Supports school, district, and state curriculum, policy and initiatives**			
	Teacher is unaware of or does not support school, district, or state initiatives. Teacher violates a district policy or rarely or never follows district curriculum/pacing guide.	Teacher supports and has a basic understanding of school, district, and state initiatives. Teacher follows district policies and curriculum/pacing guide.	Teacher supports and has solid understanding of school, district, and state initiatives. Teacher follows district policies and implements district curricula and policy. Teacher makes pacing adjustments as appropriate, to meet whole group needs without compromising an aligned curriculum.	Teacher supports and looks for opportunities to take on leadership roles in developing and implementing school, district, and state initiatives. Teacher follows district policies and implements district curricula and policy. Teacher makes pacing adjustments as appropriate to meet whole group and individual needs, without compromising an aligned curriculum.
PCC6	**Professional Responsibilities: Ethics and advocacy**			
	Teacher's professional role toward adults and students is unfriendly or demeaning, crosses ethical boundaries, or is unprofessional.	Teacher's professional role toward adults and students is friendly, ethical, and professional and supports learning for all students, including the historically underserved.	Teacher's professional role toward adults and students is friendly, ethical, and professional and supports learning for all students, including the historically underserved. Teacher advocates for fair and equitable practices for all students.	Teacher's professional role toward adults and students is friendly, ethical, and professional and supports learning for all students, including the historically underserved. Teacher advocates for fair and equitable practices for all students. Teacher challenges adult attitudes and practices that may be harmful or demeaning to students.

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Appendix 3: 5D+ Inquiry Cycle

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5D+™ Inquiry Cycle

SELF-ASSESS:

Teacher self-assesses to identify an area of focus.

Examine student work, classroom-based assessment data, feedback from students, etc. *What are the learning strengths and learning challenges of your students?*

Consider building and district learning goals and instructional initiatives. *How do these support the learning challenges of your students?*

Assess your instructional practice using the 5 Dimensions of Teaching and Learning (5D) instructional framework and the 5D+ Teacher Evaluation Rubric, citing evidence from your day-to-day classroom practice to support your assessment for each rubric indicator. Observe / collect data. *Which indicators are strengths for you? Which are learning opportunities?*

ANALYZE IMPACT:

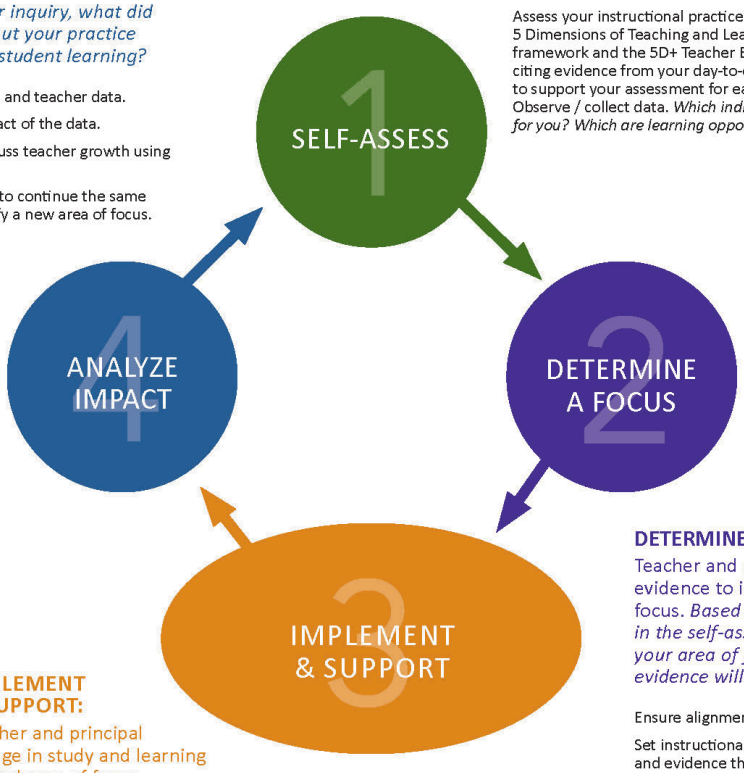
Teacher and principal analyze the results of their work. *Based on your inquiry, what did you learn about your practice as it impacts student learning?*

Examine student and teacher data.

Analyze the impact of the data.

Formatively discuss teacher growth using the 5D+ rubric.

Decide whether to continue the same inquiry or identify a new area of focus.



DETERMINE A FOCUS:

Teacher and principal analyze evidence to identify an area of focus. *Based on the responses in the self-assessment, what is your area of focus? What kind of evidence will you collect?*

Ensure alignment.

Set instructional practice goals and evidence that will demonstrate meeting the goals.

Set student learning goals and evidence that will demonstrate meeting the goals.

IMPLEMENT & SUPPORT:

Teacher and principal engage in study and learning around area of focus.

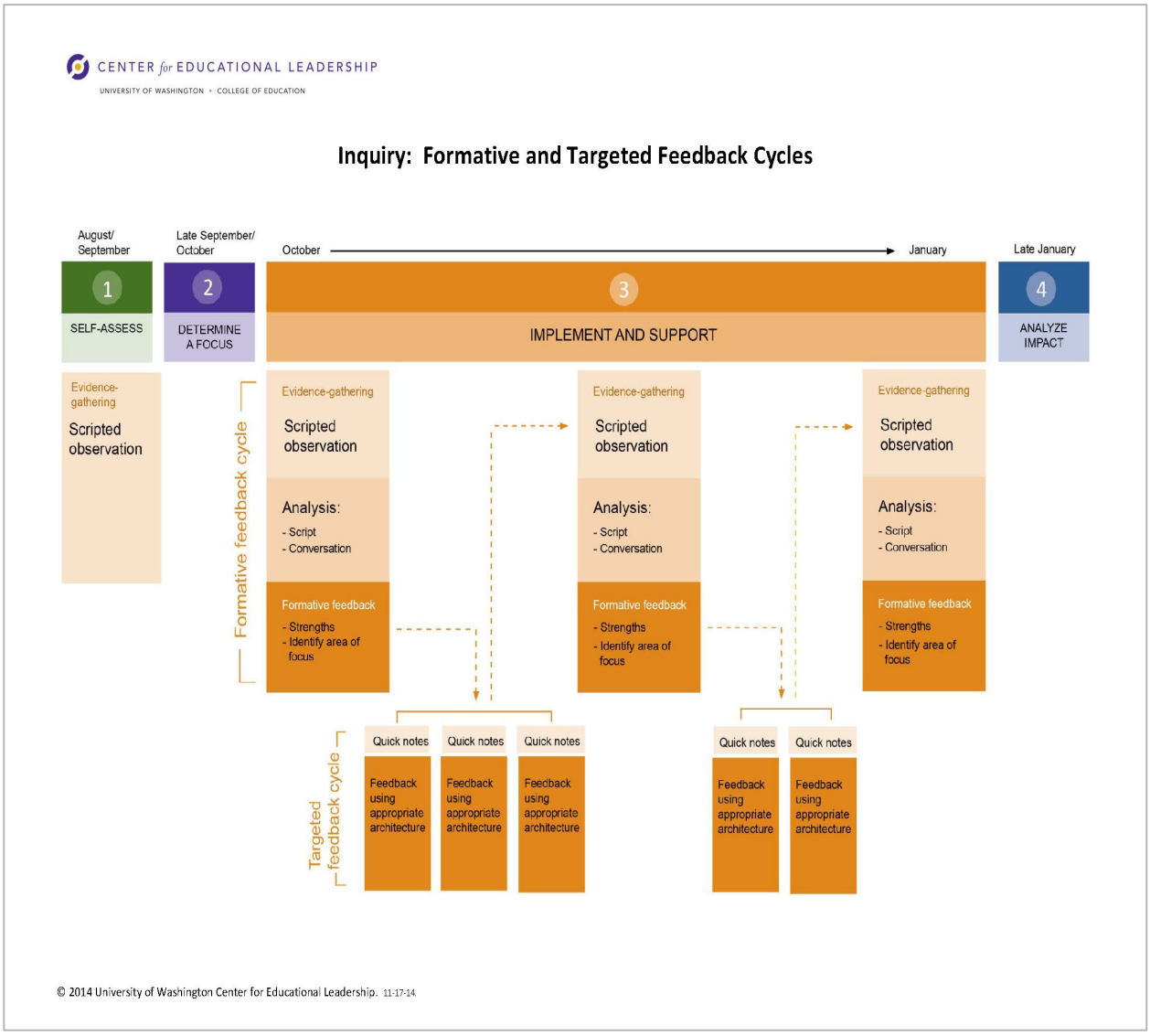
Formative feedback cycles.

Targeted feedback cycles.

Professional collaboration (PLCs, study groups, CFGs, team planning).

Professional development (team, building, district, individual).

Appendix 4: Formative and Targeted Feedback Cycles



Appendix 5: Formative Observation Schedule Sample

Teachers grouped in cohorts*	Pre-Inquiry Cycle Conference	Formative Observation 1	Formative Observation 2	Formative Observation 3	Post-/Pre-Inquiry Cycle Conference	Formative Observation 4	Formative Observation 5	Formative Observation 6	Post-Inquiry Cycle Conference
1	Sep. Week 2	Oct. Week 2	Oct. Week 4	Dec. Week 2	Jan. Week 4	Feb. Week 3	Mar. Week 1	As needed *or* by PLC members *or* by video	Apr. Week 4
2	Sep. Week 2	Oct. Week 2	Oct. Week 4	Dec. Week 2	Jan. Week 4	Feb. Week 3	Mar. Week 1		Apr. Week 4
3	Sep. Week 2	Oct. Week 2	Oct. Week 4	Dec. Week 2	Jan. Week 4	Feb. Week 3	Mar. Week 1		Apr. Week 4
4	Sep. Week 2	Oct. Week 2	Oct. Week 4	Dec. Week 2	Jan. Week 4	Feb. Week 3	Mar. Week 1		Apr. Week 4
5	Sep. Week 2	Oct. Week 2	Oct. Week 4	Dec. Week 2	Jan. Week 4	Feb. Week 3	Mar. Week 1		Apr. Week 4
6	Sep. Week 3	Oct. Week 3	Oct. Week 5	Dec. Week 3	Jan. Week 5	Feb. Week 4	Mar. Week 2	As needed *or* by PLC members *or* by video	Apr. Week 4
7	Sep. Week 3	Oct. Week 3	Oct. Week 5	Dec. Week 3	Jan. Week 5	Feb. Week 4	Mar. Week 2		Apr. Week 5
8	Sep. Week 3	Oct. Week 3	Oct. Week 5	Dec. Week 3	Jan. Week 5	Feb. Week 4	Mar. Week 2		Apr. Week 5
9	Sep. Week 3	Oct. Week 3	Oct. Week 5	Dec. Week 3	Jan. Week 5	Feb. Week 4	Mar. Week 2		Apr. Week 5
10	Sep. Week 3	Oct. Week 3	Oct. Week 5	Dec. Week 3	Jan. Week 5	Feb. Week 4	Mar. Week 2		Apr. Week 5
11	Sep. Week 4	Nov. Week 1	Nov. Week 3	Jan. Week 2	Feb. Week 1	Mar. Week 3	Apr. Week 1	As needed *or* by PLC members *or* by video	Apr. Week 5
12	Sep. Week 4	Nov. Week 1	Nov. Week 3	Jan. Week 2	Feb. Week 1	Mar. Week 3	Apr. Week 1		Apr. Week 5
13	Sep. Week 4	Nov. Week 1	Nov. Week 3	Jan. Week 2	Feb. Week 1	Mar. Week 3	Apr. Week 1		Apr. Week 5
14	Sep. Week 4	Nov. Week 1	Nov. Week 3	Jan. Week 2	Feb. Week 1	Mar. Week 3	Apr. Week 1		May Week 1
15	Sep. Week 4	Nov. Week 1	Nov. Week 3	Jan. Week 2	Feb. Week 1	Mar. Week 3	Apr. Week 1		May Week 1
16	Oct. Week 1	Nov. Week 2	Nov. Wk 4/ Dec. Wk 1	Jan. Week 3	Feb. Week 2	Mar. Week 4	Apr. Week 2	As needed *or* by PLC members *or* by video	May Week 1
17	Oct. Week 1	Nov. Week 2	Nov. Wk 4/ Dec. Wk 1	Jan. Week 3	Feb. Week 2	Mar. Week 4	Apr. Week 2		May Week 1
18	Oct. Week 1	Nov. Week 2	Nov. Wk 4/ Dec. Wk 1	Jan. Week 3	Feb. Week 2	Mar. Week 4	Apr. Week 2		May Week 1
19	Oct. Week 1	Nov. Week 2	Nov. Wk 4/ Dec. Wk 1	Jan. Week 3	Feb. Week 2	Mar. Week 4	Apr. Week 2		May Week 1
20	Oct. Week 1	Nov. Week 2	Nov. Wk 4/ Dec. Wk 1	Jan. Week 3	Feb. Week 2	Mar. Week 4	Apr. Week 2		May Week 1

*Note: One teacher could be in multiple cohorts.

Appendix 6: Study Methodology

This project focused on the impact of a teacher directed inquiry cycle on individual teacher practice and student learning within a teacher evaluation process. Theoretically, the project provided a conceptual frame for managing the tension between teacher evaluation that results in continuous learning and impact on teaching practice and the traditional notion that teacher learning and teacher evaluation are separate activities. The study examined the impact of the 5D+ inquiry process on K-12 teacher's thinking and practice.

Methodologically I conducted a qualitative study of sixteen K-12 teachers in two school districts (District A and District B) and four principals in one of those districts (District A.) District A and District B were selected for this study because:

- Each district had utilized the 5 Dimensions of Teaching and Learning Instructional Framework to begin to create a common understanding and language of instruction with district and building administrators for at least one year prior to adopting the 5D+ Teacher Evaluation process. In the eyes of the author, this demonstrated a commitment to continually improving the quality of instruction throughout the district.
- Each district had a multi-year, comprehensive plan to support principal and teacher learning during the 5D+ Teacher Evaluation implementation process (See Figure 4.)
- Each district implemented the 5 Dimensions of Teaching Learning Instructional Framework, the 5D+ Teacher Evaluation Rubric and the 5D+ Inquiry Cycle tools with fidelity to the 5D+ teacher evaluation and inquiry process training provided to principals and teachers.

District A is a rural school district with 4,300 students served by five elementary schools, two middle schools and one high school. The district has a 30% free and reduced lunch rate. Five percent of their students are designated transitional bilingual and 13% of their students receive special education services. District B is a district in a small city with 11,000 students. It has a 37% free and reduced lunch rate. Six percent of their students are in a transitional bilingual program while 14% of their students receive special education services. Both districts are 70% white.

Perceptual data was collected from teachers and principals between October, 2014 and January, 2015. It was collected via online survey and a focus group process where the study author posed questions and focus group participants discussed them.

Perceptual data was collected from teachers in District A using an online survey (See Appendix 6) and a focus group process (See Appendix 7 for focus group prompts.) Teachers in District A were randomly selected to participate in the online survey from a list of teachers who had been evaluated using the 5D+ inquiry process the previous school year. Random selection was done by grade bands; primary, intermediate, middle and high. The goal was to obtain responses from 24 teachers. Eight teachers participated in the online survey.

District A Teachers were randomly selected to participate in the focus group from the same list of teachers used for the online survey. Random selection was done by grade bands; primary, intermediate, middle and high. The goal was to have 8-10 teachers in the focus group conversation. Four teachers participated. As a result of the low numbers of teachers responding

to the online survey and electronic requests to participate in a focus group, it was decided that teachers from a second district should be interviewed to determine if the same results were obtained.

Perceptual data was collected from teachers in District B using the same focus group process and questions used with District A. Teachers in District B were randomly selected to participate from a list of teachers who had been evaluated using the 5D+ inquiry process the previous school year. Random selection was done by grade bands; primary, intermediate, middle and high. Five teachers participated in the focus group conversation in District B.

Perceptual data was collected from principals in District A using the same focus group process used with teachers (See Appendix 8 for prompts.) Principals were selected to represent elementary, middle and high school levels.

Online survey data was collected, sorted and analyzed by individual teacher, by question number, and by grade bands of teachers. Data was then coded and categorized. Focus group conversations were recorded and transcribed. Transcripts were then read multiple times, coded and categorized. Data that was mentioned several times, or agreed to by multiple participants across data sets was included in the final data set that is summarized in the text of this project. Data that was mentioned once or was not agreed to by multiple participants across data sets was not included in the summarized data set described in this project.

Appendix 7: Online Teacher Survey Questions

1. How was your teacher evaluation process different this year from traditional teacher evaluation practice in previous years?
2. What about the teacher evaluation process did you find supportive to improving your instructional practice?
3. What about the teacher evaluation process hindered improving your instructional practice?
4. How did, or did not, the use of an inquiry cycle in the teacher evaluation process impact your instructional practice?
5. What specific aspects of the new teacher evaluation process led to growth in instructional practice?
6. What about the teacher evaluation process did you find supportive to improving student learning in your classroom?
7. What about the teacher evaluation process hindered improving student learning in your classroom?
8. What resources or strategies were most helpful to you when you engaged in the teacher evaluation inquiry cycle this year?
9. How could the inquiry-based teacher evaluation process be more effective?
10. What grade level do you teach? (Primary, Intermediate, Middle, High)

Appendix 8: Teacher Focus Group Questions

1. Does the inquiry process as part of the evaluation process really matter? Why or why not? Compare the inquiry-based evaluation process to the traditional evaluation process.
2. What kind of support from the principal, colleagues, or from the larger district was important to your learning?
3. Was there ever time when you and the principal disagreed on what you were seeing or on a piece of evidence, and if so, how was the disagreement resolved?
4. What did you learn using the inquiry cycle? If we didn't have the inquiry cycle, would the evaluation process be better? Would it be worse?
5. Thinking about the area of focus that you developed, how did having an area of focus work for you when you knew that you would be evaluated on all the indicators at the end of the year?
6. How did the inquiry-based teacher evaluation process affect your teaching? If there was a hypothetical student who was in your classroom before and is in your classroom now, what would the student say is different, or would they?
7. Was there any part of the inquiry cycle that you found to have the greatest impact?
8. One big piece of evidence is the scripts that your principals write. Do they show those to you? Are they helpful to you?
9. Thinking about what didn't work in this process or what you would take out, or what you wish wasn't in there, or what you're glad is in there but isn't quite right, what can we do to make this process better?

Appendix 9: Principal Focus Group Questions

1. How was your teacher evaluation work different this year from previous years?
2. What about the teacher evaluation process did you find supportive to improving your teachers' instructional practice?
3. What about the teacher evaluation process hindered improving your teachers' instructional practice?
4. How did, or did not, the use of an inquiry cycle in the teacher evaluation process impact your teachers' instructional practice?
5. What specific aspects of the new teacher evaluation process led to growth in instructional practice?
6. What about the teacher evaluation process did you find supportive to improving student learning in your classrooms?
7. What about the teacher evaluation process hindered improving student learning in your classrooms?
8. What resources or strategies were most helpful to you when you engaged in the teacher evaluation inquiry cycle this year?
9. How could the inquiry-based teacher evaluation process be more effective?