Teach What, Test What?

Practices of a Newly Formed Collaborative Team in a Professional Learning Community

by

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ABSTRACT

This study was designed to capture the conversations and practices of seven educators who navigate teaching and learning decisions in their Title 1 elementary school. This case study was conducted to answer the research question, "What are the behaviors and practices of a newly formed collaborative team of educators working within a professional learning community (PLC)?" In order to understand how this collaborative team worked together, data was collected through a survey, interviews, focus group discussion and questionnaire, observations of collaborative team meetings and artifacts generated from the team's work.

The findings revealed that (1) participants spent the majority of their collaborative team time focusing on how to best prepare students for district and state standardized assessments; (2) teachers described themselves as learners who look to their colleagues to enhance their knowledge and skills; (3) members of PLCs need dedicated collaborative time to ensure all students and adults in the organization learn at high levels; (4) discussing and using student learning data can be difficult; (5) educators gravitate to colleagues who have similar philosophies and beliefs and (6) PLCs need supportive district, school and teacher leadership to accomplish their goals. This research study provides validation that the PLC process is a complex process of professional development designed to support school reform in an era of increased school accountability.

The recommendations for school leaders are to create supportive leadership structures that allow all students opportunities to learn, build trusting environments, and provide clarity and focus of the vision for all stakeholders. District leadership needs to establish a priority for PLC work by embedding the processes in the vision, mission and goals of the district, examine policies to ensure they support the concepts of PLCs, provide access to resources and create a forum for critical conversations about teaching and learning. Policy makers need to ask the right questions so that they can design appropriate accountability systems that encourage collaboration.

This is dedicated to my husband, Ted, and daughters, Alexa, Athanasia and Anna.

Your endless encouragement and patience allowed me to pursue this dream.

You will always be an inspiration for me.

I love you with all of my heart.

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"Who dares to teach must never cease to learn." – John Cotton Dana

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I want to thank the educators who participated in this study. Their stories provided me with a glimpse of what it is like to teach in a time where school accountability systems impact their daily decisions. Their passion and persistence to teach in a time with increased accountability and decreased resources is remarkable. It is because of their willingness to share their practices, thoughts and conversations that this study was possible.

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CHAPTER 1

INTRODUCTION

Overview

Accountability of the American education system has received much attention from policymakers, lawmakers and educators for the last twenty years. The goal of school accountability is to reduce achievement gaps between groups of students while ensuring all students are learning and growing at high levels. The federal No Child Left Behind Act of 2001 (NCLB) mandates states to determine specific achievement targets for schools and districts as measured by student performance on standardized tests. The goal is for all students to reach grade level proficiency in reading and mathematics by the year 2014 (NCLB, 2001).

The underlying premise behind NCLB's school accountability is that an emphasis on student performance will result in better learning for all children. It is also understood that states are required to create standards and performance targets for student learning in the areas of reading, math and science. In addition, NCLB assumes rewards and sanctions will motivate educators to improve student achievement for all regardless of race, socioeconomic level, gender or learning needs. Finally, NCLB delegates responsibility to states to create, distribute and target resources to support reform initiatives, professional development and effective instructional practices (NCLB, 2001).

Teacher quality is a significant factor in how well students perform on accountability measures. Therefore, improved student achievement is linked to the quality of the teacher and the teaching practices the teacher uses to ensure high levels of student learning. As a result, in 2008, the federal government invested $3 billion in Title II state grants to improve teacher quality through professional development (U.S. Department of Education, 2008).

A common denominator of school reform is to change teacher and administrator practice. This makes sense since the purpose of reform is to alter the status quo. Challenges to implement and sustain changes have prompted educators to create learning communities within schools. These learning communities offer a powerful form of daily professional development to teachers who collaboratively plan lessons, share innovations and develop strategies for struggling students (Louis & Marks, 1998).

Researchers Hochberg and Desimone studied professional development through the lens of accountability and discovered characteristics of professional development that are most likely to bring about change in instruction and student achievement (2010). Those characteristics include: "content focus, active learning opportunities, coherence with other initiatives, sustained duration and collective participation" (Hochberg & Desimone, 2010, p. 103). Equally as important, the research continues to share that teachers can best meet the rigorous challenges of school accountability when they work collaboratively to align instruction with standards and assessments, meet the needs of a variety of learners

and tackle the organizational environments within schools to allow this work to happen (2010).

One professional development model sweeping the United States and other countries is known as professional learning communities (PLCs). Professional learning communities are described as "educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve. Professional learning communities operate under the assumption that the key to improved learning for students is continuous job-embedded learning for educators" (DuFour, DuFour, Eaker & Many, 2006, p. 217).

Purpose of the Study

The purpose of this study is to describe how one newly formed collaborative team works within a PLC process in a suburban Title I school. While there is a much research about how PLCs should work in schools across the world, there is limited research on how the PLC process is implemented in a Title I school in a suburban school district in the southwestern United States. In addition, there is limited research on the behaviors and practices of newly formed collaborative teams working within a PLC.

Statement of the Problem

This study is designed to describe how one newly formed grade level of teachers work as a collaborative team within a PLC for a two month period. The research will investigate the following questions:

1. What are the behaviors and practices of a newly formed collaborative team in a PLC?
2. How do educators commit to continuous learning?
    a. How do educators determine essential learnings by course and by quarter?
    b. How are SMART goals created?
    c. How is student data used to make instructional decisions?
    d. How are common assessments created?
    e. How are decisions made regarding which students need additional time and support for learning?
    f. How are decisions made regarding which students need enrichment when they have already learned?
    g. How is consensus reached in the collaborative team?
    h. How are instructional practices shared with one another?
3. How is time dedicated for learning?
    a. How much time is spent working collaboratively on the tasks related to collaborative team functions? (see question #1 and subquestions a-h under #1)
    b. How is instructional time used to ensure student learning?
4. How do school and district leadership support a focus on learning?

Definition of Terms

For the purpose of this study, the following definitions will be used:

Achievement gap: The achievement gap is a persistent, pervasive and significant disparity in educational achievement and attainment among groups of students as determined by a standardized measure.

Collaboration: A systematic process in which people work together, interdependently, to analyze and impact professional practice in order to improve individual and collective results (DuFour, DuFour, Eaker & Many, 2006).

Collaborative team: A group of people working interdependently to achieve a common goal, for which members are held mutually accountable. Collaborative teams are fundamental building blocks of PLCs.

Common assessment: An assessment typically created collaboratively by a team of teachers responsible for the same grade level, course or content area. The assessment is created to measure the essential learning outcomes, and is administered to all students taking the same course or grade level in a systematic and timely manner.

Communities of practice: A process of social learning that occurs when people who have a common interest in a subject or area collaborate over an extended period of time, sharing ideas and strategies, determine solutions, and build innovations (Lave & Wenger, 1991).

Continuous learning: Principals and teachers active in their own learning and open to new ideas. Inquiry allows them to overcome chasms caused by

various specializations of grade level and subject matter. Inquiry focuses debate among teachers about what is important. Inquiry promotes understanding and appreciation for the work of others. Inquiry helps teacher and principals create the ties that bind them together as a special group and to a shared set of ideas and practices. Inquiry, in other words, helps teachers and principals become a community of learners (Sergiovanni, 1994).

Enrichment: Consists of differentiated experiences provided in the classroom that allow students to investigate the curriculum to a greater breadth and depth.

Essential learnings: The critical skills, knowledge, and dispositions each student must acquire as a result of each course, grade level, and unit of instruction. Essential learning may also be referred to as essential outcomes or power standards (DuFour, DuFour, Eaker & Many, 2006).

Formal networks: The formal network often has an organizational culture attached to it, such as a formal philosophy, mission, structure, leadership, membership, eligibility, and funding.

Formative assessment: An assessment *for* learning (Stiggins, 2002). An assessment used frequently throughout the year to identify (1) individual students who need additional time and support for learning, (2) the teaching strategies most effective in helping students acquire the intended knowledge and skills, (3) program concerns- areas in which students generally have difficulty achieving an

essential learning and (4) improvement goals for individual teachers and the team (DuFour, DuFour, Eaker & Many, 2006).

Informal networks: Informal networks are based on the objective of achieving a reciprocal exchange of information and favors with no rules. They share advice freely, expand the network at will, inspire one another and help one another achieve personal and team goals.

Intervention: Strategies that allow struggling students access to additional time and support for learning.

Knowing –doing gap: The disconnect between knowledge and action, the mystery of why knowledge that needs to be done so frequently fails to result in action or behavior consistent with that knowledge (Pfeffer & Sutton, 2000).

Professional development: A lifelong, collaborative learning process that nourishes the growth of individuals, teams, and the school through a daily job embedded, learner-centered, focused approach (National Staff Development Council, 2000).

Professional learning communities: Professional learning communities operate under the assumption that the key to improved student learning for students is continuous job embedded learning for educators (DuFour & Many, 2006). Professional staff learn together to direct their efforts toward improved student learning (Hord, 1997). Learning communities are places in which teachers pursue clear, shared purposes for student learning, engage in collaborative

activities to achieve their purposes and take collective responsibility for student learning (Lieberman, 2001).

Reflective dialogue and practice: Involves thoughtfully considering one's own experiences in applying knowledge to practice while being coached by professionals in the discipline (Schon, 1996).

School reform: Activities that alter existing procedures, rules and requirements to enable the organization to adapt the way it functions to new circumstances or requirements (Conley, 1993).

SMART goal: Goals that are Strategic and Specific, Measurable, Attainable, Results-oriented, and Timebound. (O'Neil &Conzemius, 2005).

Summative assessment: An assessment *of* learning (Stiggins, 2002) designed to provide a formal measure to determine if learning goals have been achieved.

Acronyms

For the purpose of this study, the following acronyms will be used:

AYP: Adequate Yearly Progress increases from year to year under the current No Child Left Behind law, which means that schools who failed to make AYP in one year are often that much more behind in the following year.

NCLB: No Child Left Behind was signed into law by President George W. Bush in 2001 and was meant to guarantee accountability, provide freedom for communities and school districts and more choices for parents. NCLB also

requires that a larger percentage of special education students move from performing at the basic level to performing at the proficient level.

PLC: professional learning community.

Limitations

The results of the study will be limited to the perceptions and experiences of those who were observed, interviewed, and participated in the study. The study will represent a two month snapshot in time in the professional careers of the participants. In addition, my role in the school district impacts the types of information that is shared with me as a researcher. During the study there was strong emphasis from the district on effective implementation of PLCs as the primary professional development and school reform model. The biggest threat is the researcher's insider role in the school district. To minimize threats, the researcher will triangulate the data to increase validity. In addition, no one source of information or research occurrence will dominate the study.

Delimitations

This study will be conducted with a newly formed collaborative team and those who support them at a Title 1 school in a suburban school district in the southwestern United States during the 2010-11 school year. Therefore, the findings and results may or may not necessarily generalize to other schools, districts, or settings. The researcher will provide detailed, contextual information from which the reader will make generalizations.

Significance of the Study

This study will attempt to describe how a newly formed collaborative team within a PLC works in an elementary school. The perceptions, beliefs and practices of the educators in the study will help researchers, policy makers, administrators and teachers understand the lived experiences of those working in a PLC process. While the research supports PLCs as a best practice school reform strategy, the implementation is complex and requires educators to change their thinking and practice.

Professional learning communities are a professional development model that is likely to bridge the knowing-doing gap. For years, professional development has been criticized for showing little impact on student learning. Educators attended conferences, workshops, seminars, and enrolled in college courses that did not change their classroom practices. In contrast, teachers in PLCs are encouraged to share their best practices with one another. As a result, implementation of new learning is less risky and more likely to impact student learning. This is encouraging to policy makers and administrators who allocate dwindling financial resources to support professional development.

Federal legislation such as No Child Left Behind (NCLB, 2001), and state legislation have created accountability mechanisms to measure both student learning and teacher quality. As a result, the work of educators has changed. The demands on public school educators make working in isolation a thing of the past. Teachers and administrators who work collaboratively to ensure all students learn

at high levels are more likely to reach their goals (DuFour, DuFour, Eaker & Many, 2006). Students who do not achieve their goals are subject to becoming high school drop outs. Every school day, more than seven thousand students become dropouts. That adds up to about 1.3 million students who will not graduate from high school every year. High school dropouts are far more likely than graduates to spend their lives periodically unemployed, on government assistance, or cycling in and out of the prison system. The average annual income for a high school dropout in 2005 was $9,634 less than that of a high school graduate. "If the students who dropped out of the Class of 2009 had graduated, the nation's economy would have benefited from nearly $335 billion in additional income over the course of their lifetimes" (Alliance for Excellent Education, 2009).

Chapter Summary

This introductory chapter presented an overview of the study on the importance of PLCs as a reform strategy and professional development model through a description of the overview, purpose, statement of the problem, definitions of terms, abbreviations used, limitations, delimitations and significance of the study. Chapter 2 presents the conceptual framework of the study through a review of the literature related to the research question. Chapter 3 describes the research design and methodology used to conduct the study. A description of the methods used to collect and analyze data is also included. Chapter 4 presents the data collected throughout the study as well as an analysis

of the data. Chapter 5 includes the findings from the study aligned to the research question and themes in the literature review. This chapter also includes areas for further research.

CHAPTER 2

LITERATURE REVIEW

Introduction

Federal and state accountability systems aimed at holding schools responsible for student achievement have resulted in various reform initiatives. Unlike additive reforms such as Title I's compensatory education, current school reforms challenge educators to rethink what schools should look like, how they should interact with colleagues and their students, and how to teach in ways they have never taught before (Stein, 2008). Schools are often prescribed reforms that include professional development requiring teachers to change their practices. These reforms are typically imposed from outside the organization and assume that adult and student learning will close achievement gaps. If a reform does not create the intended change in learning and close the achievement gap, it is often abolished. Meanwhile the school awaits the next prescription.

One such reform spreading across the world is a professional development process known as professional learning communities (PLCs). One of the most commonly accepted definitions of a PLC is "professional staff learning together to direct their efforts toward improved student learning" (Hord, 1997, p. 36). As students learn more, achievement gaps decrease and schools achieve positive outcomes based on federal and state accountability measures.

The practical problem occurs when reform initiatives, such as PLCs, are mandated by those furthest from the classroom. Policy makers and administrators

often assume teachers understand the meaning behind the reforms they expect them to implement, why they are important, and their intent. More importantly, the conditions needed to nurture and support the change in practice are not in place before the reform is introduced, monitored and measured (Stein, 2008).

PLCs are professional development processes that focus the work inside the organization. The work of PLCs focus on the daily practices of educators and allows them multiple opportunities to exam student learning, share best practices and take collective responsibility for student achievement.

Conceptual Framework

The purpose of this study is to understand the contribution that professional learning communities have on student learning. The conceptual framework for this study is drawn from Vygotsky's sociocultural theory of human learning. Many believe learning is an individual psychological process. In contrast, Vygotsky and the researchers that have been influenced by his work believe that learning occurs as individuals participate in social and cultural activities (Rogoff, 1990). As a result, to understand the PLC process, it is important to analyze the culture and social climate of educators' learning environments, and to what extent they support change in teaching practice.

Two key assumptions drawn from Vygotsky's work form the backdrop for my analysis. First, social interaction plays a fundamental role in the development of cognition**.** Individuals learn first through interaction with others, then what they learn is integrated into their mental structures (Vygotsky, 1978, p. 57).

Learner identities along with the time and space allotted for learning has significant impact on how cognition is developed.

Second, Vygotsky argued that cognitive development occurs within a "zone of proximal development" (ZPD) (Vygotsky, 1978 p. 57). The ZPD is the area of exploration for which the learner is cognitively prepared, but requires help and social interaction to fully develop (Briner, 1999, p. 18). Collaborative learning, modeling and scaffolding support the intellectual knowledge and skills of learners and facilitate intentional learning. In all of these circumstances a teacher, or more experienced peer, supports the learner's evolving understanding of knowledge or complex skills.

The implications of Vygotskian learning theory are that learners should be provided with socially rich environments that allow them to explore knowledge domains with their fellow students, teachers and outside experts. In practice, teacher learning happens in formal and informal networks, through social interaction among people within microcommunities of practice as they go about their daily work (Lave &Wenger, 1991; Wenger, 1998). Scholars refer to these microcommunities as communities of practice, learning communities, or professional learning communities (PLCs). Microcommunities are situated within schools and between schools.

Research Question

In order to understand the power of sociocultural theory, and determine how the work of PLCs deepen educators' professional knowledge, the research

question to be investigated in this study is, "What are the behaviors and practices of a newly formed third grade collaborative team at Waves Elementary in Beach Front Unified School District?" Waves Elementary is one of eleven Title 1 schools located in the suburban area of Beach Front Unified School District. The District is made up of 31 schools that educate 27,000 pre-kindergarten through twelfth grade students. Five hundred and fifty five pre-kindergarten through sixth graders attend Waves Elementary School. The school earned the state accountability label of Performing Plus, and did not make AYP (annual yearly progress) in the 2009-10 school year.

The research question is important because BFUSD has aligned resources and systems to support PLCs as the district's professional development model and primary reform strategy for school improvement. The district is in its third year of implementing PLCs district wide. This means that each of the 1700 teachers in the District are part of collaborative teams working within PLC processes on their respective campus. The collaborative teams are determined by grade level and or content area. Teachers are compensated for 36 hours of participation in their collaborative team and record their interactions on an electronic collaborative team log as a form of accountability. The data collected from the logs is also used to determine professional development needs. In addition to compensated collaborative team time, the school board approved an additional 13 hours of early release time for professional development. This allows teachers and

administrators a total of 57 compensated hours for collaborative team related tasks throughout the school year.

The research question is also important because it will help the researcher understand the positive and negative practices and behaviors associated with this change.

National consultants have been hired to work with district and site administrators as well as teacher leaders for the past two years. In addition, educators throughout the district have participated in book studies, attended conferences, read relevant research and have begun doing the complex work of building the culture and foundation for PLCs. The district has embraced the research that identifies the work of PLCs as a highly effective professional development model for teachers and administrators. In addition, the research reveals the connection between highly functioning PLCs and increased student learning. The answers to the research question are important to leaders who design and allocate resources to implement school reform initiatives. As financial resources dwindle in public schools, it is critical to understand what works in terms of school reform so that resources can be targeted to the reforms that most effectively support student learning. The PLC process is a low cost reform strategy that places student and adult learning as the primary strategy to close achievement gaps.

Professional Development

One of the common denominators among high achieving school systems is an investment in professional development. Effective professional development increases teacher quality which has a positive impact on student learning. This research describes a study that begins with a review of how professional development is defined and weaves research studies that analyze three concepts associated with professional development as represented in professional learning communities: commitment to continuous learning, time for learning, and leadership for learning. In general, professional development has been criticized as less effective when changes in teaching practice and increases in student learning are not evident. Researchers continue to identify the most effective forms of professional development are those that allow practitioners the opportunity to bridge the knowing – doing gap. "Relatively few persons, having mastered a new skill, will then transfer that skill into their active repertoire. In fact few will use it at all. Continuous practice, feedback and the companionship of coaches is essential to enable even highly motivated persons to bring additions to their repertoire under effective control." (Joyce & Showers, 1983).

According to the National Staff Development Council (NSDC), the term professional development means a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement (NSDC, 2001). According to the NSDC, the goal of professional development should be to foster collective responsibility among educators for

improved student performance. There are eight key features of effective professional development practices. Educators should engage in professional development that: 1) is aligned with rigorous state student academic achievement standards and school improvement goals; 2) is conducted among educators at the school and facilitated by well-prepared school principals and/or school-based professional development coaches, mentors, master teachers or other teacher leaders; 3) occurs several times each week among established teams of teachers, principals and other instructional staff members; 4) engages these teams of educators in a continuous cycle of evaluating student, teacher and school learning needs; 5) defines a clear set of educator learning goals based on the rigorous analysis of the data; 6) implements coherent, sustained, and evidence based learning strategies, such as lesson study and the development of formative assessments, that improve instructional effectiveness and student achievement; 7) provides job embedded coaching or other forms of assistance to support the transfer of new knowledge and skills to the classroom; 8) regularly assesses the effectiveness of the professional development in achieving identified learning goals, improving teaching, and assisting all students in meeting challenging state academic achievement standards.

Professional Development and PLCs

Communities of practice have been created in many schools as a way to implement the NSDC's definition of professional development. Professional learning communities, as defined in the literature, are synonymous with

communities of practice. Ann Lieberman defines PLCs as, "learning communities are places in which teachers pursue clear, shared purposes for student learning, engage in collaborative activities to achieve their purposes and take collective responsibility for student learning" (2001). DuFour, Eaker and Many define PLCs as "educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve. Professional learning communities operate under the assumption that the key to improved student learning for students is continuous job embedded learning for educators" (DuFour & Many, 2006, p. 3). Schools and districts that embrace PLCs align their resources and training to support:

- building and maintaining a collaborative culture
- intense focus on student learning
- deep understanding of the curriculum
- identifying essential student learning outcomes
- development and monitoring of SMART (specific, measurable, attainable, results oriented, time bound) goals
- creation and analysis of common formative and summative assessments
- assessment and grading practices that ensure student learning
- designing meaningful interventions when students have not learned, and enrichment for those who have

The use of professional learning communities to foster continuous teacher learning about how to best meet the academic and social needs of students is consistent with Vygotsky's understanding that learning occurs through social interaction. Like students, teachers learn from social experiences associated with problem solving. It is through problem solving that meaning is negotiated (Jaramillo, 1996).

PLCs as a School Reform Strategy

Knowing the popularity of professional learning communities as models for school reform, Canadian researcher Laura Servage analyzed popular publications written about PLCs asking the question, "What sort of change can be advanced with the PLC model: reformation or transformation?" Servage argues that current educational accountability systems require schools to transform, not reform. She contends most PLCs focus on teaching strategies, not on changing student learning. In order for schools to transform, teachers must engage in critical reflection and dialogue to "uncover and challenge beliefs and practices that undermine democracy and perpetuate social injustices"(Servage, 2008). Teachers must transform their thinking and actions for change in practice and student learning to occur. Servage's application of transformative learning theory to professional learning communities recognizes the "gap between the eloquence of the PLC model on paper and its messiness in practice" (2008). Servage concludes that PLCs can be effective in transforming schooling if teachers engage in open ended discussions about foundational educational issues, not the day to

day operations of teaching. The result of critical, creative and hopeful dialogue is to positively impact student learning (2008).

Researchers continue to point to the teacher as the critical element in creating educational change. And, that professional development should pave the way for teachers to change and improve their practices. Many teachers have participated in well intentioned learning experiences that are not relevant to their day to day classroom practices (Ball & Cohen, 1999; Borko & Putnam, 1995; Hatch et al., 2005; Lieberman & Miller, 2001). The PLC process allows teachers to collaboratively examine their daily practices with the goal of increasing both teacher and student learning. Researchers Lieberman and Mace propose one way to transform teaching is through multimedia tools that enable teachers to make their practice public. Lieberman and Mace's work with teachers has taught them "the most powerful result of going public is a new kind of conversations about teaching". Teachers using multimedia tools are videotaping their lessons, scanning the student work that is generated from the lesson then blogging with colleagues in a reflective dialogue using blogs and social networking sites such as Facebook. (Lieberman & Mace, 2009). Electronic critique and collaboration add value to teacher practice because of the content and the accessibility. Teachers no longer have to wait for the next scheduled workshop or meeting to critique their practice. Using technology tools, teachers can incorporate reflection into their daily practice.

Four themes from the research on professional learning communities have been identified: commitment to continuous learning, collaboration, time for learning, and leadership for learning.

PLCs Commit to Continuous Learning

Commitment to continuous learning is a rich area of study divided into the following five subtopics: teacher learning, learning through informal and formal networks, learning through collaboration, learning through assessments and student learning.

Teacher Learning

Successful schools facilitate the learning of teachers and students. School reform nationwide requires teachers to use, create, disseminate, and preserve pedagogical knowledge (Wood, 2007). The quality of professional development and adult learning becomes an essential component of successful school reform and the hallmark of professional learning communities (Bezzina, 2006). Because, teachers working in effective learning communities are reflective practitioners, they are far more than technicians implementing others' ideas. They are thinkers, inquirers and conceptualizers. To learn more about the work of teachers in PLCs, Wood followed a mid Atlantic urban school district for five years during their district wide establishment of professional learning communities as organizational structures for student learning. Wood's study analyzed how the learning communities at two different schools, Randolph Middle School and Lincoln Elementary, operated differently during collaborative meetings. Wood observed

teachers at Randolph compliantly using PLC techniques such as protocols to guide their work and conversation. During interviews after their meetings, teachers said they felt the agenda was a prescription for how they were to interact. Teachers also reported that the facilitator asked them to contribute their ideas, and then told them what to do. In contrast, Wood's observations at Lincoln Elementary suggested that teachers were building shared knowledge as they questioned their practices. The teachers consulted outside expertise and reflected on what they had learned from the experience. Teachers became empowered by this type of work. They sought relevant professional development after they reflected on their practices with their colleagues. Most importantly, the empowerment allowed teachers to identify themselves as agents for changes in teaching and learning.

Formal and Informal Networks of Learning

Learning occurs in both formal and informal networks. Formal networks are those that are well-defined and structured, and generally embed an accountability system such as meeting agendas, notes from meetings and time logs. In contrast, informal learning networks are those that are developed among educators because of commonalities such as proximity, educational philosophy, teaching assignment, personality, etc. Informal networks typically do not include structured time and space, which are characteristic of accountability systems.

Networks to support math program implementation. Researchers Stein and Coburn conducted a study of Greene School District and Region Z (also

a school district) where formal networks were designed to link communities of practice in schools with district leaders. The goal of the networks was to provide teachers with new knowledge to implement mathematics programs. In the Greene School District, school based coaches, along with their principals, were the conduit between the district and teachers. This model was considered bidirectional because the information flowed in both directions, from teachers and coaches to administrators and from administrators to teachers and coaches. In Region Z, school based coaches worked with regional instructional coaches and did not include district administrators. Stein and Coburn characterized this as a unidirectional learning network which was less effective than the bidirectional model (Stein & Coburn, 2008). Vygotsky's theoretical concepts would suggest that the bidirectional model would be most effective because it included a constructivist approach to learning. Teachers learned side by side with the group who used their experiences as the foundation for their learning.

While both Greene and Region Z established clear district policies related to the implementation of the new programs, the focus of the professional development differed. In Greene, the majority of the time coaches spent with principals and district leaders was focused on mathematics content. The researchers observed numerous meetings that were "rich with examples of student work, talk about mathematics instruction, and discussion about the use of district objectives and standards" (Stein & Coburn, 2008, p. 615). The majority of the professional development in Greene involved creating space and time for teachers

to explicitly discuss the nature of the mathematics, do math problems together and assess the flexibility of strategies to solve the problems.

In Region Z, the focus of the professional development engaged educators in how to manage the materials, parental communications, grading practices, and pacing guides associated with the mathematics curriculum. Eighty eight percent of the teacher interactions in Greene School District, the research team observed were focused on instructional strategies, student learning and the nature of mathematics, compared to 58% in Region Z.

Developing a culture for PLCs. A qualitative study conducted in 2008 by researchers Hipp, Huffman, Pankake and Oliver featured two schools: Lake Elementary along the Mississippi River and Galena Park Middle School in an industrialized urban city. These schools had a five year history of learning communities as part of their culture (Hipp, Huffman, Pankake, & Olivier, 2008). The formal network of learning communities provided space for teachers to tackle school reforms together instead of in isolation. Lake Elementary teachers embraced Critical Friends to engage staff in learning across grade levels and subject areas to focus on meaningful student issues. Critical Friends are groups of teachers within a school who help each other take a serious look at their classroom practice and make changes. Members of Critical Friends groups focus on designing learning goals for students, employ strategies to move students towards these goals, and collect evidence on how the strategies work. In addition, Critical Friends groups use protocols to analyze artifacts and issues such as

student work, teacher lessons, student case studies, classroom dilemmas, etc. One teacher referred to her job embedded professional development experiences at Lake Elementary by saying , "It's (Critical Friends) built relationships and fostered trust...we've become valuable resources to one another" (Hipp, Huffman, Pankake & Olivier, 2008). The teachers defined the culture at Galena Park Middle with these words: family, dedicated, committed, don't give up on students, sincerity, generous atmosphere, everyone wants to help out, and hard working. Teachers at Lake and Galena Park mirrored Senge and his colleagues' views that in high performing schools, a nurturing professional community seems to be the container that holds the culture. Teachers feel invigorated, challenged, professionally engaged and empowered just because they teach there (Senge, 1982).

PLCs Learn through Collaboration

Teachers need time to work collaboratively to develop curriculum, instructional and assessment practices based on individual student interests. McLaughlin and Talbert (2006) emphasize the power of collaborative learning that can happen in PLC structures. PLCs provide teachers with the opportunity to negotiate the space between macro policies and micro policies of school districts and the micro realities of their daily practices. Collaboration among teachers contributes to how and what they learn.

Collaboration with colleagues. A study conducted by Wells and Feun in 2007 analyzed six urban high schools in Michigan for one year after they

participated in nine days of training on how to design and sustain professional learning communities (PLCs). The goal of the PLCs was to provide formal networks to facilitate teachers working together to change their practices in order for all students to learn at high levels. According to Wells and Feun, the teachers' most critical need after the training was to collaborate with colleagues. In interviews and surveys, teachers reported wanting to discuss what and how to teach various concepts and share materials. The teachers also indicated that they were most comfortable meeting with teachers they liked and who shared their teaching and learning philosophies. However, the majority of the respondents said they did not regularly discuss student goals with members of their department who taught the same classes before the training. Wells and Feun documented a shift across all six high schools as staffs began to collaborate in teams of teachers who taught the same content. Teachers began to raise questions such as: Collaboration for what reason? What are the expectations? Other questions centered around academic freedom, dedicating individual planning time to team planning, lack of time and internal structures to allow for collaboration, negative resistant colleagues, and who should decide to develop learning communities and why. The teachers said they were not trained in working collaboratively. In addition, many were forced to have difficult conversations with their colleagues about teaching and learning that disrupted the status quo of the school. Overall, researchers noted the more collaborative the team, the more likely teachers were to change their teaching practices (Wells & Feun, 2007).

Dynamics of collaboration. In 2007 researchers Dooner, Mandzuk and Clifton recognized that little research documented how effective PLCs develop, are sustained, and how teachers learn to work through the inquiry process. As a result, they designed a study that grappled with the question, "What collaborative dynamics are involved in developing and sustaining PLCs?" Dooner, et al. studied seven teachers over a two year period as they collaborated to understand and implement a reform initiative in their school. Through analysis of journal entries, focus group discussions and interviews, Dooner et al. learned that teachers who discuss their practices add value to their work by capitalizing on others' strengths to achieve a shared goal. Ironically, the characteristics of an effective PLC can cause conflict among the participants.

Dooner et al. also documented the process teachers used to develop their PLCs. First, the teachers determined if there was shared interest to work together and if their personalities were compatible. Then, they agreed to share space, time and energy. Initially, the participating teachers did not share a common vision, aspirations or intentions. In the second phase, the group developed an understanding that all members had an equal voice, and everyone would be supported through challenges. In this phase they developed trust through social events. In addition, they established consistent meeting agendas, recorded meeting minutes and a rotating chairperson. The teachers also shared readings that contributed to their collaborative working environment. It took six months for the group to develop enough confidence to discuss struggles and challenges.

In the second year, anxiety among some of the teachers surfaced as the group became "too social" and "generally off task". One of the group members recognized that they had "generated more work, but of lesser quality". While the teachers could have abandoned the group, they explained they felt invested in the group process and felt a personal commitment to the group. One teacher said, "I will be honest, as time went on, and it got demanding, I did feel like giving up! But, I thought I can't let down the group, we are a unit and we have to keep as one." (p. 569)

Another teacher shared, "Each time situations present themselves you have to decide whether it is going to interfere with the stability of the group or if it's worth it. Sometimes it is, and sometimes it isn't. You are always wondering if it's going to shake up or wreck the group. And then you have to wonder if dealing with the issue is worth it." (pg. 571)

The group reflected that they grew stronger as they worked through their discomfort. One teacher stated, " It is very difficult to get a group to a place where they can be openly critical about practice, theory and group dynamics. Often, it doesn't get to that point. We got to that point. Still, peoples' feelings get hurt and things become personal." (p. 572). Dooner et al's findings are consistent with the popular literature on PLCs, which suggests teachers develop norms and consensus building strategies as they develop their PLC (DuFour & Eaker, 1998).

At the end of the two year project, the seven teachers broke into smaller groups to implement specific projects with their teaching partners. Based on their analysis, Dooner et al. argued that overall, the two year learning experience impacted the teaching practices of the teachers. One teacher summarized her experience by saying, "I have worked harder to familiarize myself with my curricular objectives…and I am much more concerned with quality over quantity. I have move away from daily worksheets….and I'm into longer term inquiry-based projects". Another teacher responded saying, "Well, in the past, I said to my students to simply write. They did, but they didn't understand the elements of a story. They just wrote. Now, I noticed that the stories are more detailed and I told them stories, too, through the unit. Doing this they were more imaginative."(p. 573).

Types of collaboration. In 2010 Levine and Marcus conducted a multi-level case study of six teachers at one school with the goal of identifying the types of teacher collaboration and analyzing which are most likely to improve student and adult learning. In addition, they learned how different kinds of activities facilitate and constrain what teachers can learn from collaborative work.

Levine and Marcus found that the topic of collaborative conversations in PLCs impacted what the teachers were and weren't able to learn from their colleagues. Researchers noted the intended focus for meetings fell into one of three categories: instruction, students and school operations. In general, meetings focused on instruction were more structured, allowing more collaborative talk

among the team. Furthermore, when teachers intended to focus on instruction in a structured setting, they were more than twice as likely to replay or rehearse classroom practices. In less structured meetings teachers tended to focus on operational and student issues.

In the structured meetings, a facilitator and timekeeper kept the agenda moving to the intended outcome. In the less structured meetings, the purpose and goals were shared without formal facilitation and structure. They also learned that when teachers focus on instruction, meetings with structure generated more detailed discussions about teacher practice. Levine and Marcus concluded that teachers can learn from collaborative conversations related to the "aspects of their work they can control and intend to impact" (p. 395). They also found that meetings designed to focus on student learning without a structured format may not generate detailed conversations about teaching practices. The message to practitioners is the design of the collaborative interactions can help or hinder teachers' learning.

Learning through Assessment

Federal legislation such as the Elementary and Secondary Education Act of 1965 and No Child Left Behind of 2001 generated accountability systems that requires school districts to measure student learning through standardized assessments. Teachers who work in professional learning communities collaboratively design ongoing assessments to gauge whether students are learning the curriculum that will be assessed on standardized state level tests. In

addition, they use the assessment information to design interventions for those who need additional time and support for learning, and enrichments for those who have already mastered the standards.

Mastery learning process. In 1964, Benjamin Bloom studied strategies of successful students and found that students who received feedback and correction performed at higher levels. In general, these students ask the teacher to explain and clarify the items they missed, then make corrections. He also looked at the role of assessment in the typical instructional process which was at the end of a unit. Bloom's research led to the recommendation to use assessment as part of the instructional process to identify learning needs and prescribe remediation and enrichment along the way (Guskey, 2005). These findings led to what is known as Bloom's Mastery Learning, and is found in the work of professional learning communities.

Teachers who design instruction using mastery learning design instructional units that include concepts and skills students need to learn. After initial instruction of the unit, teachers administer a formative assessment designed to give teachers and students feedback about their learning. This feedback is generated to let students know where they are performing well, and where they need additional support (Bloom, Hastings & Madaus, 1971). PLCs refer to these activities as interventions. Teachers design corrective activities for students so that they can work on areas not yet mastered. This process allows teachers a way to differentiate instruction and practice for individual students. After students

complete the corrective activities the teacher administers a second formative assessment to measure student progress. This second assessment includes the concepts and skills on the first assessment tested in a slightly different way. The purpose of this second assessment is to determine if the corrective activities enhanced student learning. In addition, it lets students know they have a second opportunity to learn which increases their motivation.

Students who do not need corrective activities are provided with enrichment or extension activities which allow them to delve deeper into the concepts and skills through various problem solving tasks. This provides students with multiple ways of expressing mastery.

Bloom's mastery learning process is designed to reduce the achievement gaps among students. In order to be most effective the corrective activities need to be noticeably different than the initial instruction. This is most likely to be achieved when teachers are given time to work collaboratively to design corrective and enrichment activities (Guskey, 2005). Teachers in PLCs constantly analyze student learning data to determine which students need corrective activities and which students would benefit from enrichment. In addition, teachers in PLCs are committed to sharing their expertise, materials and strategies to ensure all students learn at high levels (DuFour, 2006, pg 3).

Assessment data to inform instruction. To understand how literacy assessments would provide data to shape teaching practices and student learning progress, Schnellert, Butler and Higginson conducted a study of six teachers'

professional development at one of four schools in Canada. In the study, university researchers and classroom teachers participated in an instructional model that included the following: collection and analysis of assessment data, instructional goal setting, collaboratively designed instructional strategies, development of new practices, monitoring of outcomes and decisions about what to do in the future (Butler, Schnellert & Cartier 2005). This model embraces the components of PLCs. Teachers who work in PLCs engage in professional learning experiences that spark reflective practice. This reflective practice can result in heightened awareness of the relationships between instructional practices and student learning (Butler, et al., 2005; Butler & Cartier, 2004).

In 2007 researchers Schnellert, Butler and Higginson investigated how including teachers in the co-creating and analysis of formative and summative assessments can be useful in their efforts to improve their teaching practices. Their study is also important to administrators and policy makers who are responsible for supporting instructional and professional development practices that impact student learning outcomes. In general, researchers found that all teachers made instructional changes based on the data they collected from formative and summative assessments. The extent to which the changes were sustained and ingrained in practice was dependent on the teacher. Teachers who spent more time engaged in collaborative cycles of reflective inquiry were more likely to embedded instructional changes into their daily work. In addition, those who made the most changes actively engaged their students in dialog about data,

instruction and learning strategies. These teachers shared data with students and asked them for input on the types of learning strategies that would be most beneficial. Researchers believe it is likely that instructional change is sustained when students are directly involved. (Schnellert, et al., 2007).

It is important to recognize that the teachers in the study perceived large scale assessment data (created and administered from the Canadian province) to be less relevant in the instructional decisions they made. They felt the assessments developed and administered at the school level were much more meaningful for their professional development and student learning.

The findings of the study suggest that teachers can make instructional changes that increase student learning when they: collaboratively create and implement formative and summative assessments, use the data from these assessments to set goals for their students and themselves, have opportunities to work collaboratively and reflectively throughout the instructional cycle and participate as partners in accountability systems (Schnellert et al., 2007).

Assessment for learning. Knowing the popular research that formative assessments lead to increased learning, Ayala et al. (2008) conducted a pilot study to learn how formative assessments are designed, developed, and embedded into an inquiry science curriculum titled Foundational Approaches in Science Teaching (FAST). Researchers defined embedded assessments as those inserted into a curriculum to be used throughout the learning cycle, not just at the end. The results of the embedded assessments are to be used by teachers and students

to close understanding and learning gaps. The terms embedded and formative assessment are used interchangeably throughout the study.

The study included three phases: 1) planning, designing and developing embedded assessments, 2) piloting the assessments and 3) refining the assessments. During the piloting phase, researchers learned that teachers treated the embedded assessment like any other test they would administer. In general, teachers used the assessments in a summative way. They taught the material before administering the embedded assessment, and delivered feedback weeks after the test was given missing the teachable moments the assessments were designed to elicit. Teachers in the study did not recognize the shift from assessment practices to learning practices. As the study continued, researchers learned the embedded assessments should be reduced in number, short in duration and tightly linked to unit outcomes, administered in no more than two class periods, allow for immediate feedback to teachers and students, provide opportunities for student inquiry based on assessment feedback and set the stage for the next set of learning outcomes.

In response to the summative use of the embedded assessments, researchers changed the name of the formative, embedded assessments, to reflective lessons. These reflective lessons built on what students already know, focus on student conceptions and misconceptions, priming students for future lessons, and reflecting on material learned. Lastly, teachers were provided with specific strategies for putting the assessments into practice.

The findings from this study suggest that teachers need professional development to learn how to link and embed assessment practices into their teaching practices. The work of PLCs are designed to allow teachers time to work collaboratively to create frequent and formative assessments to guide student learning (DuFour, 2006, pg. 3).

Impact on Student Learning

At Lake Elementary and Galena Park Middle School teachers voiced and practiced a commitment to student learning, and viewed it as their moral purpose. At both schools educators moved beyond making decisions for teachers to making decisions based on the best interests of students and their ability to learn. This practice reinforces DuFour's and Eaker's suggestion that "until educators can describe the school they are trying to create, it is impossible to develop policies, procedures or programs that will make that ideal a reality" (DuFour & Eaker, 1998).

In the Michigan high school study, teachers who struggled to implement PLCs revealed they were struggling with comparing learning results of their students, discussing instructional methods used to teach students, assisting failing students, and agreeing with administrators about helping students who were not learning. In addition, across all six high schools in the study, teachers reported the review of student learning results seldom happened. When they analyzed tests it was to determine whether the test questions needed revision (Wells & Feun, 2007).

PLCs Need Time for Learning

The research highlights the importance of cultural and structural changes within schools to support teachers as they change their practices. In order for teachers to engage in the type of social interaction Vygotsky viewed as essential for cognition, they must work together. One of the key structural supports for teachers engaging in professional learning is the allocation of time in the contracted work day and week to participate in such activities. More than 85% of schools in Belgium, Denmark, Finland, Hungary, Ireland, Norway, Sweden and Switzerland provide time for professional development during the teacher work day or week (Organization for Economic Cooperation and Development (OECD), 2004) whereas this built in time is typically absent in the United States. For example, in Finland, teachers meet once a week to plan and develop curricula within their schools and between schools. (Wei, Andree & Darling-Hammond, 2009).

Furthermore, in most European and Asian countries, less than half of a teacher's working day is spent instructing students (National Commission on Teaching and America's Future, 2005). Teachers spend the remaining 15 to 20 hours of the week working with colleagues, preparing and analyzing lessons, developing and analyzing assessments, observing other classrooms, collectively analyzing student work to inform their instruction, meeting with students and parents (Wei, Andree & Darling-Hammond, 2009).

In Japan, teachers engage in what is known as Japanese Lesson Study in which a teacher demonstrates a lesson to a group of up to 200 teachers who act as observers. These observers analyze the strengths and weaknesses of the lesson and ask the teacher questions. This process allows the teacher to reflect on his or her practice and refine the lesson before it is taught to students. (Wei, et al., 2009).

In contrast, teachers in the United States generally have 3 to 5 hours each week for lesson planning and those hours are generally spent working independently (National Commission on Teaching and America's Future, 1996). In the United States teachers are with students about 80 percent of their total working time, compared with about 60 percent on average for teachers in these other nations. As a result, teachers in the U.S. have less time and space to learn from one another (Wei, et al., 2009), and more time to learn from their students.

PLCs Need Leadership for Learning

Collaborative leaders are defined as those leaders who have accepted the challenge of, and the responsibility for, building and sustaining a diverse team dedicated to successfully accomplishing a shared purpose (Rubin, 2002). To realize shared goals, collaborative leaders must create structures that support and maintain the relationships needed to further the shared mission and vision of the organization. Successful organizations have at their core the ability to "convert tacit knowledge to explicit knowledge on an ongoing basis" (Fullan, 1999, p. 16). "A core characteristic of professional learning communities is an undeviating

focus on student learning" (DuFour, et al., 2006, p. 3). Bezzina (2006) suggested that teachers need strong leadership to examine the teaching and learning processes in their school.

Collaborative Leadership

Eilers and Armando took a look at the social systems and interactions evident in a district and a school that tackled a school level change (2007). A case study was conducted at Whitman Elementary to learn more about the leadership within and between school and district networks to support changes that could make a difference in a small amount of time. Whitman Elementary had a history of "test scores well below the state and national averages, persistent student mobility and poverty, and a slate of veteran teachers with limited will to change" (Eilers & Armando, 2007 p. 619). A new principal was hired to reform the school. He possessed the skills necessary to 1) create learning communities among the teachers, 2) demonstrate his own form of collaborative leadership by learning through collaboration, and 3) use knowledge of and access to practices based on evidence (Eilers & Armando, 2007).

The first step in changing the culture at Whitman began with team building workshops. Those were followed by moving teachers from working in isolation to a culture of collaboration that focused on improvement. Teachers observed teachers in a neighboring school with similar demographics that consistently outperformed Whitman. A "no excuses" rule was modeled by the principal as evident in his conversations with the staff that there should be "no

blaming of the students' backgrounds", as an explanation for lack of achievement (Eilers & Armando, 2007, p. 621). This is in alignment with a quote from author and researcher, Jonathon Kozol in his book, Shame of a Nation, that reads, "It is harder to convince young people they 'can learn' when they are cordoned off by a society that isn't sure they really can. That is, I am afraid, one of the most destructive and long lasting messages a nation possibly could give its children" (p. 37). The collaborative leadership at Whitman was determined to create a culture that believed all students could learn. This philosophy mirrors Vgotsky's belief that learning is facilitated through the assistance of more knowledgeable members of the community and culture (Lee & Smagorinsky, 2000, p. 233).

The principal's actions and strategies designed to reform the school were aligned to district initiatives and expectations. Although there was resistance, the principal persevered and reported that, "People actually sit and work with each other and then talk about students, talk about data, and are open to do that. The focus now is on students versus on the principal or on the adults in the building" (Eilers & Armando, 2007, p. 625). During the two year study, the school culture changed along with an increase in student achievement. The researchers concluded that the positive changes occurred as a result of multiple district supports at the school level and collaborative leadership between levels of the district system. Schools that depend on leadership throughout the system, spreading and finding leadership within and outside of it, are the schools that learn and perform at high levels (Marks & Pinty, 2003, p. 393).

Leadership Perceptions of PLCs

In order to understand principal perceptions of PLCs, Cranston (2009) gathered data through focus groups and interviews of twelve principals who worked in seven private, and five public Canadian schools. The principals in the study led urban, suburban and rural schools representing all grade levels. Cranston's summarized his finding into eight themes. The first is that PLCs are a process that requires educators to learn together, and eventually transform their practices. The second is that schools need the following conditions for PLCs: time, school plans, interconnected teacher roles, teacher empowerment and institutional identity. When these conditions are in place, PLCs will grow and mature. The third is trust among and between teachers and administrators. PLCs develop in places where educators are can take risks, grow and learn together. The fourth is teachers in PLCs resemble familial relationship meaning they spend time protecting each other from professional critique which can lead to lack of change in practice. The fifth is learning in the PLC model was still an individual activity. The sixth is teachers' professionalism is determined by their attitudes and knowledge of curriculum, instruction, appropriate dress and respectful language. The seventh is the role of the teacher evaluation process and how it provides principal with opportunities to identify areas for professional growth. The eighth characteristic is how the teacher evaluation impacts principal and teacher relationships in PLCs. The evaluation process was seen as a way to build relationships between teachers and administrators.

Cranston's study emphasized the need for principals to move PLCs beyond comfortable conversations into decisions about best practice strategies to increase student learning. This challenging work can be done in schools where the principal has a firm understanding of what PLCs are, and how they work collaboratively to ensure learning as the ultimate goal (Cranston, 2009).

When asking educators to change their practices and thinking it is critical to understand the conditions that allow for effective adult learning. Danzig et al. summarized research from Knowles (1980) and Guskey (2000) and found that adult learners need to feel the need to learn, the opportunity to accomplish their own goals while learning, and the ability to incorporate their new learning into to the processes and practices within their school structures. In addition, learning is most likely to create change when learners develop their own ideas and collaborate with colleagues about how to implement them (Danzig, Borman, Jones, & Wright, 2007).

Chapter Summary

The research on professional development as a school reform strategy continues to support the notion that the key to improving student learning is an intense focus on teacher learning. PLCs is a professional development process that serves as a school reform strategy when implemented effectively. The complex nature of PLCs and how they work to increase student learning has been studied for the last two decades. Much of the literature is dedicated to how PLCs

are created and structured. Less literature focuses on the day to day practices of PLCs.

The research indicates PLCs are most effective when they commit to continuous learning. This job embedded professional development happens when teachers work collaboratively to close achievement gaps. Teams of teachers working together to analyze student performance, set collective goals for student learning, create common assessments to inform their instruction and share their best practices are what researchers describe as PLCs. In order for PLCs to work effectively, they need time to work together, and leadership that focuses on learning while removing barriers that get in the way.

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

The purpose of this study is to report findings on how a newly formed collaborative team works in a suburban Title I school in the southwestern United States. The research attempts to describe the behaviors and conditions associated with the work of the PLC process.

This chapter describes how the research will be designed and implemented. The design is a case study made up of six components: 1) a survey of the teachers and administrators designed to measure the extent to which critical issues of teams are in place in the PLC; 2) a self-assessment of how the teachers and administrators perceive their work in PLC processes prior to a 3) focus group interview of all participants; 4) in-depth interviews with the third grade teachers and those who support them; 5) field notes collected during observations of collaborative team interactions and faculty meetings; and 6) analysis of documents and artifacts of the collaborative team's work to include electronic collaborative team logs, faculty meeting agendas, collaborative team generated essential learning outcomes, SMART goals, common assessments, and intervention and enrichment schedules.

Restatement of the Problem

This study will describe how one newly formed collaborative team of educators work together in a PLC process. The research will investigate the following questions:

1. What are the behaviors and practices of a newly formed collaborative team working in a PLC?
2. How do educators commit to continuous learning?
    a. How do educators determine essential learnings by course and by quarter?
    b. How are SMART goals created?
    c. How is student data used to make instructional decisions?
    d. How are common assessments created?
    e. How are decisions made regarding which students need additional time and support for learning?
    f. How are decisions made regarding which students need enrichment when they have already learned?
    g. How is consensus reached in the collaborative team?
    h. How are instructional practices shared with one another?

3. How is time dedicated for learning?
    a. How much time is spent working collaboratively on the tasks related to collaborative team functions? (see question #1 and subquestions a-h under #1)
    b. How is instructional time used to ensure student learning?
4. How does school and district leadership support a focus on learning?

Research Design Procedures

A case study design will be used to describe how a newly formed collaborative team works in a suburban Title I elementary school in the Southwestern United States. The third grade teachers in the collaborative team, the school based instructional coach, special education teacher, principal and assistant principal will be invited to participate in the study. Qualitative and quantitative data will be collected through an electronic survey, self-assessments, a focus group interview, an individual in-depth interview, observations, and analysis of documents.

Research Methodology

A case study design will be used in this study to describe how a newly formed collaborative team works within PLC processes from October through December of 2010. The researcher selected a case study approach in order to gain an understanding of how a collaborative team works through close examination of a specific example (Rossman & Rallis, 2003). A case study will assist the researcher in exploring a structure, activities, and processes with a team of

individuals. Since case studies are bound by time and activity, the researcher will use a variety of data collection procedures over a sustained period of time (Creswell, 2009).

As a result of the research design, both qualitative and quantitative data will be collected throughout the study. Qualitative research focuses on human perception and understanding. The methodologies of qualitative research tend to improve the theoretical comprehension of the existing research so that practitioners in various environments can understand how things work. (Stake, 2010). Quantitative research methods will also be used in this study. The survey data will be collected to provide "numeric descriptions of trends, attitudes or opinions of a population" (Creswell, 2009, p. 145).

In an effort to triangulate the qualitative data, agendas of the eight collaborative team meetings will be analyzed to determine alignment between the agenda items and the expected function of a collaborative team.

Participants

Participants in the study will consist of three third grade teachers, a school based instructional coach, a special education teacher, principal and assistant principal who work in a suburban Title I elementary school in the southwestern United States. Each of the participants directly participate and or support the third grade collaborative team at the school. Permission from the school district and site administration will be secured before approaching the participants. Letters requesting permission will be provided. In addition, all participants will be

notified that their participation will be voluntary and their identity will not be revealed in any way.

The third grade collaborative team at Waves Elementary was chosen for this case study for a variety of reasons. First, this is the first year the collaborative team has worked together. While they are not new to teaching, they are new to working with one another at this school and at this grade level. Secondly, third grade is a highly accountable year in terms of state assessments and accountability measures. This is the first time two of the participants have taught third grade. Lastly, Waves Elementary did not make Adequate Yearly Progress(AYP) in 2010. However, the third grade students did make AYP and showed a 27% gain from the year before. The faculty and staff at Waves understand the state sanctions that could come their way if their students do not make AYP in 2011.

The sample size for this case study is seven educators who are directly connected to the work of a third grade collaborative team. All seven educators will participate in individual interviews, surveys, observations, and a focus group. The documents generated by the seven participants will be analyzed, and all seven will receive the survey.

Researcher Self-disclosure

In addition to identifying the educators in the study, it is important to note the researcher's participation in the study was overt (Rossman & Rallis, 2003, p. 152). The researcher worked with each of the participants in some capacity throughout her 15 year career in Beach Front Unified School District.

Throughout her career she led professional development initiatives and supported their implementation at both the district and site levels. In this role she worked with building administrators and teacher leaders to design Professional Learning Community processes within Beachfront Unified School District. To support the implementation of PLCs, she provided coaching and mentoring for school improvement teams and worked to align resources to support this professional development model aimed at increasing student and adult learning. In addition, the researcher worked as the district recruiter from 2006-09 where she participated in the selection of staff. She was a member of the selection committee that hired Frank as the principal of Waves Elementary.

Instrumentation

Six data collection instruments will be used in the study. Each instrument is aligned to the research question, "What are the behaviors and practices of a newly formed collaborative team at Waves Elementary School in Beachfront Unified School District?" A survey will be used to measure the extent to which critical issues of teams are in place in the collaborative team as shown in Appendix A. Self- assessments of collaborative team practices as shown in Appendix B will be administered prior to participation in a focus group interview as shown in Appendix C. A three part interview will be conducted as shown in Appendix D. Field notes will be collected while the collaborative team is meeting in its formal structure. In addition, artifacts and documents related to the work of

the collaborative team will be analyzed in an attempt to triangulate the qualitative data collected.

Instrument 1: Survey "Critical Issues for Team Consideration"

A survey with a ten point Likert scale will be provided to all participants. The information collected will be used to gather quantitative data on teacher perception of the extent to which 18 statements are true of their team. The survey results will allow the researcher to make generalizations about the group being studied (Creswell, 2006). The researcher will use an online survey tool called Survey Monkey so that the results can be downloaded into graphs, charts and spreadsheets to be analyzed. The researcher was granted permission by Solution Tree to use the survey in this study. The survey is included in Learning By Doing, which is published by Solution Tree. A copy of the survey is included in Appendix A.

Instrument 2: Self-assessments of PLC Practices

Self-assessments of the following topics: learning as our fundamental purpose, building a collaborative culture and a focus on results, will be used by participants to assess the current reality of their school's implementation of indicators aligned to each topic. The purpose of the self-assessments is to provide the participants with an opportunity to individually interact with the vocabulary, concepts and topics related to the focus group interview. The researcher was granted permission by Solution Tree to use the self-assessments in this study. The

self-assessments are included in Learning By Doing, which is published by Solution Tree. The self-assessments are included in Appendix B.

Instrument 3: Focus Group Interview

All participants will be invited to attend a focus group interview designed to generate opinions and points of view from the group. The focus group technique allows participants to hear "others' opinions and understandings to clarify their own" (Rossman & Rallis, 2003, p. 193). The questions to be asked in the focus group interview are included in Appendix C.

Instrument 4: Three Part Interview

A focused interview consisting of three parts will be administered to all participants in a 90 minute time frame (Seidman, 2006). The first part of the interview, a focused life history, will be used to put the participant's experiences in context by telling about him or herself. These five questions will focus on the participants' experiences as a student, their decision to become an educator, the professional development and professional organizations they participate in and their thoughts about current education reform initiatives in the United States.

The second part of the interview will concentrate on the participants' lived experiences related to professional development and PLCs. These two questions are designed to elicit details from personal stories and experiences.

The third part of the interview will include three questions aimed at reflection on the meaning of the experiences. This is where the participants connect past experience to their present reality. It will be critical for the questions

in part one and part two to provide the foundation for this type of reflective thinking.

The overall goal of the three part interview will be for participants to make meaning and share that meaning with the researcher who is trying to gain a deeper understanding of their experiences and how they contribute to their current work (Seidman, 2006).

Instrument 5: Field Notes

Field notes will be collected by the researcher as she observes interactions among the third grade collaborative team and those who support the team's work. The purpose of field notes is for the researcher to "turn what you see and hear into data" (Rossman & Rallis, 2006, p.195). The field notes will be divided into two categories: 1) a running record of observations that are seen and heard, and 2) observer comments to include emotional responses, analysis and questions about meaning. The comments will include researcher reflection about the process and ideas for improvement and or clarification. "Thick descriptions" of details, emotions and relationships will emerge in this process which will result in "thick interpretations" (Rossman & Rallis, 2006, p. 197).

Instrument 6: Analysis of Artifacts and Documents

Throughout the study the researcher will collect qualitative documents related to the work of the third grade collaborative team. These documents may include products of the collaborative team's collective talents such as team norms, SMART goals, essential learning outcomes for students by quarter and by course,

common assessments, intervention and enrichment schedules and strategies, and data analysis reports. Other documents and artifacts may include electronic collaborative team logs, faculty meeting agendas, classroom walk through observation data, student performance data, and videos and photos of the collaborative team working collaboratively. The purpose of collecting and analyzing artifacts and documents is to enable the researcher a view into the language and vocabulary of the participants and access to data that have been generated by the participants (Creswell, 2006).

Data Collection Procedures

Permission to collect data will be granted from the school district and the school administration. The appropriate documents will be submitted to the school district prior to the research process. The researcher will meet with site administrators to explain the purpose and scope of the study. At the conclusion of the meeting the researcher will request permission to meet with teaching staff to request their participation. Table 1 shows the process and estimated time allocation for each phase of the data collection.

Table 1

Phases of Study

Phase	Audience	Instrument	Time Allocation
Phase 1: Survey	Individual participation of all participants	Electronic Survey 18 questions	October 2010 25 minutes
Phase 2: 3 Self-assessments	Individual participation of all participants	3 self-assessments	October 2010 45 minutes
Phase 3: Focus Group	Group participation of all participants with researcher	Focus Group Interview Questions 4 questions and 10 sub questions	October 2010 90 minutes
Phase 4: In-depth Interview	Individual participation of all participants with researcher	In-depth three part interview 10 questions	November-December 2010 90 minutes
Phase 5: Field Observations	Researcher conducts field observations during PLC and faculty meetings	Running record and observer comments Researcher journal	October – December 2010
Phase 6: Artifact and document collection	Researcher collects relevant artifacts and documents from participants	Artifacts created collectively in the PLC which may include team norms, SMART goals, essential learning outcomes, common assessments, student performance analysis, intervention and enrichment strategies and schedules, faculty meeting agendas, collaborative team logs, classroom walkthrough observation data, videos and photos of PLC structures, etc.	October-December 2010

Phase 1

Phase 1 of the data collection will begin with an overview of the purpose and scope of the study. Included in the scope of the study will be an estimated time commitment for each participant and an anticipated timeline for each phase. Teaching staff will be reminded that their participation will be voluntary and anonymous, and that they can withdraw from the study at any time. Participants will be asked if they prefer to meet before school, after school or during their lunch time. The group will have to come to consensus on when they want to do the focus group since they will participate at the same time. Phase 1 of the data collection process will begin with an electronic survey included in Appendix A. Since the survey is electronic, participants will need access to computers to complete the survey during the meeting.

Phase 2

Phase 2 will consist of participants individually, honestly and silently assessing their collaborative team's implementation of indicators related to the following functions and beliefs of PLCs: learning as the fundamental purpose, building a collaborative culture through high performing teams, and focus on results. There are a total of eight indicators to be assessed using criteria associated with five levels of implementation. The researcher will provide the self-assessments at the conclusion of phase 1. Participants will be asked to complete them prior to the focus group interview. The researcher will not collect the self-assessments.

Phase 3

Phase 3 will be a focus group interview with all participants. The focus group will be conducted at the school site at an agreed upon time based on consensus of the group. A protocol for participation will be followed and confidentiality forms will be completed and signed. The focus group will be structured around three questions with 10 sub questions. Each participant will have the opportunity to respond to the questions by taking turns orally. After all questions are discussed, participants will complete a focus group questionnaire where they will write their responses to the same questions that were discussed orally. The questionnaires will also include demographic data about the educator. The questionnaires will be collected by the researcher to be coded, categorized, and analyzed.

Phase 4

Phase 4 will be three-part, in-depth interviews with participants. These interviews will be conducted based on the participants' time and location preference. The interviews will be audio recorded and professionally transcribed. The researcher will explain the structure, purpose, format and confidentiality of the interview to each participant before the interview begins. At the conclusion of the interview, the researcher will summarize and close the interview by thanking the participant, and explaining the process for sharing the transcription of the data (Rossman & Rallis, 2003). During the analysis of the transcribed information, the researcher will use the member checking strategy to ensure validity of the

interview. The researcher will meet with the participant to share interpretations and confirm validity of the data (Creswell, 2006).

Phase 5

Phase 5 will occur between October and December 2010. The researcher will attend at least seven PLC meetings and three faculty meetings to observe and record interactions between participants in two different settings within the school. The field notes will include location, people in attendance and those who are absent, topic(s) of the meeting, the events that took place, why the events occurred, the conversations that emerged, social interactions and outcomes of the meetings. These notes will be specific and will avoid evaluative language (Rossman & Rallis, 2003).

The researcher will write up the notes as soon as possible after each observation. To assist in the data gathering of field notes the topics and indicators on the self-assessments may be used to help categorize and organize the data.

Phase 6

Phase 6 will be conducted between October and December of 2010. Documents and artifacts related to the work of PLCs will be collected throughout the research process. These documents will be used to gather additional data from participants as well as to triangulate the data. The documents will be coded, categorized and analyzed for trends and themes related to the work of PLCs.

Table 2

Data Collection Aligned to 5 Themes

Theme	Data collection
Professional development and PLCs	Focus group questionnaire: professional development participation and question #1 In-depth interview questions: #4, 7, 8, 9 Field notes Artifact and document collection
PLCs as a reform strategy	Survey questions: #2, 4, 8, 11, 12, 14 Self-assessment: Learning as Our Fundamental Purpose, Part II Self-assessment: Focus on Results, Part I In-depth interview question #5 Field notes Artifact and document collection
PLCs commit to continuous learning	Survey questions: #3, 5, 6, 7, 9, 10, 13, 15, 17, 18 Self-assessment: Learning as Our Fundamental Purpose, Part I Self-assessment: Collaborative Culture Through High Performing Teams Self-assessment: Focus on Results, Part I and II Focus group questionnaire: question 2, 2a, 2b, 2c, 2d, 2e, 2f, 2g, 2h Field notes
Collaboration	Artifact and document collection Survey questions: #1, 16
PLCs need time for learning	Focus group questionnaire: question 3a, 3b Field notes Artifact and document collection
PLCs need leadership for learning	Focus group questionnaire: question 4 Field notes Artifact and document collection

The data was examined according to the five themes in the literature reviewed in Chapter 2. A sixth theme, collaboration, emerged during the analysis of the data. Table 3 represents the how codes were assigned to each theme during the data analysis. Each theme was divided into sub themes. Each theme was color coded and each sub theme was numbered. The themes and subthemes were sorted to determine areas of integration among data sets. For example, the theme of time was apparent in the focus group questionnaire, field note observations and artifacts. All data related to that theme was coded in orange. Within the orange coding, the information related to "time for relationship building" was coded with the sub theme of 8 and information related to "time to become more efficient" was coded with a sub theme of 9.

Chapter Summary

In order to learn how a newly formed collaborative team works, it will be important to gather multiple forms of data to describe the behaviors and practices of those who work within the PLC process. The case study for this research project includes both qualitative and quantitative data collection methods. An electronic survey, self-assessments, focus group interview, in-depth interview, field observations, and artifact analysis will be conducted by the researcher from October to December of 2010.

Table 3

Coding for Focus Group and Interview Responses, Field Note Observations, Artifacts, and Survey Questions

Theme	Sub Theme	Coding
Professional development	Curriculum	1
	Instruction	2
School reform and accountability	Compliance	3
	Data discussion	4
	Resistance	5
Commitment to learning	Low level of commitment	6
	High level of commitment	7
Time	Time for relationship building	8
	Time to become more efficient	9
Leadership	Teacher leadership	10
	Administrative leadership	11
	District level leadership	12
Collaboration	Isolation	13
	Interdependence	14

CHAPTER 4

FINDINGS AND RESULTS

Introduction

The goal of this study was to do a case study of a newly formed collaborative team working within a Professional Learning Community (PLC). The research describes how one grade level of teachers participates and works together in the PLC; it identifies themes based on educators' conversations and behaviors related to working within a collaborative team. Data were collected through a survey, interviews, focus group discussion and questionnaire, observations of collaborative team and faculty meetings, and artifacts generated from the work of the collaborative team. The goal of this chapter was to analyze the data in relation to the research questions:

1. What are the behaviors and practices of a newly formed collaborative team working in a PLC?
2. How do educators commit to continuous learning?
    a. How do educators determine essential learnings by course and by quarter?
    b. How are SMART goals created?
    c. How is student data used to make instructional decisions?
    d. How are common assessments created?
    e. How are decisions made regarding which students need additional time and support for learning?

f. How are decisions made regarding which students need enrichment when they have already learned?

g. How is consensus reached in the collaborative team?

h. How are instructional practices shared with one another?

3. How is time dedicated for learning?

    a. How much time is spent working collaboratively on the tasks related to collaborative team functions? (see question #1 and subquestions a-h under #1)

    b. How is instructional time used to ensure student learning?

4. How does school and district leadership support a focus on learning?

Data are analyzed in relation to the research questions and themes presented in the literature review. In addition, a description of the school and characteristics of the participating educators is presented.

Demographics of the School

Waves Elementary is a Title 1 school in a unified school district of 27,000 students. Five hundred and fifty five students in grades prekindergarten through sixth grade attend Waves Elementary. Sixty eight percent of the students qualify for free and reduced lunch. Forty one percent of the students are Hispanic, 2% are Asian, 8% are African American, 7% are American Indian, and 39% are white, and 3% are other.

Since 2005, Waves has maintained the state designated label of "Performing Plus" which means the school has shown improvement or has

sufficient numbers of students demonstrating proficiency to earn a Highly Performing or Excelling label, but do not have a sufficient number of students exceeding the standard. In two of the last three years, however, Waves Elementary did not make adequate yearly progress. A school or district can be designated as "Highly Performing or Excelling" under the state's model and simultaneously be designated as "not making Adequate Yearly Progress (AYP)" due to fundamental differences in the two calculations. One of the most significant differences is due to the evaluation of all students' performance on state assessments in reading and math by grade level as well as the performance of subgroups (race/ethnicity, English Language Learners, Special Education, low socioeconomic status, etc.). Failure to meet the criteria in any one of these indicators results in the entire school or district not making AYP. Another key difference is the inclusion of different student populations; AYP calculations include the student achievement data of all students (English Language Learners (ELL), Special Education, low socioeconomic status, etc.) considered stable; where the state accountability calculations include the results of only students with "valid test scores," excluding ELL students who have less than four years instruction in English. Lastly, the other indicators used in the AYP and state accountability calculations differ, most notably the inclusion of the percentage of students tested and attendance rate in the AYP calculation.

Table 4

Participants in the Study

Name	Job	# of years as an educator	# of years at Waves Elementary	# of years working in BFUSD	# of years working with 3rd graders	Education Level	Ethnicity	PLC training received
Ava	Special Education Teacher	14	10	10	2	Bachelors Degree	White	2 or more hours of PLC training with the DuFours 2 or more hours of participation in a book study about PLCs
Barb	Instructional coach	35	11	35	20	Masters	White	2 or more hours of PLC training with the DuFours 2 or more hours of participation in a book study about PLCs
Coral	3rd grade teacher	10	5	5	2	Masters	White	2 or more hours of PLC training with the DuFours 2 or more hours of participation in a book study about PLCs
Frank	Principal	12	3	9	10	Masters	White	2 or more hours of PLC training with the DuFours 2 or more hours of participation in a book study about PLCs
Jim	Assistant Principal	37	5	18	5	Masters	White	2 or more hours of PLC training with the DuFours
Mary	3rd grade teacher	3	1	3	1	Bachelors	White	No formal training
Samantha	3rd grade teacher	25	1	10	1	Masters	White	2 or more hours of PLC training with the DuFours 2 or more hours of participation in a book study about PLCs

Over the past five years, Waves Elementary School has experienced an increase in students qualifying for free and reduced lunch and a decrease in total enrollment. Three years ago the school community began to study whether or not it would be beneficial to adopt a traditional philosophy of education at Waves Elementary. After studying the concept and engaging the community, the Beach Front Unified School District's governing board granted Waves Elementary the permission to become a traditional school. This identification means that teachers have a commitment to teaching linear, sequential curriculum with high expectations for all. Parental involvement is expected, and consistent discipline and dress code are monitored.

The school has a strong partnership with a local university, which conducts undergraduate and graduate education classes on Waves' campus. These courses require university students to observe classroom instruction.

Description of Participants

Ava

Ava is a special education teacher who teaches students who qualify for special education services in grades kindergarten through fourth grade. She works closely with the third grade collaborative team since the majority of her students are in the third grade. She differentiates instruction for her students that is aligned to the curriculum being taught in the third grade classrooms. She provides individualized instruction, accommodations and remediation as needed. In addition, she works closely with the parents of her students. During

collaborative team meetings Ava's most frequent contributions to the 3rd grade team were strategies for how to work with students who are struggling with learning. "Together we (our PLC) come up with resources and lessons, SMART board activities, anything we can get for those lower level reading kids to understand, to make it easier for them." (Ava interview, November 17, 2010)

Barb

Barb is the instructional coach who works as a teacher leader to support both teacher and student learning on the campus. Barb retired from the District three years ago as a classroom teacher and was rehired in the role of an instructional coach. She serves as a mentor, not an evaluator. She works closely with the school administration and grade level collaborative team to support school improvement initiatives. She coordinates reading and math interventions for students, analyzes student learning results, shares best practice instructional strategies, generates ideas for lesson design and shares materials. Observations and notes collected in interviews from the field indicate Barb is well respected by her colleagues for her years of teaching experience and commitment to her profession. According to her site administration, she has a reputation of being able to teach any child, and has a great rapport with students, teachers and the administration. She is looked upon as a lifelong learner who continually shares what she learns with others.

> I hate not knowing. I'm just a person that can't not know. When I heard our new director of gifted services talk about the depth and complexity instructional model, I went home and researched it. I trained myself in the

> model. Now I would love to go to a training of some sort. (Barb, interview November 17, 2010)
>
> I go to just about everything. I'm involved in all kinds of national organizations. Our state's gifted and geography associations, and the National Reading Association are a few. I go to all kinds of conferences. I don't even turn in half of my professional development credit for salary advancement. I go because I want to go. (Barb, interview, November 17, 2010).

During the 90 minute interview in Barb's classroom, the phone rang six times with teachers calling for advice. Three of the phone calls were teachers seeking help with how to use a particular computer program, two were asking for tips on implementing reader's theater and one was how to design a math intervention for a student.

Barb leads the 3rd grade collaborative team's weekly meetings. She begins each meeting with some kind of gift for the teachers. For example, at one of the November meetings she brought a file folder for each teacher with Thanksgiving related activities. She did the same in early December with a file of her favorite winter related lessons and activities. The team responded with appreciative comments such as, "Thank you!", "This is great!", and "You are so thoughtful!" In addition, she brings a basket of snacks to each meeting and begins the meeting by thanking them for being there. Throughout the meeting she solicits input from the team and creates an agenda for the next meeting. She facilitates each collaborative team meeting and provides reflective questions to spark conversation about each agenda item. For example, Barb asks the team such as, "What questions do you have about this data?" "How do you feel about this?"

"Now that you have analyzed this data, would you have done something differently?"

Coral

Coral has taught third grade for two years. Of the three third grade teachers, she has the most experience teaching this grade level and teaching in a Title 1 school, but is not the most experienced teacher on the team. Throughout the last four years she has worked closely with the school improvement leadership team to design, implement and monitor strategies to increase student learning. As a result, she has had more than 20 hours of training in PLCs and in how to write and implement school improvement plans. Throughout her interview she referred to her understanding of the relationship between teacher practice, student learning and school accountability.

> I feel like the weight of the world is on my shoulders sometimes. I can look in the mirror every day and say I am doing my absolute best. If at any time my kids don't perform, the world is looking at me. It's tough. (Coral, interview November 10, 2010)

Coral has high expectations for how her collaborative team should function. "I know my issues are about control. It's not control that everything has to be my way, but control in that this is my world and I want it to be perfect." Her primary objective is to ensure that this year's third graders make AYP in reading. Coral shares successful practices of the past and is constantly looking for ways to increase student performance. Coral has an educational commitment to her students.

> For me, as an elementary teacher, I really do feel I make a difference with some of these kids, and they come back. My preschool kids are

> graduating from high school and they come back and recognize me as their teacher. So I know I make a difference. But nobody was able to do that for me, I guess, because I don't even remember my teachers' names. (Coral interview, November 10, 2010)

Frank

Frank is the principal of Waves Elementary. During his tenure, he has worked with his staff and community to implement traditional educational philosophies known as traditional pillars. The following six pillars of traditional educational philosophy guide the mission of Waves Elementary: classrooms with a strong academic focus, linear and sequential curriculum, high expectations for all, dress code, partnership between home and school, and consistent discipline. These pillars are documented on posters displayed throughout the school. Throughout the three years as principal at Waves Elementary, he has seen a decline in enrollment, an increase in special education programs, and an increase in the poverty levels of his students. At the same time, he has had minimal change in teaching staff. Each teacher in the study shared that Frank is well respected by the teachers and staff on his campus. They credit him for creating an environment of trust and collegiality by being visible, approachable and focused on student learning. During an early release day for professional development, Frank brought the staff together to have a 30 minute faculty meeting. The first 15 minutes were dedicated to faculty and student celebrations followed by an overview of the professional development choices available to them for the remainder of the afternoon. He opened the meeting by saying, "Choose to do what you value today. The time is yours, do what you value." He closed the

meeting by saying, “I want you to feel supported with time. Your time is based on what you value. Go do what you value!”

Frank believes his primary role is to guide the work of collaborative teams by setting expectations for their work and protecting time for them to be able to work together.

> I believe you have to build trust with your colleagues. You have to be a good listener. I think I have good relationships with my staff. Of course, I think there are areas for growth, but my biggest strength is getting them together to believe in what we’re doing and feeling like I’m a supporter of them. It’s not us against them, teachers against administration. We are in this together. (Frank interview, November 3, 2010).

Jim

Jim is the assistant principal whose primary job roles are to manage discipline, testing and scheduling. As the testing coordinator he works closely with collaborative teams to provide student learning data. He runs reports from the district’s standards-based instructional improvement system which includes quarterly benchmark assessments in reading and mathematics. Jim discusses the reports with the 3rd grade collaborative team after each benchmark to determine what types of interventions and enrichments are needed to support student learning. In one collaborative team meeting, he posed questions to the teachers about the assessment questions, format of the tests and challenges teachers to think about why their students performed as they did, and how they can work collaboratively to increase student learning. An example of Jim’s commitment to student learning was revealed in the indepth interview where he discussed his approach to using the district assessment program as a learning tool.

> It is so important for collaborative teams to determine what the students' learning needs are so that I can help them focus on why the learning needs exist. One thing I do with collaborative teams is take a question from our quarterly benchmarks and treat it as a learning tool. I lead teachers through the analysis of the question and why each of the answers is either correct or incorrect. It is powerful to know why the answers are right or wrong. It is important to use higher order thinking skills to analyze the answers. (Jim, November 15, 2010)

Mary

Mary is the newest teacher in the 3rd grade collaborative team. She has taught for three years at three different grade levels in three different schools. She has been a victim of reduction in force due to budget cuts across the state. This is her first year teaching in a Title I school and she is learning how to understand school reform and accountability from a new perspective. During collaborative team meetings she shares her energy and determination for meeting the needs of each of her students. Her persistence is evident when she talks about the pride she and her students have when they see results of their hard work.

> After reviewing the first reading benchmark, I was almost in tears because the majority of my students could not read the questions. I reached out to all of the experts on this campus…the reading teacher, the instructional coach and begged for help. Now, these specialists are coming into my room and we are working with small groups of students on very specific concepts so that they will do better next time. I have some kids sounding out words, some working with sight words, some with vocabulary. (Mary interview, November 15, 2010).

Mary's mentoring network includes the teachers in her collaborative team as well as the specialists on campus. In the in-depth interview, Mary talked about the difficulties her students were having with writing. During a team meeting, her colleagues suggested that she contact the school's literacy specialist for help. The

literacy specialist is now coming in three days a week for an hour to help students write sentences and paragraphs. Mary looks to her collaborative team for structure and asks a lot of "how" and "when" questions to clarify expectations.

Samantha

Samantha is new to the school and the grade level, but not new to teaching. This is the first year she has taught a grade level with high stakes testing accountability, and her first year in a Title 1 school. Samantha's interview included her knowledge and practice of how to design and implement integrated thematic curriculum. She explained how she incorporates Howard Gardner's multiple intelligences theory (Gardner, 1993) and Susan Kovalic's integrated thematic instruction model (Kovalik, 1994) into her lessons. Her belief that students learn best when they have meaningful real life experiences was revealed throughout her interview.

> I was so disappointed when I found out our students were getting cabbage plants to take home yesterday. I was upset because I did not know about it until 10:00 yesterday morning. I changed my lessons for the rest of the day. I taught the third grade standard of measurement using the plants, and connected the plants to agriculture and how growing plants is part of our ecosystem. Then we connected cabbage to the nutrition unit we just did. Then we made connections from nutrition to the digestive system that we studied in science. If I would have known the plants were coming I would have had time to create a parental involvement component and done a much better job of using the plant as a real experience to teach so many parts of the third grade curriculum. Instead, we spend so much time focusing on test preparation. (Samantha interview, December 7, 2010).

Samantha believes her primary role in the collaborative team is to share thoughts and ideas about how to make the curriculum more engaging for students. She

understands the learning needs of each of her students and is trying to meet all of them.

> I'm going to do the very best I can with each student while he's here with me. I am going to put my heart and soul into him. But I can't fix his parents; I can encourage his parents. I will do whatever I can. I have to do whatever I can to create opportunities for my students. We are doing the best we can. When I get an idea, I share it and vice versa. (Samantha, December 7, 2010)

Researcher's Role in the Study

The researcher has been an educator for twenty years, the last 15 years in Beachfront Unified School District. The first eight years of her career were spent teaching 6th, 7th and 8th grades. Four of those years were in a Title 1 school. She spent six years as a district wide teacher leader mentoring first year teachers and four years as the director of professional development and recruitment. She is currently in her first year in the role of assistant superintendent for teaching and learning. She has an elementary teaching certificate, a middle grades language arts endorsement, k-12 reading endorsement, English as a Second Language endorsement and a superintendent certificate.

Throughout the research study the researcher engaged in participants' conversations when invited to do so. At one of the initial collaborative team meetings participants invited the researcher to join their reflective dialogue about their work in creating common assessments. While they were talking about their lack of time to do this kind of work the researcher asked them a few questions about how they were using the district adopted instructional materials.

> How are you using the math assessments embedded in the newly adopted math series? How are you using the assessments in the reading series? How are you using the district created benchmark assessments? Are you assessing spelling words using the same assessment for each spelling unit?" (researcher's field notes, 11-3-10)

They answered each question by talking about how they were using each of these assessments in a common way. The researcher reminded them that these are all common assessments. They collectively paused and nodded in agreement. The next conversation centered around the idea that so often teachers think that when learning something new, in this case the PLC model, they think they have to discard what they have been doing and start over. The conversation continued as the team discussed the work of the collaborative team is to not only create, or identify existing common assessments, but to design intervention and enrichment opportunities for students based on the results of the common assessments.

Findings and Results

What are the Behaviors and Practices of Educators within a PLC Structure?

The agreed upon formal structure for how the collaborative team operates is the teachers meet each Wednesday morning during their planning time in Coral's classroom. The administration does not routinely attend the collaborative team meetings. Barb creates an agenda, emails it to the team ahead of time and facilitates each meeting. In addition, she creates and monitors the collaborative team sign in sheets used to track teacher participation in the state level school improvement plan for performance pay. The PLC structure is the district supported professional development model aligned to school improvement

initiatives. All collaborative team members attended the eight team meetings I observed.

Role of the Instructional Coach

Barb keeps conversations focused on the agenda items, is mindful of time and uses coaching strategies to move the dialogue along when needed. For example, she regularly asks the team for their ideas and thoughts about how to tackle complex challenges. Because of her wealth of experiences and years of practice, she is looked to as the "knowledgeable other." The team looks to her for acceptance of ideas and for guidance. During one collaborative team meeting, Barb asked the team how they would like to tackle the upcoming writing benchmark test to be administered the following week. She asked for ideas and solicited feedback from each of the team members. Barb validated their ideas, and they quickly came to consensus that they would use expository writing prompts from the past available in the electronic district assessment program. Coral took responsibility for getting the prompts to Ava, Barb offered to help in any way, and they moved on to the next agenda item.

Barb closes each meeting with a summary of what was discussed and who will be responsible for following through with decisions and actions.

Understanding PLCs as a Model for School Reform

The literature reviewed in Chapter 2 revealed the definitions and functions of Professional Learning Communities as cited by researchers and scholars in the United States and abroad. In order to learn how the participants in the study

understood PLCs, the researcher conducted a focus group that included whole group discussion followed by independent written responses on an anonymous questionnaire that was turned in to the researcher.

Six of the seven participants attended the focus group. The seventh was tutoring a student in an afterschool reading program. All seven participants completed a written questionnaire. During the whole group dialogue, the group's answers to the following questions were charted. What is a PLC? What do PLCs do? What do PLCs need? The participants summarized that a PLC is a group of educators who have a common goal, strive for professional growth, share resources, responsibilities and strategies, learn from one another, and work interdependently.

The focus group participants (educators at Waves Elementary) explained that PLCs are passionate about helping students, use a variety of data to drive their instruction, design interventions and enrichments to ensure student learning, provide support to one another, capitalize on individual talents, share resources, design assessments and lessons together, determine essential learning outcomes and create common goals and align assessments to measure performance of those goals.

In response to the third question they discussed the needs PLCs have in order to do their work. They need time, student level data, support and coaching from site and district leadership, resources, common planning time, guidelines

and expectations for their work, common goals and purpose, and they need to establish a set of norms they agree to work by.

Table 5

Responses from Participants in the Focus Group

Question	Oral responses from participants
What is a PLC?	Group of educators with a common goal Group of educators striving for professional growth Group of educators who share resources, responsibilities and strategies Educators who learn from one another Interdependent group of educators
What do PLCs do?	Passionate about helping students Use data (all kinds of data) to drive instruction Design interventions and enrichments Provide support to one another Capitalize on individual talents Design assessments and lessons together Share resources Create common goals and align assessments to those goals Determine Essential Learning Outcomes (ELOs)
What do PLCs need?	Time Student data Support and coaching (referred to administration and site based instructional coach Resources Common planning time Guidelines (expectations and parameters for their work) Norms Common goals and common purposes

Knowing-doing Gap

The collective answers generated during the focus group echoed the definitions shared by scholars cited in Chapter 2. However, the individual and anonymous responses on the survey questionnaire revealed examples of the knowing-doing gap (Joyce and Showers, 1983). One of the individual responses on the questionnaire was, "The behaviors and practices of my collaborative team are not always what I would like. Often times it seems like a vent session. I would like to see more work toward looking at data, discussing classroom instructional practices and creating common assessments."

The educators in this PLC know what a PLC is, and what a PLC should do. They are, however, struggling with putting the model into motion. This was evident in the only collaborative team meeting where the instructional coach was not present. Ava asked the group," Who is leading us? Do we want to make a recommendation for how to proceed today?"

Mary asked, "Who has the PLC guide? That would help us to make a decision about how we are going to use our time." The collaborative team silently read the choices on the PLC guide. Coral responded, "How about we create our next common assessment?" Samantha said, "We really should focus on main idea." Coral went to her file cabinet and pulled out files full of materials related to main idea. The collaborative team browsed through the file with little conversation. After 10 minutes the attention of the teachers was directed to Jim,

the assistant principal, who walked into the room with the results of the third grade reading and math benchmark scores from the second quarter.

During a collaborative team meeting, the participants analyzed student performance on a common reading assessment which they had created. Mary, the newest teacher, asked for clarification of the purpose for their schoolwide intervention blocks. In a conversation with the researcher after the meeting, she said she had hoped the purpose was to group students who had similar needs across the grade level to receive needed enrichment or remediation. Instead, the team shared a variety of strategies and ideas she could use in her classroom. Mary thanked the team then began to cry as she said, "Those are all great ideas. Unfortunately, I do not have the time to create and learn how to do all of those things you have suggested. My kids need help right now, this minute, today!" Barb, the instructional coach, assured her she would help and asked if Mary would allow her to work with small groups of students who needed additional time and support for learning. Mary agreed, and they have been working together to differentiate instruction in Mary's classroom.

Teachers Sharing Talents to Accomplish Goals

The analysis of collaborative team agendas revealed a strong focus on teachers sharing their expertise with one another. All of the meetings observed included time for teachers to share their lessons, ideas, resources and materials. In addition, all of the meetings observed included a mini demonstration lesson where one teacher shared a vocabulary lesson or strategy with her colleagues.

The school improvement team at Waves Elementary School analyzed student performance on last year's state assessment and identified vocabulary as an area for instructional improvement. As a result, each teacher is expected to use multiple strategies to teach vocabulary. Ava shared how she designed a vocabulary lesson around a popular television game show using the SMART board. Samantha demonstrated how she taught students science related vocabulary using graphic organizers to paraphrase their new learning. Mary shared how she incorporates movement and music into her vocabulary lessons. Barb's lesson demonstrated how to differentiate learning centers using vocabulary at various reading levels. Coral explained how she incorporates the school's word of the week into her daily routines and procedures. The group reflected that vocabulary words on the daily announcements have been effective because they are used in context and repeated throughout the week. The majority of the lessons shared were generated as a result of a book study the team did on building academic vocabulary and developing background knowledge.

In addition to sharing instructional strategies, the collaborative team engaged in professional development related to curriculum. The team of teachers analyzed their newly adopted math series to determine instructional pacing as well as areas that needed to be supplemented. In addition, the team worked together to design remediation and enrichment lessons based on student performance. Mary took the lead on designing lessons about sequencing numbers. The need for additional lessons surfaced as teachers discussed their

students' understanding of the concept, and inability to demonstrate it on a worksheet or test. After much discussion, the team determined they needed to break the written directions down into smaller parts.

Understanding PLCs as a Strategy for School Reform

At the beginning of the study, all participants examined continuums of PLC implementation (Appendix B) to reflect on where they thought their behaviors and practices were on the continuum. This was done to establish common vocabulary while looking at levels of implementation. After this self-reflection, participants took an anonymous electronic survey (Appendix A) asking them to use a scale of 1-10 to indicate the extent to which each of 18 statements were true of the third grade collaborative team they work with (1=not true of our team, 5=our team is addressing and 10=true of our team). All seven participants rated each of the eighteen questions. The mean rating for each question was calculated and reported in Table 6.

Table 7 identifies the number of participants who responded to each rating (1-10) for each statement. All seven participants rated each of the 18 statements on the survey.

Table 6

Results of Anonymous Survey Questions by Theme

Theme	Statement	Mean	Mode
PLCs as a reform strategy	Statement 2: We have analyzed student achievement data…	8.00	7 and 9
	Statement 4: We have aligned the essential learnings with state…	8.14	7
	Statement 8: We have identified strategies and created…	5.28	5 and 7
	Statement 11: We have established the proficiency standard we…	6.00	5 and 7
	Statement 12: We have developed common summative assessments…	5.85	7 and 8
	Statement 14: We have agreed on the criteria we will use in judging…	4.57	4 and 5
Collaboration	Statement 1: We have identified team norms and protocols to guide…	8.00	10
	Statement 16: We evaluate our adherence to and the effectiveness…	5.71	5
PLCs commit to continuous learning	Statement 3: Each member of our team is clear on the essential…	7.00	5, 7, 8
	Statement 5: We have identified the course content and our topics…	6.42	6 and 7
	Statement 6: We have agreed on how to best sequence the content…	6.00	6
	Statement 7: We have identified the prerequisite knowledge and…	5.71	7
	Statement 9: We have identified strategies and systems to assist…	5.85	5 and 6
	Statement 10: We have developed frequent common formative…	5.42	7
	Statement 13: We have established the proficiency standard…	5.57	7
	Statement 15: We have taught students the criteria we will use in…	5.42	6
	Statement 17: We use the results of our common assessments to…	5.71	5 and 7
	Statement 18: We use the results of our common assessments to…	6.42	8

Table 7

Frequency of Ratings by Statement

	Rating Scale									
	1	2	3	4	5	6	7	8	9	10
Statement 1					2		1		1	3
Statement 2						1	2	1	2	1
Statement 3					2		2	2	1	
Statement 4							3	1	2	1
Statement 5				1	1	2	2			1
Statement 6			1		1	3		2		
Statement 7			1	1	1	1	2		1	
Statement 8			1	1	2	1	2			
Statement 9				1	2	2	1	1		
Statement 10	1		1		1	1	2		1	
Statement 11	1				2		2	1	1	
Statement 12	1			1		1	2	2		
Statement 13	1			1	1		3	1		
Statement 14	1			2	2	1	1			
Statement 15				2	1	3	1			
Statement 16		1			4				2	
Statement 17					2	1	2	1		
Statement 18					1	1		3		2

PLCs as a Reform Strategy

All of the participants indicated their collaborative team ranged between a 6 and 10 on statement 2, "We have analyzed student achievement data and have established SMART goals that we are working interdependently to achieve." The mean rating was 8 and the two most frequent responses were 7 and 9. This was evident during the observations of collaborative team meetings. This means each week the PLC agenda allowed time to work towards the schoolwide goal of increasing vocabulary knowledge as evidenced by school and team created SMART goals. On multiple occasions, Coral reminded the team that they are working towards multiple SMART goals; a year-long goal related to vocabulary development, and quarterly goals for math and reading.

All of the participants indicated their collaborative team ranged between a 7 and 10 on statement 4, "We have aligned the essential learning with state and district standards and the high stakes exams required of our students." The mean response was 8.14, and the most frequent response was 3. While there were not many indications of conversations related to this statement, references were made to using the curriculum map created by the team during the first weeks of school. The curriculum map included the essential learnings aligned to the state assessment. The range in the responses indicates different levels of understanding and implementation of how the statement relates to PLC practices.

The participants rated their collaborative team between a 3 and 7 on statement 8, "We have identified strategies and created instruments to assess

whether students have the prerequisite knowledge and skills." This is an interesting range of responses as this topic was discussed informally in 6 of the 8 collaborative team meetings. The mean response was 5.28, and the most common responses were 5 and 7. The team briefly discussed the analysis of 2nd grade benchmarks to determine learning strengths and challenges their students came to third grade with. However, their conversations did not reveal a consistent and focused approach. They did share the informal discussions they had with the 2nd grade team about the performance of the students during the previous year.

When the team identified the extent to which they "establish the proficiency standard they want each student to achieve on each skill and concept examined with their common assessments", they rated themselves from a 1 to a 9. The mean rating was 6, and the most frequent responses were 5 and 7. The large range may be due to the fact that only one of the teachers has previously taught this grade level in the past. At one of the collaborative team meetings, the team determined the level of mastery on the common reading assessment would be 75%. "Last year we set the mastery level at 80% and that was too high. We realized it would have been better to have larger enrichment groups, and smaller intervention groups" (Coral, field notes, 11-17-10). The team agreed.

Other members of the team felt differently. "Averaging of student performance will give a false sense of mastery. I think we should consider analyzing student performance by skill so we can do a better job of targeting interventions" (Samantha, field notes, 11-17-10). Again, the team agreed to do

this with the next common assessment. Mary, the newest teacher, and Samantha offered to develop a process for monitoring student progress on common assessments that can easily be reported back to the homeroom teacher.

The response range on statement 12, "We have developed common summative assessments that help us assess the strengths and weaknesses of our program" was between a 1 and 8. The mean response was 5.85, and the most frequent responses were 5 and 7. When the PLC discussed this topic the researcher was invited to join in the dialogue. The researcher began by asking the team how they viewed the district benchmark assessments. After much conversation, they came to understand that the district created benchmarks are common summative assessments administered quarterly. Through the conversation, it was evident that since these teachers did not directly contribute to the creation of these tests they rated themselves lower.

During a collaborative team meeting the team developed a common assessment. Barb began the meeting by asking the team, "What will be important for you to know about your students and how will you continue to monitor their learning?" The collective answer was they needed to know how well their students could locate facts in a reading passage. The teachers came to consensus on the reading passage to be used and each teacher decided to write two questions for a total of eight. The questions were analyzed to determine the level of difficulty. Next, the team decided the sequence of how the questions would be organized on the test. Throughout the meeting the team matched each test

question to the third grade standards. Samantha asked the team to review one question that she thought measured inference instead of locating facts. The team agreed and they collectively rewrote the question.

Statement 14, "We have agreed on the criteria we will use to judge the quality of student work related to the essential learnings of our course, and we practice applying those criteria to ensure consistency," was rated from a 1 to a 7. The mean rating was 4.57, and the most frequent responses were 4 and 5.

After the common assessment on locating facts in nonfiction text was administered, Barb asked the team to bring their data to discuss the question, "What did you notice?" Mary responded, " All but two of my kids got a 100%" Coral said, "All but my three special education students got a 100%" Samantha shared, "Sixteen of my twenty four students got a 100%. Four students got one question wrong, three got two questions wrong, and one got three questions wrong. There were no patterns in their wrong answers" Mary looked to Barb and Coral to see if it was permitted for students to use highlighters on the common assessment. They both said yes. They reminded her that highlighters cannot be used on the state assessment in the spring. Mary followed up by asking if students could make test corrections. Barbie said that was allowed because the goal is to allow students to show what they know.

Samantha brought student work to five of the eight PLC meetings to get feedback from her colleagues. "This is my first year teaching third grade. I want to be sure my expectations are in line with all of yours." (Samantha, field notes,

December 1, 2010) The conversations did not include expectations related specifically to the essential learnings identified by the collaborative team.

At a collaborative team meeting the team analyzed their second quarter reading benchmark data. The veteran third grade teachers warned the team that last year's third graders had difficulty identifying and inferring main idea in a passage.

Participant Opinion of School Reform

In the in-depth interview each of the participants were asked to share their thoughts about the current educational reform strategies in the United States. All seven indicated they supported accountability for high quality education in America. They shared a variety of opinions of how to measure and support accountability.

> I think the Obama administration has the correct intentions and a lot of good ideas. However, I don't think resources are properly given to the different levels (from the federal to the state to the local level) to get the job done. People realize that education is underfunded and educators are underpaid, but nothing is ever done about it. (Ava interview, November 17, 2010)

> I worry about things that come down from the people that are too far removed from the classroom. I do agree that we need a national curriculum with high standards. And, I am believer of a structured road with freedom. We all need to get to the same end point (mastery of standards). We also need to be sure teachers know they can use lots of ways to teach to get to the end. Teachers need to know life does not revolve around a test. Life revolves around the growth of a child. I remember asking my son what he did in third grade and he said, "We took a test that lasted all year long." I thought, "Oh no! Is this what we want to do to children?" (Barb interview, November 17, 2010)

> I have mixed feelings. I think accountability is good, we need to be held to certain standards and we should be doing certain things. So much is put

on the teachers, and we can not do it by ourselves. We (teachers) do need to do the best we can. We also need parents to step up and be involved. It is so hard for kids to learn when they got beat up last night or their parents got in a fight. I know that teachers make a difference, but we are not Mom. The only thing I could do differently beyond what I am doing now is take them home with me at night. I truly believe I give everything I have every single day. I would look at any person in this world and tell them that." (Coral interview, November 10, 2010)

I believe in accountability, first and foremost. I do believe that with accountability there is a more focused approach in what you are doing. The professional development is targeted, the classrooms have specific objectives. Although I do see many flaws with the current system, I do find at times we are looking at the wrong things. Looking at whole school averages does not tell the story of individual student growth. I am glad that student growth will now be included in how a school is labeled. The public looks at our label and that we did not make AYP last year and thinks we are a bad school. Now they will be able to see that our school has the highest levels of individual student growth in the District. We all need to be proud of that. That is the word that needs to get out. (Frank interview, November 3, 2010)

I like where we are going with teachers being a resource for one another. When we have a data warehouse in our district it will be even easier for them to make decisions together. (Jim interview, November 15, 2010)

I think we teach to the test. The pressure is on third grade teachers. I am constantly printing out practice tests and teaching the standards in hopes they will pass the test. In reality, I worry that they will memorize information to pass the test then forget it because we have not had time to really understand it. I remember the Battle of Gettysburg because I acted it out with water balloons in high school. When do we have time to do those kinds of things these days? I know there is a need for standardized testing to hold teachers and schools accountable. But for me, I can tell you more about every single one of my kids than a paper and pencil test can tell you. I know reading levels of my kids, I know who doesn't take their medication because they can't afford it, I know who has a hard time focusing, I know the learning styles of my kids, and so on. I wish we could come up with an alternative to standardized testing to measure kids. (Mary interview, November 15, 2010)

Some of it is very positive and gets me very excited. Some of it makes me want to run, I want to flee. The whole accountability based on bubble sheets is horrible. Trust me, I support accountability. I absolutely believe

> we should judge our schools and teachers on student achievement. But, how should student achievement be measured? We do not have a good tool to do that yet. We should also include the measurement of resources and how they are spread out. How are we using our resources to ensure kids are learning? How are we using the professional development we have had? How are we using technology provided to us? We spend a lot of time talking about test scores here. We do not spend a lot of time talking about how to use our resources effectively to help kids learn. We have to have a vision and expectations. We can not make excuses because our kids are poor. We also need to get parents involved. I can do my best when the students are with me. I put my heart and soul into them. I can't fix Mom. I have to create opportunities for students. My expectations are for my students' performance, not Mom's. (Samantha interview, December 7, 2010).

The opinions of the participants were seen in action during all eight of the collaborative team meetings observed. Discussions about local and national level school reform were evident as they analyzed and created assessments, determined mastery levels for upcoming assessments and made decisions about how to administer assessments. In addition, artifacts related to school reform were generated or discussed in all eight of the collaborative team meetings.

Collaboration as a Component of PLC Implementation

During the analysis of the multiple forms of data, the theme of collaboration emerged. According to the first survey statement, "We have identified team norms and protocols to guide us in working together," was rated from a 5 to a 10, with a mean rating of 8, and the most frequent answer being a 10. All PLC meeting observations indicated the participants were collegial, collaborative and cooperative. Positive affirmations and gratitude were expressed among the team for tasks that were done during the collaborative team and outside of the collaborative team. For example, Coral thanked Mary for

uploading the team's upcoming spelling units, and the team expressed their thanks to Barb for sharing her files of activities.

> The third grade team is very collaborative. They have developed a set of norms that are firmly followed. They meet on a consistent basis and everyone contributes. The create agendas ahead of time that allow them to focus on student learning. They also work to be sure their classroom management and procedures are aligned to their student learning focus. They routinely use benchmark data to make instructional decisions. Their approach continues to lead to student achievement. (Frank interview November 3, 2010)

In one of the collaborative team meetings the team used a thumbs up consensus strategy to determine if the team was in agreement about which essential learning to focus on for their next common assessment. All teachers gave a thumbs up, agreeing to focus on main idea. Coral and Samantha took responsibility for gathering materials to bring to the next meeting.

> I see our school being very good at identifying when students need additional resources according to their summative assessment test scores. As a collaborative team we need to work on being more open to different way of thinking and problem solving together. The collaborative piece shows great potential that is not being realized at this time. (Anonymous comment on the survey, November, 2010)

In November, Samantha invited the team to join in on creating a cookbook from the childrens' family recipes to go home before winter break. The team applauded the creative idea, but chose not to have their classes contribute to a 3rd grade cookbook at this time. They expressed interest in doing this type of a project in the spring after the state assessments were completed.

One response on the anonymous focus group questionnaire shared a different opinion of the PLC. When asked to answer the question, "What are the

behaviors and practices of your PLC?" One participant wrote, "They are shallow and not comfortable with their environment. There is an heir of superiority that is felt at times and inhibits some conversation."

The researcher did record observations that Mary and Samantha, the two newest teachers to the school and to the team, asked Barb and Coral, the teachers with the most experience at that school, for permission to implement ideas. For example, Mary asked Coral if it is ok for students to use highlighters on the common assessment the collaborative team designed. Coral, Ava and Barb responded, "Yes," in unison. Coral reminded them that highlighters can not be used on the state assessment in April.

In another collaborative team meeting the team discussed students they had concerns about. Mary shared that she has a student who is not doing his classwork or homework. She asked if the team had any good ideas or strategies to engage this student. After the team shared behavioral intervention ideas, Coral offered to have the student come into her room at lunch. She said, "Mary you are new and have enough to do. Let me help this student at lunch time." Mary expressed her appreciation and the meeting continued.

The responses to survey statement number 16, "We evaluate our adherence to and the effectiveness of our team norms at least twice a year "ranged from a rating of a 2 to a 9. The mean rating was 5.71, and the most frequent answer was a 5 meaning the team is addressing this idea. Since they are a newly

formed team that has worked together for four months, they have not yet had the opportunity to evaluate their effectiveness twice this year.

The team was able to share how they manage conflict when making decisions in focus group question 2g. The responses below varied.

- "They agree to disagree. They have strong personalities so there are certain areas where compromise is difficult."
- "This has been odd for me. I had questions about this initially so I went to administration for clarification. It became evident that administration went to the other teacher. There has been mistrust ever since."
- "I try to explain my rationale and prove it with data. I do what the team agrees on. If I believe my rationale enough I go ahead and proceed in my classroom."
- "I believe our conflict is shoved under the rug. I think that we "go with the flow" and kind of agree in order to make it work. Then we do what we think we need to do for our own classrooms and students."
- "Let everyone say their piece, refocus the group, promote compromise and adjust to the needs of the teachers and students."

The observable behaviors of this PLC did not demonstrate unresolved conflict. In each collaborative team meeting participants came to consensus about decisions. The researcher did not observe classroom practice to see if and how the agreed upon decision was implemented. The researcher did observe

participants were prepared for the items they were responsible for at each meeting. There was evidence that participants took their tasks seriously when they were expected to report back to the group. For example, the team agreed to bring the results of the common assessment to discuss. All team members brought the data and were prepared for discussion.

PLCs Commitment to Continuous Learning

The second question on the focus group questionnaire asked participants to describe how they commit to continuous learning. A sampling of the anonymous responses include:

- "I participate in as many learning opportunities as I can. I am always looking for new ideas and ways of doing things. I spend countless hours on teacher discussions boards and the internet seeking new ways to incorporate different ideas, strategies and resources into my classroom. I commit to the continuous learning of my students by constantly reviewing the standards and data. I work very diligently in paying attention to where my students are in different areas and focusing my instruction to meet the needs of the students in my class. I strongly believe that everything that is done in my classroom has a purpose." (focus group questionnaire response, November 1, 2010)
- "I try to stay current in order to help those I supervise." (focus group questionnaire response, November 1, 2010)

- "I am not responsible for the other teachers I work with. I commit to my own learning so that I can help my students. I find myself regularly advocating for professional learning."(focus group questionnaire response, November 1, 2010)
- "I am an avid reader. I attend various workshops and take one graduate class per year." (focus group questionnaire response, November 1, 2010)

Ten of the eighteen survey statements aligned to the theme of PLCs commit to continuous learning. Below is an analysis of those survey statement supported by responses on the focus group questionnaire, observations during collaborative team meetings and analysis of artifacts.

Survey statement number 3 asked participants to rate the statement, "Each member of our team is clear on the essential learnings of our course in general as well as the essential learning of each unit. The response range was between a 5 and 9, with a mean score of 7. The most frequent responses were 5,7 and 8. Question 2a on the anonymous focus group questionnaire generated the following comments about how the collaborative team determines essential learning outcomes for their grade level:

- "by readiness, leverage and endurance"
- "We meet as a collaborative team and discuss which ELOs (essential learning outcomes) are needed most in life and which are tested on AIMS. We do this before each quarter."

- "We use what is predetermined by the state and district standards. We translate that into our discussions based on the content of the benchmark tests."
- "I look at test scores, our concept maps created by our district to determine essential objectives based on class observations and experiences."
- "Use of content area knowledge. Then we look at standards a grade level above and below. We analyze the performance objectives based on leverage, endurance and readiness."

The response to survey statement 5, "We have identified course content and or topics that can be eliminated so we can devote more time to essential curriculum" varied from a 4 to a 10. The mean was 6.42 and the most frequent responses were 6 and 7. During collaborative team meetings the team regularly discussed whether certain pieces of the curriculum were essential for the end of year test or essential for life. Often times they decided to allocate more time to teach those needed for life, and decreased the time for those needed for only the test. The special education teacher reminded the team the Individual Education Plans (IEPs) her students have are based on what is essential which indirectly gives permission for what to abandon.

The response to statement 6, "We have agreed upon how to best sequence the content of the course and have established pacing guides to help students achieve the intended essential learnings" was rated between a 3 and 8 with a mean

of 6. The most frequent response was 6. The discussion in the collaborative team meetings revolved around the need for those newest to the grade level to understand how much time should be dedicated to certain concepts. The veteran third grade teacher was looked to for guidance during these discussions. Both of the early release days for professional development included choices for teams to develop and review pacing guides. The third grade collaborative team collectively chose to spent one and half hours during each of those days refining their pacing guides for reading and mathematics.

The response to statement 7, "We have identified the prerequisite knowledge and skills students need in order to master the essential learnings of our course and each unit of this course" was rated between a 3 and 9. The mean response was 5.71 and the most frequent response was 7. Four of the participants routinely discussed the importance of breaking down the standards to determine which pieces need to be retaught so that students could achieve mastery. During this dialogue, it was discovered that breaking down the standards helps identify the gaps in knowledge. These conversations uncovered the realization that the gaps were concepts that were supposed to be mastered in first and second grade.

When the collaborative team rated themselves on statement 9, "We have identified strategies and systems to assist students in acquiring prerequisite knowledge and skills when they are lacking in those areas" the responses ranged from 4 to 8. The mean rating was 5.85 and the most frequent responses were 5 and 6. The most commonly used strategy the team used was an online program

called SuccessMaker which assesses students reading and math skills and designs interactive lessons based on their areas of need. While the team implemented this program as suggested by the vendor, they had difficulty finding time to schedule the lab often enough throughout the week for the students who needed it. While they talked about students "liking" the program, they did not talk about how the program impacted student learning.

Statement 10, "We have developed frequent common formative assessments that help us to determine each student's mastery of the essential learnings" was rated between a 1 and 9. The mean rating was 5.42 with the most frequent response being 7. Team meeting agendas indicate time was allocated for discussion about common summative assessments, but not common formative assessments. Individual teachers shared with the researcher that formative assessments were created and used by individual teachers, but not as a team. They referred to the use of formative assessments within the newly adopted math series, but not all teachers on the team used them.

"We have established the proficiency standard we want each student to achieve on each skill and concept examined with our summative assessments," was survey statement 13 that generated responses from a 1 to an 8. The mean rating was 5.57 with the most frequent response being 7. During a collaborative team meeting the team spent 20 minutes discussing whether or not last year's 80% mastery score on common assessments was too high. The team came to

consensus that 75% would indicate mastery and that they would analyze student by student to determine where they made mistakes so they could remediate.

Ratings generated a mean response of 5.42 on survey statement 15, "We have taught students the criteria we will use in judging the quality of their work and have provided them with examples." The most frequent response was 6. Again, participants discussed the need to do this, but have not established this as part of their regular practice.

> I would love to see writing samples from last year's third graders from second quarter so I know if my kids are on track. I know what the standards say my kids need to be able to do, but I want to see what it looks like at our school. I want to tell my kids they are doing great because they are working so hard. (Mary interview, November 3, 2010)

Statement 17, "We use the results of our common assessments to assist each other in building on strengths and addressing weaknesses as part of a process of continuous improvement designed to help students achieve at higher levels" received responses ranging from 5 to 10. The mean rating was 5.71 and the most frequent responses were 5 and 7.

Discussing Student Reading Data

Part of the December 8 collaborative team meeting was dedicated to discussing student performance on the second quarter reading benchmark. Barb and the researcher were the only people in the room who had the benchmark results of each third grade class. The teachers only had the results of their students and did not ask about the results of their colleagues' students. Barb asked the team, "What are your feelings about the benchmark results?"

Samantha and Mary both said the benchmark results did not mirror the results on the collaborative team created common assessment. They thought their students would have had higher scores on the benchmark because they did well on the collaborative team created assessment measuring student knowledge of how to locate facts in a nonfiction text. All of the teachers pointed to one question that was difficult for the majority of their students. The question identified sweets and fats as a food group which was inconsistent with what they taught in science.

Further analysis sparked a conversation about another question that students struggled with. The team discovered that the question asked the students to read a recipe and locate the materials needed. The teachers realized they taught the word "ingredients" instead of "materials" which may have contributed to the incorrect answers.

During the administration of the benchmark Samantha said that she observed 7 of her 25 students put their heads down and slouch in their chairs during the twelve page reading test. "I question if these results demonstrate what kids know, or what they have the energy to endure." (Samantha, field notes, December 8, 2010).

> Last year our team created "stamina packets" for the kids two months before the state assessments. The packets had reading passages with vocabulary identification and comprehension questions. We taught the metaphor that preparing for a test is like preparing for a race. It takes practice and stamina. The amount of sustained reading increased during the two months. The first packet included a passage that took about 10 minutes to read. By the last week of March, students had worked up to sustained reading of at least 30 minutes. It worked. During the state assessment my students did not slouch in their seats or put their heads down. (Coral, field notes, December 8, 2010)

Ava responded that she observed similar behaviors to what Samantha saw.

> For my special education students, I wonder if it would be a good idea to separate the skills tested into smaller chunks. I am thinking next quarter I will make separate tests. One test for abbreviations, one test for locating facts, and so on. It will take us more days to complete the benchmark, but the same amount of minutes. (Ava, field notes, December 8, 2010)

During the discussion teachers shared ideas for introducing, reviewing and practicing for the next benchmark to be administered at the end of the third quarter. Coral shared the third quarter essential learning objectives list. She also provided directions for how to use the electronic test generator included in the district adopted reading materials to create practice tests aligned to the essential learning objectives. Barb demonstrated how to use a feature within the benchmarking program to design additional practice lessons.

Discussing Student Math Data

During the December 15, 2010, collaborative team meeting, Jim, the assistant principal, brought the team development profiles of the third grade second quarter math benchmark results. Jim provided a copy of the scores for each teacher to the researcher. Teachers were given a copy of their students' performance. Jim asked teachers to study their class' results. Then he asked, "What surprises you?" He then suggested that they highlight the students who met the standard in one color, and those who exceeded the standard in another color, and so on. The teachers did as he recommended.

Coral asked the team to review question number 28. "Do you all think this question measured the standard? I think it was tricky, do you all?" The team

discussed the question and the correct answer for 20 minutes. They noticed the majority of the students who missed the question chose the same answer which Jim explained was a high quality distractor. Through this analysis the team came to the conclusion that when their students have difficulty on the benchmark test, often times it is due to their misunderstanding of vocabulary within the question. Mary shared that she has observed every one of her students successfully place at least six numbers in order based on their value. On the benchmark, only 75% of her students met or exceeded that standard. "I do not know why this happens. Can we review the vocabulary in the directions to see if that is the problem?" The team came to the conclusion that they need to use synonyms for the words greatest, least and sequence when teaching this concept.

In each PLC meeting, Mary displayed persistence and a sense of urgency when asking her colleagues to share ideas to help her teach more effectively. During these conversations Mary used words and phrases such as, "I really need your help!" and "I am running out of time!" The team responded to every request by offering suggestions and ideas. Since Barb and Jim were the only people on the team with access to every teachers' data, only they knew Mary's students were consistently performing higher than her colleagues' students in reading and math on both the collaborative team created assessments and the district benchmarks.

At the conclusion of the meeting Coral shared with the researcher that she knows the PLC process encourages teachers to group students across the grade

level for interventions and enrichments as needed. Coral confided that the team has not embraced this practice.

> I work hard with my students. I know what it takes to get them ready for the end of the year tests. I can not risk having my students leave my classroom for help elsewhere. I am responsible for their performance. I know what they need. I can not risk them falling behind in someone else's room. I don't have time to get them caught up. (Coral, field notes, December 15, 2010).

Coral is not aware that when compared with the other third grade classes, her students are not the highest performers.

Statement 18, "We use the results of our common assessments to identify students who need additional time and support to master essential learnings, and we work within the systems and processes of the school to ensure they receive that support", generated responses from 5 to 10 with a mean of 6.42. The most frequent response was 8.

The third grade collaborative team at Waves Elementary plans how to design the instructional day to maximize the amount of time their students receive additional support for learning. During the December 15 early release day for professional development, the team discussed students they were concerned about. The conversations included student learning data as evidence the students needed help in either reading or math. They also included social, emotional and family concerns they had. One by one, the team brainstormed how to intervene for students. During the conversation the team collectively realized they are not sure exactly which skills and concepts the academic interventionist focuses on. They asked Barb to include this on a future collaborative team agenda. They did

say the reading specialist is a valuable resource for their students because of her ability to diagnose reading difficulties without having to perform lengthy assessments. All of the systems this collaborative team focused on were outside of their classrooms.

How Do PLCs Dedicate Time for Learning?

The anonymous focus group questionnaire had two questions related to time for learning. Question 3a asked, "How do you work collaboratively on the tasks related to collaborative team functions?" The answers included how time is structured and how the work is done within the structure.

- "We dedicate time during our scheduled collaborative team meetings on Wednesday mornings during our preparation periods. Otherwise, we do not meet as a group. I do go to those I know can help with my question or concern."
- "I bring questions, difficulties, celebrations and discussion topics to my collaborative team. I actively participate in my collaborative team and listen. I share roles and responsibilities as needed."
- "I, at this time, do not see our collaborative team working collaboratively on most tasks. If we are working during a time that is required (during an early release day for professional development) we get the jobs done that are given to us. As far as our weekly meetings, I feel like we are going through the motions. I believe we have potential

and that we will move in the right direction as we work together throughout the year."

- "We have weekly meetings with a set agenda. Everyone utilizes their strengths, work is divided up then put back together as a group."
- "We follow our norms and focus our discussions on how to work interdependently to complete tasks."

These comments were supported by the attendance at the eight collaborative team meetings attended by the researcher. The meetings were held weekly at a specific time and the five teachers connected to the collaborative team attended each meeting. Teachers shared lessons, took responsibility for individual projects then shared with the team.

When asked to answer, "How do you use instructional time to ensure student learning?" the responses on the anonymous focus group questionnaire varied.

- "I assess student learning every day by what I ask my students to do or produce during the day. Their responses direct my decisions about how to use instructional time from day to day."
- "I use a focused approach to learning. All activities are created with a specific objective. I make sure I have enough time to teach each objective."

- "I use small assessments within my instructional time. I use whiteboards to demonstrate answers and sign language responses to check for understanding."
- "I use the multiple intelligences theory and my knowledge about my students to provide instruction in a variety of ways. I check for understanding before moving to a new concept. I integrate content areas so that students have more time to interact with the concepts."
- "The day is scheduled to maximize the use of time for classroom instruction. Lessons are created to engage students and assessments are ongoing."
- "I truly believe I use every moment of every day I have. I believe learning takes place every second, of every minute of every hour of every day!"

These responses demonstrate a consistent theme of urgency for learning. An analysis of collaborative team agendas indicate the team spent approximately 30% of their meeting time discussing how to use time to increase student learning. Each of the questionnaire responses referred to using time within each teacher's classroom. The field notes indicate the team was beginning to discuss how to use blocks of time for intervention and enrichment to ensure all students were learning at high levels. These discussions began after Mary's plea to find more hours in a day to help her students learn to read.

What Type of Leadership is Needed for PLCs to Do Their Work?

The last question on the focus group questionnaire asked participants to share their thoughts about, "How does district and site leadership support a focus on learning?" The following anonymous responses centered around the idea of preserving time for both student and adult learning.

- "Try to assist in the scheduling of students to provide blocks of time to be best utilized by teachers. It is important that the site leadership limit interruptions during those blocks of time."
- "The assessment dates are determined by the district. Time is allocated and some resources are made available when possible. I am still getting familiar with this administration and feel like the squeaky wheel gets the grease. Leadership decisions are often made by those who are the loudest even if it is not in the best interest of student or adult learning."
- "I believe my school and district leaders focus on learning by providing time and resources to support what is important."
- "Our site leaders make sure we have the resources we need for kids to learn. They set expectations and create common planning periods within our daily schedule. The district provides resource staff when available."

During the December 15, 2010, early release day for professional development Frank modeled learner centered leadership. He did this by asking

teachers to reflect on what it means for teachers to be learners too. He explained that a PLC guide was available and that the afternoon was designed around choices for how to spend adult learning time. The PLC guide explained the expectations and resources available.

The remaining responses focused on providing a vision and expectations for student and adult learning.

- "Our district and site leaders provide a clear vision with many professional development opportunities for staff. A common language is used and tools are provided for data driven instructional decisions."
- "Our principal provides support for teachers as needed. He makes sure we know what our schools' goals are and shares the responsibility for achieving them."

Frank reminded the staff of the vision and goals for Waves Elementary during the December 15, 2010, early release day. He dedicated 15 minutes on the agenda to celebrate accomplishments towards the goals. He then followed by explaining the work the teachers would be doing during January's early release day for professional development. The focus would be bringing the schools in the feeder pattern together to share best practices in parental involvement from grades preK-12.

Observational data collected during collaborative team meetings indicate the instructional coach provided strong teacher leadership in the implementation of the PLC process at Waves Elementary. The strongest evidence for this

surfaced during the one collaborative team meeting where she was not in attendance.

Chapter Summary

The findings from this research describe how one team of third grade teachers worked together in a PLC process. The researcher described the participants, the school and the practices, thoughts and behaviors of this team of educators during a two month time period. The analysis of data collected from a survey, focus group discussion and questionnaire, observations of collaborative team and faculty meetings, and artifacts generated from the work of the collaborative team was presented as related to the following themes: professional development, school reform, collaboration, commitment to continuous learning, time for learning and leadership for learning.

CHAPTER 5

SUMMARY AND RECOMMENDATIONS

Introduction

Standards and accountability have dominated education policy decisions for the last twenty years. Federal legislation such as No Child Left Behind of 2001(NCLB) was designed to close achievement gaps among racial and ethnic groups by increasing student learning for all children. NCLB provides resources and support for schools who struggle to close the achievement gaps. Because teachers play a large role in the system of accountability, professional development has become an accountability mechanism aimed at building teachers' capacity for teaching and learning and the changes needed to improve the quality of schools.

It is important to understand the theory behind accountability outlined in NCLB. The first component of accountability is the emphasis on measured student performance through the use of standardized assessments. The second component is the state requirement to align academic standards in reading, language arts, mathematics and science to the assessments that test what students are supposed to know, understand and be able to do. The third component is a system of rewards and sanctions aimed at providing incentives such as external oversight, school takeovers and monetary bonuses, for improving student achievement. The fourth component is public reporting of how students perform by category and subpopulation such as special education, English language

learners, ethnicity and poverty levels. The fifth component is the federal government gives state government the ability to set their performance targets and how to achieve those targets. This flexibility about how to implement and monitor reform comes with increased responsibility and accountability. The final component of NCLB is the focus on local capacity building, through targeted resources for professional development, school reform and effective instructional programs and materials (NCLB, 2001).

The measured outcome of accountability policies is student achievement. In order for student achievement to increase, changes in student learning as measured on tests must occur. Improving student learning is dependent on teacher practice. Teachers must know the content students must learn as well as how to instruct so that students create their own meaning and understandings. The goal of professional development is to provide teachers with the knowledge, skills and support structures needed so their students achieve proficiency on the state's academic standards. This becomes a complex task as standards based accountability can pose challenges for what teachers already know, what they were taught when they were in school or in their teacher preparation programs. As a result, teachers must have opportunities to develop new understandings aligned with the policy and to see and experience the kind of practice the policy is designed to produce (Ball & Cohen, 1999). The ability for professional development to improve student achievement depends largely on its ability to bring teachers together to develop common ground related to their knowledge,

beliefs and practices. The literature indicates professional learning communities (PLCs) have been designed to do just that. The findings of this case study suggest the PLC process dedicates time to bring teachers together, but the focus of their meetings is only sometimes about learning.

Summary of the Study

The purpose of this study was to describe the behaviors and practices of a newly formed collaborative team of educators working within a PLC process. Specifically, I wanted to learn how the behaviors, practices and conversations of this collaborative team impacted student and adult learning. Throughout the study I hoped to gain insight about how to refine district policies and how to best allocate resources to support the PLC process.

The literature reviewed supported Vygotsky's conceptual framework of sociocultural theory of human learning. How and what teachers learn is due in part to the time, space and environment created for their learning. The PLC process is dependent on collaborative teams of teachers working interdependently to accomplish a common goal related to student learning.

The research design was a case study that included qualitative and quantitative data methods. Data was collected from seven educators who work in a suburban Title 1 school where 60 percent of the students are minorities. All participants completed a self-assessment, electronic survey of 18 questions measured on a 10 point likert scale, participated in a focus group, engaged in an in-depth interview of 10 open-ended questions, attended faculty and collaborative

team meetings where the researcher took notes on their conversations and collected artifacts of the work they generated during these meetings.

Summary of Findings and Conclusions

What are the Behaviors and Practices of a Newly Formed Collaborative Team Working in a PLC?

Defining PLCs has become a challenge for educators and researchers. Often times, the PLC concept is misused to describe committees, grade level teams or planning meetings in which groups of educators use data to make decisions (DuFour, DuFour, Eaker & Many, 2006). A PLC is not a model or a program, it is a process that empowers educators to work in collaborative teams to refine their practices and assess their progress. This process moves at different rates based on the professional norms, knowledge and skill of the educators and students in the learning community. Therefore, educators working in a PLC process recognize schools as learning organizations for adults and students so they shift their focus on learning rather than teaching (Senge, 1984).

The researcher found that participants defined the professional learning community as a process and belief system for increasing student achievement and adult learning. They defined the behaviors and practices of collaborative teams who work within a PLC process as steps and actions for increasing student achievement. The majority of the observed and discussed behaviors revolved around student assessment. Teachers created common formative assessments, prepared their students for benchmark testing, analyzed benchmark assessments,

designed intervention strategies based on the assessment data, and discussed the data. Administrators and teachers worked together to create conditions for PLC work, and administrators allocated time for teachers to collaborate during the school day.

The findings from this case study suggest teachers define the work of PLCs as a combination of sharing teaching strategies that best prepare students for standardized assessments and a form of job embedded professional development. The definitions provided by teachers in the focus group indicate PLCs work interdependently to accomplish a common goal and one of the ways to do that is to share resources, responsibilities and strategies. During the focus group they did not specify a focus on standardized assessment preparation, but in practice the majority of their time and conversations were dedicated to answering the question, "How will we prepare our students to be successful on the upcoming benchmark or state assessment administered in the spring?"

One can conclude this collaborative team's definition of PLCs mirrors the definitions found in the research. However, the practices and behaviors of this collaborative team only match portions of those definitions. One of the characteristics of the PLC process is the ability for educators to negotiate how they will respond to federal, state and district policies within their daily practices (McLaughlin and Talbert, 2006). In practice, the collaborative team at Waves Elementary lacked a focus on learning while emphasizing achievement as measured by standardized assessments created by those outside of the team. The

question, “Do tests measure learning?” began to surface in the collaborative team meetings as the study was concluding.

It is likely the accountability measures and sanctions associated with NCLB contributed to the focus of this collaborative team’s work. As educators at Waves Elementary work under the threat of sanctions for not making AYP, they turn to strategies that help them “game” the accountability system. For example, the veteran grade level teacher shared the “stamina packet” strategy as a successful way to prepare students for the state reading assessment. Her prior experience indicated this was successful in preparing students to read large amounts of information in one sitting which is required on the state assessment. The collaborative team did not discuss this strategy as a way to increase learning, but a way to increase test performance. One of the teachers voiced her concern that this was not what she believed to be good practice, but agreed to do it because she trusted her colleague that it would help her students achieve on the test. They spent time analyzing how the state weighs portions of the assessments. The areas with more weight were emphasized in classroom instruction. The test dictated instruction, not student need.

Scholars cited in Chapter 2 believe collaborative teams of educators working in a PLC process should focus on both student learning and achievement. Student learning should be influenced by what students need to know and are interested in knowing, as well as what they will encounter on the test. This includes learning how to work with others to solve problems and communicate

their solutions. This conflicts with the standards based teaching and assessment reform initiative that identifies specific skills students need to master by a particular point in time. As a result, standards documents have become longer with more emphasis on discrete skills that require rote memorization and an understanding of academic vocabulary. Some of the most powerful work within the PLC process is to determine how to create a balance between the tested curriculum and the taught curriculum.

The collaborative team at Waves Elementary decided to focus on academic vocabulary as a common school wide goal. This goal was driven by student learning performance on state assessment results from the previous year. A focus on vocabulary development is a common reform strategy in schools with large English language learner populations.

How do Educators Commit to Continuous Learning?

All of the participants in the study described themselves as learners who look to their colleagues to enhance their knowledge and skills. During the formal collaborative team meetings, the participants exchanged ideas and strategies to improve student performance on upcoming assessments. Within this context, classroom management, instructional strategies and parental involvement tips were shared. For example, one teacher shared how she uses her interactive white board to differentiate instruction for students when they have mastered a concept and are ready for enrichment. At each meeting one of the teachers demonstrated a vocabulary strategy aligned to the team's SMART goal for increasing reading

performance. One teacher attended a workshop on behavior management and shared what she learned and how the new learning could apply to the collaborative team and their students. These examples demonstrate individual participants' willingness to learn and willingness to share.

Throughout the study participants began to demonstrate a collective commitment to ensure all students and adults are continuously learning. However, the most common pronouns used during professional dialogue were "I", "you" and "my". Team members were most comfortable sharing what they do as an individual and provided ideas for how others could tackle challenges associated with learning. For example, one teacher asked for help with teaching main idea. The team shared multiple ways she could teach the concept. The majority of the recommendations were aimed at contacting specialists within the school to see if they were available to help. Overall, remedies for student learning were sought outside of the collaborative team. I suspect this is due to the newness of the team. They had only worked together for two months at the beginning of the study. Two of the teachers were new to the grade level as well as new to the school. Their learning of the curriculum and resources available was becoming greater as the study concluded. This suggests the team was becoming more comfortable recognizing the talent and skill within the team.

Much of the conversations during collaborative team meetings revolved around "who" and "what" controls the learning. Being in a Title 1 school that did not make AYP, it was evident the team saw the state accountability system as "the

who" that controls the learning, and the test as the "what" that controls the learning. Performance on the test became defined as achievement. All too often significant learning occurred that was not measured on a test. For example, students who made break throughs in language acquisition, students who learned the value of cooperation, and students who learned how to navigate the social structures of school were not recognized by test scores. This supports the research that in order for schools to transform, as opposed to reform, teachers must engage in critical reflection and dialogue so that teaching practices are changed to allow high levels of student learning (Servage, 2008). I would argue the participants in the study focused the bulk of their energies on achievement instead of learning because of the current reality they are working in. The participants appeared to share a collective sense of urgency for student achievement but had not yet begun to determine how they could take collective responsibility for all of the students in the grade level to demonstrate and celebrate learning, other than looking at test scores.

The most veteran teacher at the grade level confided that she did not want her students to be taught by other teachers on the team because she did not have time to reteach if they got confused. She continually reminded the team that third graders showed significant improvement on the state assessment the year before and she was committed to doing the same this year.

The research on PLCs and their contribution to increased student learning identifies the development and use of common formative assessments to drive

instruction as the most powerful change for student learning (DuFour, DuFour, Eaker & Many, 2006). The participants in the study recognize they are just beginning to do this kind of work. They also recognize they have room to grow in the area of agreeing on the criteria they will use to judge the quality of student work related to the essential learnings for the grade level. As these practices are refined and become the norm within the collaborative team, I predict student learning instead of student achievement will dominate their conversations.

How is Time Dedicated for Learning?

The findings identify time as one of the obstacles participants will have to overcome in order to work effectively and efficiently within a PLC process. Time for both student and adult learning must be protected in order for PLCs to be effective.

Student learning. One of the guiding principles within a PLC is the commitment to providing time and support so that all students can learn at high levels. This commitment means time becomes the variable so that student achievement becomes the constant. This contrasts many practices of "watering down the curriculum" so that it can be learned in the specified amount of time. In a PLC, the collaborative team is responsible for allocating time and support for students based on their learning needs. The participants in this study tackled this idea by working with experts such as the literacy specialist, reading specialist and interventionist to provide instruction for students. Often times this meant the students left the grade level classroom during instruction for remediation and

intervention. Best PLC practices would argue more time for learning is the goal, not pulling out for "instead of" learning.

The collaborative team did design lessons for all of the students during their Wednesday intervention block for mathematics. Lessons were created based on the gaps teachers identified between their math textbook series and the state standards for which students would be held accountable on the state assessment. During the last month of the study, teachers were using student data generated from regular summative assessments to guide interventions. The team had not yet developed or used formative assessments to inform instruction. The collaborative team collectively reflected they had not yet designed time for those who met the standards to engage in enrichment opportunities. This is something they hoped to do by the end of the school year.

It is important to know that classroom and student level performance data was not shared with the collaborative team. Each teacher was provided with her class' performance on benchmark assessments. The administrators and instructional coach were the only participants who had access to all of the data. During an early release day for professional development, the principal told collaborative teams they had a choice to pick up their data by individual class or by collaborative team. His expectation was everyone on the team had to agree on how the data would be shared and analyzed; by team or by class. The participants in this study chose to view the data by class, not as a team. Teachers kept their data private. This brings into question the commitment this team of teachers has

to interdependent collaboration. Again, I attribute this to the newness of the team and the infancy of their professional norms.

The assistant principal provided the team data to me as the participant observer. It was difficult for me to watch the angst one of the teachers displayed as the team discussed the data. The teacher who was most worried about her students' performance was the teacher whose class performed the highest on the benchmark. The teacher whose class performed the lowest was the one who was providing the most suggestions for how others should respond. The sense of urgency among the team was evident although each teacher responded in a different way. The teacher with the most angst prompted her teammates to consider grouping students by name and by learning need so they could work together to provide focused interventions. They collectively replied they were not ready to do this at this point in the year. She turned to the instructional coach who came into her classroom during reading instruction to provide differentiation for those in need of targeted support. The teacher whose class performed in the mid-range asked her team if they would be willing to dedicate team meeting time to better understand the curriculum and how it was assessed on the test. These are the types of conversations that need to happen in order to move the focus from the test to learning.

Collaborative teams who do not make their data transparent continue to add barriers to the work of ensuring all students learn at high levels. I see the largest barrier being the continued focus on test scores instead of learning. Based

on my observations, as well as individual and collective conversations, I do not think the team would have had difficulty exposing their data. I believe the newness of the team contributed to the lack of conversation about how to share the data and how it would be used. I anticipate they will begin to share and discuss their data in different ways as they build trust within the team.

Adult learning. The challenges facing today's educators are more profound than they have ever been. They are being asked to do more with fewer resources. Strategies that require educators to work harder are doomed to fail. There is no doubt educators are working hard. In this educational environment, they must learn to work differently. No one person can perform all of the tasks necessary to ensure learning for all students. Therefore, educators working in collaborative teams sharing best practices and taking collective responsibility for all students make sense.

Leaders of PLCs ensure educators are part of collaborative teams that work interdependently to accomplish common goals. In order to do this they need time to work collaboratively within the contracted day . At Waves Elementary, collaborative teams have one hour per week built into their schedule to meet. This one hour a week meeting was not sufficient to tackle the student and adult learning needs of this collaborative team. Teachers continually expressed their concerns that they were exhausted and did not have enough time in the work week to meet the increasing demands associated with high levels of accountability. Teachers regularly discussed the many hours per week they met with parents by

phone, email and in face to face meetings. One teacher called the mother of one of her students every evening at 5:15 p.m. to be sure he made it home with his homework, had the materials needed to accomplish his work and provided a daily report of his classroom behaviors.

The teachers in the study also discussed the amount of hours they dedicate to their professional learning. When I asked how the professional development within the PLC process at Waves Elementary differs from traditional professional development classes and workshops, they all paused to reflect on how their work within the collaborative team is a powerful form of professional learning. The common responses were the learning in the collaborative team is timely, relevant and doable.

A spirited conversation about the relationship between a math standard and how it was assessed on a benchmark test demonstrated high levels of adult learning. The participants challenged each other's perspective and cited evidence to support their thinking. In the end, all had learned a new way of thinking and thanked one another for bringing the conversation to the team. This kind of dialogue would not have occurred if these teachers were working in isolation.

What does Collaboration Look Like in the PLC Process?

Collaboration is the fundamental building block of the PLC process. The premise is learning improves when teams of professionals are working together to accomplish common goals. That means the adults in a PLC take collective responsibility for improving learning. PLCs are not effective in creating and

sustaining change in practice if educators work in isolation. Vygotsky's sociocultural learning theory recognizes the need for educators to work in environments that allow them to explore knowledge with their peers and outside experts. This learning takes place formally and informally.

At Waves Elementary, the collaborative team meeting served as the formal network for collaboration. These meetings were structured, focused, and the agenda items aligned to the school wide implementation of PLCs. Teachers demonstrated collegiality and adhered to their agreed upon team norms. The instructional coach asked questions as appropriate, kept the discussion focused and purposeful and made sure everyone had an opportunity to contribute their thoughts and ideas. The majority of the collaborative discussions centered around how the teachers would share ideas and resources so that students would be successful on upcoming assessments. The items on the agenda were developed based on requests by the collaborative team as well as the school administration. The formalness of the team was also evident when the instructional coach did not attend the meeting. It was clear the team believed their role was to participate, not self-facilitate the meeting. This is common in the beginning stages of team development.

Another formal network for collaboration was the specialists on campus who worked with the grade level teachers. These specialists eagerly responded to requests for instructional and professional development support. These specialists demonstrated high levels of collective responsibility for the third grade students.

This was evident when the literacy specialist worked with the newest teacher as she modeled writing strategies with English language learners. The specialist continually referred to the students as "our" students.

Informal networks for collaboration happened outside of the team meeting. Two of the participants share a door between their classrooms so they regularly observed one another teach. They also shared materials, lessons and worked with small groups of students from one another's classroom. Another pair of teachers met each day after school to debrief the day and plan for the future. Sometimes they met for an hour, sometimes for three hours. The two informal teams within the team shared similar philosophies about teaching, learning and assessment.

The findings from this case study suggest teachers gravitate to colleagues who have similar beliefs about what constitutes best practice. Based on observations I identify a pair of teachers as constructivists, and another pair as traditionalists. Their differences in philosophy emerged as they worked collaboratively within the formal network. The traditionalists were more likely to submit agenda items related to test preparation and discrete skill development. The constructivists submitted items related to instruction and project based learning. I would argue the constructivists will continue to find working in a school with a traditional philosophy difficult. Overall, the research indicates this team is negotiating how to find the best matches between traditional social norms and traditional teaching and learning norms.

The participants demonstrated that collaborative teams can be collegial when they are made up of educators with differing philosophies. However, change in practices appeared to be related to compliance instead of commitment. An example of this happened when the team discussed an instructional strategy for vocabulary. One of the constructivists demonstrated a lesson that required students to use whole to part thinking, then extend their knowledge of the words in context of science content. One of the traditionalists agreed to try it. She reported back she modified the strategy to allow her students to break the vocabulary into parts before attempting the extension to the science content. She closed the conversation by saying she was uncomfortable with students working with vocabulary that was unfamiliar to them. The instructional coach asked her to share how students responded and she said they demonstrated an understanding of the new vocabulary.

The teachers appeared to be satisfied with the outcome because students learned the vocabulary. None of the teachers on the team judged or criticized the instructional delivery. This was significant learning on my part as some educators worry the PLC process contributes to loss of instructional autonomy. I saw collaboration for student learning, not collaboration that required all teachers to teach in the same ways.

An important characteristic of a PLC is the willingness to take collective responsibility for student learning. The collaborative team in this study regularly displayed commitment to the students assigned to their classroom. They spoke of

students with pride and a commitment to ensuring they were well taught and well prepared. Students were referred to as "my class" and "my students". Teaching practices were referred to as, "how I do it," and "my way of doing it". I suspect this was due to the short amount of time these teachers have worked together as a team. Their collaborative efforts were directed at coming to consensus on what to teach and how to demonstrate students had achieved.

One of the themes that emerged throughout the study was the unspoken norm of keeping conversations noncontroversial. I did not observe or hear conversations related to educational beliefs or philosophies during the collaborative team meetings. In addition, participants did not engage in conversations about students' race or ethnicity even though 60% of their students represent minority populations. It appeared as though the team believed controversial topics would have gotten in the way of collegiality. Collegiality was an important ingredient for collaboration, but not sufficient to its formation.

How Does School and District Leadership Support a Focus on Learning?

The vision for how PLCs connect to school improvement in Beachfront Unified School District has been a three year initiative. Collaborative teams need time to meet as well as have physical and structural supports in order to be effective. This means they need schedules and structures that reduce isolation, policies that encourage cooperation, availability of resources such as time, materials, data and access to professional development.

District administration has allocated resources of time and talent to support the PLC initiative. For example, national researchers and consultants have worked with administrators and teachers for the last three years on how to implement and sustain PLCs. In addition, time for collaborative teams has been preserved and compensated. During this study, the District eliminated a policy that required all teachers to document the time they met in collaborative teams. This change was made in response to teacher workload concerns. The idea was to focus on the work of the collaborative team instead of documenting and monitoring logs. The administrators at Waves Elementary expressed concern that some teachers may think the elimination of the logs meant the district expectation for PLC work was eliminated. My observations indicate the change did not alter the way the teachers in this study worked within their collaborative team.

PLCs must also develop relationships among staff so they can work productively together. These relationships must be collegial and trusting. Trust provides the basis for giving and receiving feedback in order to work toward improvement. School and district leadership can do this by nurturing the human characteristics demanded of PLC work.

The administrators at Waves Elementary demonstrated their trust of the PLC process and the work of the collaborative teams. Teams were given the autonomy to create their own agendas, monitor their work, and make decisions about how to allocate their time for student and adult learning. This was also evident in faculty meetings and early release days for professional development.

The principal worked with the instructional coach to design professional development that was timely, relevant to the work of the collaborative team and embedded within the contracted day. Site administrators clearly communicated the district vision for PLCs and developed action plans for how to put the vision in place at Waves Elementary.

As the site administration monitors progress of collaborative teams in conjunction with student learning results, I anticipate they will revise PLC processes and expectations. The administrators are aware of the negative impacts on their school if they do not make AYP. As a result, I anticipate more conversations will occur about assessments and how the data is used to design systematic interventions. The negative consequence of this could be a more negative focus on testing at the expense of deeper teaching and learning.

Through my observations, interviews, and informal conversations I found that it is critical for district leaders to continue to stay the course and communicate that we are still on the course. This is done in a variety of ways: formal communications such as newsletters and policies, aligning processes such as evaluation tools and pay for performance programs, professional development opportunities, celebrations of best practices, and examining policies and procedures that create barriers for PLC work. The school district is responsible for building administrative and teacher leadership capacity at the school level. Leaders have to be purposeful about involving teachers in decision making as they positively impact student and adult learning.

Participants in the study shared that they needed district leaders to support their endeavors and provide the resources to get the work done. They indicated that the district needed to listen and brainstorm about how to better allocate existing resources such as time, people, materials and money to provide additional support so that all students can learn at higher levels than ever before. They also want site and district leaders to help teach parents and the community what PLCs are and how they can support them.

Recommendations

Recommendations for School Leadership

Supportive leadership. The evidence presented in this case study suggest that in order to close achievement gaps between groups of students, schools have to create systems that allow all students to learn. This requires school level leadership that is focused on learning and creates the conditions necessary for learning. In the context of school improvement the PLC process is shifting the focus from restructuring to reculturing. The traditional model of teachers working in isolation, and administrators managing is altered to allow collaborative decision making in an environment focused on common goals for student learning. The purposeful expansion of leadership to include teachers is an important component of building and sustaining the PLC process. Teachers are those closest to the learning and need to be included in decisions about how their school will put the PLC processes into action. Teachers feel supported when they are able to contribute their ideas and have the resources they need to do their jobs

well. The most common resources teachers need are a variety of instructional materials, flexible schedules, dedicated time to meet in collaborative teams, meaningful data to make instructional decisions, and access to relevant professional development.

Build a trusting environment. A culture absent of threat is needed to build a trusting environment where educators feel safe to learn and grow. Trust is developed as colleagues make commitments and keep their word. Trust provides the basis for giving and accepting feedback. One way to build trust within a PLC is a commitment from site leaders to not use student learning data as a weapon to threaten teachers or pit teachers against one another. The reluctant part of teachers in the case study to even share their test results illustrates the limited trust that is available among teachers in this collaborative team, and in many educational settings. Because collaboration is crucial in the PLC process, collaborative efforts need to be celebrated and encouraged. In more mature and high performing PLCs individual teacher recognition will or may be replaced with collaborative team recognition. In addition, educators in a PLC need to feel supported and confident when challenging practices that are misaligned with the concepts of a PLC. Building trust is an ongoing process that requires time and opportunities for staff to get to know one another on a personal as well as professional level.

Provide clarity and focus. Leaders in a PLC model the vision and focus of the PLC. In order to do this it is critical to develop a common vocabulary

aligned to the components of a PLC. This vocabulary is taught to all stakeholders and is clearly and consistently communicated to keep all informed. Effective leaders in PLCs believe that all students can and will learn at high levels given the adequate amount of time and support. Therefore, they remove language that blames or provides excuses for failure.

Another way school leaders provide clarity and focus of their vision is by monitoring progress towards their goals. In a PLC, leaders need to create conditions to support collaborative teams, clarify the work that must be done, monitor productivity of the team by examining artifacts the team produces and build the capacity of teams to be successful through reciprocal accountability.

Lastly, school administrators provide clarity and focus of the vision when they limit initiatives on their campus. All too often, well intentioned leaders bring in multiple reform initiatives that pull teachers' time away from working in collaborative teams.

Recommendations for District Leadership

Establishing priority for PLCs. PLCs become realized when the characteristics and outcomes associated with PLCs are embedded in the district's vision, mission and goals. District leaders need to integrate and connect the PLC process to existing program requirements and expectations. For example, meaningful data needs to be made available to sites in a timely fashion so that collaborative teams can use the data to inform best instructional practices. In addition, district policies can help or hurt the level of PLC implementation. It is

important for district leaders to be mindful that in order for PLCs to develop and sustain throughout a district, schools must be given the authority to monitor their progress for accomplishing their goals.

Examination of district policies. District leaders need to examine current district policies to determine if they support the concepts of PLCs. When they discover misalignment, they need to be willing to confront them. Policies that create barriers for student learning need to be modified or abandoned. For example, grading and scheduling policies that limit students' ability to demonstrate their learning need to be examined and changed. In addition, proposals for new district policies need to align to the fundamental concepts of PLCs. This includes the negotiation of employee contracts and working conditions. Employment agreements that discourage collaboration need to be replaced. Working conditions need to consider how adult time is preserved to meet the learning needs of students.

Provide access to resources. District leaders need to be willing to examine how they allocate resources such as time, talent, money and materials so that PLCs can do the work that is expected of them. This includes meaningful and user friendly curriculum documents, access to multiple forms of data, a variety of instructional materials, highly trained and effective employees and the autonomy to spend site level funds to meet the needs of their students. District leaders can support site leadership by teaching parents and the community what PLCs are and how they can support them.

Create a forum for critical conversations. District leaders need to be willing to engage school and teacher leaders in conversations about what needs to be taught and how it needs to be taught. Despite the emphasis school accountability places on testing, I believe the biggest educational challenge is engaging our students in meaningful learning that will allow them to be academically and socially successful in the future. Today's educators are expected to prepare students with the knowledge and skills they will need to compete in a global society. The problem is the educational system we are working in is designed to meet the needs of an industrial world, not the technological world of today.

District leaders need to engage in conversations about what we should delete from the curriculum so that we can add time for students to explore their passions, problem solve, communicate and think critically. Because these types of learnings are difficult to measure and take time to mature, they have been discarded from curriculum reform agendas. This contributes to cynicism among educators who work in an accountability environment of reform du jour.

Recommendations for Policy Makers

Ask the right questions. Federal and state legislatures and school boards are designing school reform strategies to fix schools. The first recommendation is to ask if, and how, schools are "broken". And, how is "broken" being determined? Most reform initiatives are designed to reform schools within the same constraints they are currently working in. I argue that prescribing reform

strategies will not work if we have not accurately diagnosed the real problems by engaging those closest to the classroom. I believe true change in schools will come with reculturing of our schools. The new culture of schools will focus on collaborative teams of teachers working together to determine relevant curriculum as opposed to managing their time to cover the tested curriculum. Teams of teachers will experiment and learn the best instructional strategies for how to teach, and the most engaging ways for students to demonstrate they have learned it. Time will be used flexibly to determine student learning instead of time dictating when students will learn. Our educational system will continue to be broken if we continue to repair a system designed to meet the needs of the past.

Encourage collaboration. Federal and state accountability measures can discourage knowledge sharing and collaboration. Policy makers need to take care when designing teacher evaluation and merit pay systems that increase competition and destroy collaborative efforts of educators. The challenges facing educators are greater than they have ever been. At the same time resources are dwindling. If we are to attract and retain highly effective educators we must create systems that allow them to share their talents and be compensated for their collective efforts. The price is too high to destroy a pipeline of future educators by creating policy that makes education a dismal profession. The evidence in this case study suggests the teacher who had been laid off twice in three years felt as though she was not only a victim of budget reductions, but a victim of the stresses placed on educators in the name of accountability.

Recommendations for Future Research

This case study described the behaviors and practices of a newly formed collaborative team of teachers working in a Title 1 school in a suburban school district in the southwestern United States. It is recommended that further research be conducted on the role of teacher collaboration during an era of accountability. Collaboration was a theme that emerged as an element that contributed to both student and adult learning. How do teachers maintain collaborative behaviors in an accountability era focused on competition?

A second area for future research is the relationship between the effectiveness of a collaborative team and the length of time they have worked together. It was evident throughout this study that the newness of this team of teachers had an impact on their behaviors and practices. How does the amount of time a collaborative team works together impact their behaviors and practices? How might technology tools such as blogs, wikis and lesson sharing sites encourage collaboration among educators?

A third area for future research is to study the relationship between the behaviors and practices of collaborative teams in a Title 1 elementary school that made AYP. Would the conversations and focus be the same, or different? Would reduced pressure on test scores open up greater space for learning? And what implications does this have for poor students, English language learners and others attending schools that fail to make AYP?

Summary

This case study described the behaviors and practices of how one newly formed collaborative team worked together in a PLC process. The main objective was to identify themes in teachers' conversations and behaviors to further understand how they work within a PLC process. Participants had an understanding of what PLCs are and what PLCs do, but had a more difficult time putting their knowledge into practice. Participants described how they worked in formal and informal networks that allowed them to collaborate on a regular basis. The majority of their collaborative time was dedicated to preparing students for standardized assessments. The overall challenge facing the participants is the current accountability system for measuring student achievement. Instead of focusing on learning, their time is spent understanding and gaming the assessment practices that report achievement. By examining the practices of practitioners, much can be learned about how to create conditions and adequately allocate resources so that educators and students can succeed in the rapidly changing global society.

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APPENDIX A

CRITICAL ISSUES FOR TEAM CONSIDERATION SURVEY

Use the scale below to indicate the extent to which each of the following statements is true of your team.

1 2 3 4 5 6 7 8 9 10
Not true of our team Our team is addressing True of our team

#	Rating	Statement
1		We have identified team norms and protocols to guide us in working together.
2		We have analyzed student achievement data and have established SMART goals that we are working interdependently to achieve.
3		Each member of our team is clear on the essential learnings of our course in general as well as the essential learnings of each unit.
4		We have aligned the essential learnings with state and district standards and the high-stakes exams required of our students.
		We have identified course content and/or topics that can be eliminated so we can devote more time to essential curriculum.
6		We have agreed on how to best sequence the content of the course and have established pacing guides to help students achieve the intended essential learnings.
7		We have identified the prerequisite knowledge and skills students need in order to master the essential learnings of our course and each unit of this course.
8		We have identified strategies and created instruments to assess whether students have the prerequisite knowledge and skills.
9		We have developed strategies and systems to assist students in acquiring prerequisite knowledge and skills when they are lacking in those areas.
10		We have developed frequent common formative assessments that help us to determine each student's mastery of essential learnings.
11		We have established the proficiency standard we want each student to achieve on each skill and concept examined with our common assessments.
12		We have developed common summative assessments that help us assess the strengths and weaknesses of our program.
13		We have established the proficiency standard we want each student to achieve on each skill and concept examined with our summative assessments.
14		We have agreed on the criteria we will use in judging the quality of student work related to the essential learnings of our course, and we practice applying those criteria to ensure consistency.
15		We have taught students the criteria we will use in judging the quality of their work and have provided them with examples.
16		We evaluate our adherence to and the effectiveness of our team norms at least twice each year.
17		We use the results of our common assessments to assist each other in building on strengths and addressing weaknesses as part of a process of continuous improvement designed to help students achieve at higher levels.
18		We use the results of our common assessments to identify students who need additional time and support to master essential learnings, and we work within the systems and processes of the school to ensure they receive that support.

APPENDIX B

THE PROFESSIONAL LEARNING COMMUNITY AT WORK CONTINUUM

The Professional Learning Community at Work Continuum
Learning as Our Fundamental Purpose in a PLC at Work (Part I)

DIRECTIONS: Individually, silently and honestly assess the current reality of your school's implementation of each indicator listed in the left hand column. To assess district implementation, substitute the word "district" for "school."

Learning as our Fundamental Purpose (Part I) We acknowledge that the fundamental purpose of our school is to help all students achieve high levels of learning, and therefore we work collaboratively to clarify what students must learn and how we will monitor each student's learning.					
Indicator	Pre-initiating	Initiating	Implementing	Developing	Sustaining
We work with colleagues on our team to build shared knowledge regarding state, provincial, and/or national standards; district curriculum guides; trends in student achievement and expectations for the next course or grade level. This collective inquiry has enabled each member of our team to clarify what all students must know and be able to do as a result of every unit of instruction.	Teachers have been provided with a copy of state, provincial or national standards and a district curriculum guide. There is no process for them to discuss curriculum with colleagues and no expectations they will do so.	Teacher representatives have helped to create a district curriculum guide. Those involved in the development feel it is a useful resource for teachers. Those not involved in the development may or may not use the guide.	Teachers are working in collaborative teams to clarify the essential learning for each unit and to establish a common pacing guide. Some staff members question the benefit of the work. They argue that developing curriculum in the responsibility of the central office or textbook publishers rather than teachers. Some are reluctant to give up favorite units that seem to have no bearing on essential standards.	Teachers have clarified the essential learning for each unit by building shared knowledge regarding state, provincial, and/or national standards; by studying high stakes assessments, and by seeking input regarding the prerequisites for success as students enter the next grade level. They are beginning to adjust curriculum, pacing, and instruction based on evidence of student learning.	Teachers on every collaborative team are confident they have established a guaranteed and viable curriculum for their students. Their clarity regarding the knowledge and skills students must acquire as a result of each unit of instruction, and their commitment to providing students with the instruction and support to achieve the intended outcomes gives every student access to essential learning.
We work with colleagues on our team to clarify the criteria by which we will judge the quality of student work, and we practice applying those criteria until we can do so consistently.	Each teacher establishes his or her own criteria for assessing the quality of student work.	Teachers have been provided with sample rubrics for assessing the quality of student work.	Teachers working in collaborative teams are attempting to assess student work according to common criteria. They are practicing applying the criteria to examples of student work, but they are not yet consistent. The discrepancy is causing some tension on the team.	Teachers are working on collaborative teams are clear on the criteria they will use in assessing the quality of student work and can apply the criteria consistently.	Collaborative teams of teachers frequently use performance based assessments to gather evidence of student learning. Members have established strong inter-rater reliability and use the results from these assessments to inform and improve their individual and collective practice. The team's clarity also helps members teach the criteria to students who can then assess the quality of their own work and become more actively engaged in their learning.

Indicator	Pre-initiating	Initiating	Implementing	Developing	Sustaining
We monitor the learning of each student's attainment of all essential outcomes on a timely basis through a series of frequent, team-developed common formative assessments that are aligned with high stakes assessments will be required to take.	Each teacher creates his or her own assessments to monitor student learning. Assessments are typically summative rather than formative. A teacher can teach an entire career and not know if he or she teachers a particular skill or concept better or worse than the colleague in the next room teaching the same skill or concept.	The district has established benchmark assessments that are administered several times throughout the year. Teachers pay little attention to the results and would have a difficult time attempting to explain the purpose of the benchmark assessment.	Teachers working in collaborative teams have begun to create common assessments. Some attempt to circumvent the collaborative process by proposing the team merely uses the quizzes and tests that are available in the textbooks as their common assessments. Some administrators question the ability of teachers to create good assessments and argue the district should purchase commercially developed tests.	Teachers working in collaborative teams have created a series of common assessments and agreed on the specific standard students must achieve to be deemed proficient. The user-friendly results of the common assessments are providing each member of the team with timely evidence of student learning. Members are using that evidence to improve their assessments and to develop more effective instructional strategies.	Collaborative teams of teachers gather evidence of student learning on a regular basis through frequent and formative assessments. The team analysis of results drives the continuous improvement process of the school. Members determine the effectiveness of instructional strategies based on evidence of student learning rather than teacher preference or precedent. Members who struggle to teach a skill are learning from those who are getting the best results. The frequent common formative assessments provide the vital information that fuels the school's system of intervention and enrichment. The assessments are formative because 1) they are used to identify students who need additional time and support for learning, 2)the students receive the additional time and support for learning, and 3) students are given another opportunity to demonstrate what they have learned.

The Professional Learning Community at Work Continuum
Learning as Our Fundamental Purpose in a PLC at Work (Part II)

DIRECTIONS: Individually, silently and honestly assess the current reality of your school's implementation of each indicator listed in the left hand column. To assess district implementation, substitute the word "district" for "school."

Learning as our Fundamental Purpose (Part II) We acknowledge that the fundamental purpose of our school is to help all students achieve high levels of learning, and therefore we are providing students with systematic interventions when they struggle and enrichment when they are proficient.					
Indicator	Pre-initiating	Initiating	Implementing	Developing	Sustaining
We provide a system of interventions that guarantees each student will receive additional time and support for learning if he/she experiences initial difficulty. Students who are proficient have access to enriched and extended learning opportunities.	What happens when a student does not learn will depend almost exclusively on the teacher to whom the student is assigned. There is no coordinated, school response to students who experience difficulty. Some teachers allow students to turn in late work; some do not. Some teachers allow students to re-take a test; some do not. The tension that occurs at the conclusion of each unit when students are proficient and ready to move forward and others are failing to demonstrate proficiency is left to each teacher to resolve.	The school has attempted to establish specific policies and procedures regarding homework, grading, parent notification of student progress, and referring students to child study teams to assess their eligibility for special education services. If the school provides any additional support for students it is either through a "pull-out" program that removes students from new direct instruction or optional after school programs. Policies are established for identifying students who are eligible for more advanced learning.	The school has taken steps to provide students with additional time and support when they experience difficulty. The staff is grappling with structural issues such as attempting to provide time for intervention during the school day in ways that do not remove the student from new direct instruction. The school schedule is regarded as a major impediment to intervention and enrichment and staff members are unwilling to change the schedule. Some members of the staff are concerned that providing students with additional time and support is not holding them responsible for their own learning.	The school has developed a schoolwide plan to provide students who experience difficulty with additional time and support for learning in a way that is timely, directive and systematic. It has made structural changes such as modifications in the daily schedule to support this system of intervention. Staff members have been assigned new roles and responsibilities to assist with the intervention. The faculty is looking for ways to make the systems of intervention more effective.	The school has a highly coordinated, system of intervention and enrichment in place. The system is very proactive. Coordination with sender schools enables the staff to identify students who will benefit from additional time and support for learning even before they arrive at the school. The system is very fluid. Students move into interventions and enrichment easily and remain only as long as they benefit from it. The achievement of each student is monitored on a timely basis. Students who experience difficulty are required, rather than invited, to utilize the system of support. The plan is multi-layered. If the current level of time and support is not sufficient to help a student become proficient, he or she is moved to the next level and receives increased time and support. All students are guaranteed access to this system of intervention regardless of the teacher to whom they are assigned. The school responds to students, and views students who are failing to learn as "under supported" rather than "at risk."

The Professional Learning Community at Work Continuum
Building a Collaborative Culture Through High Performing Teams in a PLC at Work

DIRECTIONS: Individually, silently and honestly assess the current reality of your school's implementation of each indicator listed in the left hand column. To assess district implementation, substitute the word "district" for "school."

Building a Collaborative Culture of Through High Performing Teams in a PLC at Work We are committed to working together to achieve our collective purpose of learning for all students. We cultivate a collaborative culture through the development of high performing teams.					
Indicator	Pre-initiating	Initiating	Implementing	Developing	Sustaining
We are organized into collaborative teams in which members work interdependently to achieve a common goal that directly impact student achievement.	Teachers work in isolation with little awareness of the strategies, methods or materials used by colleagues teaching the same course or grade level. There is no plan in place to assign staff members into teams or to provide them with time to collaborate.	Teachers are encouraged to work together collaboratively. Some staff may elect to work with colleagues on topics of mutual interest. Staff members are congenial but are not co-laboring in an effort to improve student achievement.	Teachers have been assigned to collaborative teams and have been provided time for collaboration during the regular contractual day. Teams may be unclear regarding how they should use the collaborative times. Topics often focus on matters unrelated to teaching and learning. Some teachers believe the team meeting is not a productive use of their time.	Teachers have been assigned to collaborative teams and have been provided time for collaboration on a weekly basis during the regular contractual day. Guidelines, protocols and processes have been established in an effort to help teams use the collaborative time to focus on topics that will have a positive impact on student achievement. Team leaders are helping to lead the collaborative process and the work of teams is monitored closely and so assistance can be provided when a team struggles. Teams are working interdependently to achieve goals specifically related to higher levels of student achievement and are focusing their efforts on discovering better ways to achieve those goals.	The collaborative team process is deeply engrained in the school culture. Staff members view it as the engine that drives school improvement in their schools. Teams are self-directed and very skillful in advocacy and inquiry. They consistently focus on issues that are most significant in improving student achievement, and set specific measurable goals to monitor improvement. The collaborative team process serves as a powerful form of job embedded professional development because members are willing and eager to learn from one another, to identify common problems, engage in action research, make evidence of student learning transparent among members of the team, and make judgments about the effectiveness of different practices on the basis of that evidence. The team process directly impacts teacher practice in the classroom, helping each teacher clarify what to teach, how to assess, and how to improve instruction.

Indicator	Pre-initiating	Initiating	Implementing	Developing	Sustaining
We have identified and honor the commitments we have made to the members of our collaborative team in order to enhance the effectiveness of our team. These articulated collective commitments or norms have clarified expectations of how our team will operate and are used to address problems that may occur on the team.	No attention has been paid to establishing clearly articulated commitments that clarify the expectations of how the team will function and how each member will contribute to its success. Norms do emerge from each group based on the habits that come to characterize the group, but they are not explicit nor are they the result of a thoughtful process. Several of the norms have an adverse effect on the effectiveness of the team.	No attention has been paid to establishing clearly articulated commitments that clarify the expectations and commitments. Recommended norms for teams may have been created and distributed. Norms are often stated as beliefs rather than commitments to act in certain ways.	Each team has been required to develop written norms that clarify expectations and commitments. Many teams have viewed this as a task to be accomplished. They have written the norms and submitted them, but do not use them as part of the collaborative team process.	Teams have established the collective commitments that will guide their work and members have agreed to honor the commitments. The commitments are stated in terms of specific behaviors members will demonstrate. The team begins and ends each meeting with a review of the commitments to remind each other of the agreements they have made about how they will work together. They assess the effectiveness of commitments periodically and make revisions when they feel it will help the team become more effective.	Team members honor the collective commitments they have made to one another regarding how the team will operate and the responsibility of each member to the team. The commitments have been instrumental in creating an atmosphere of trust and mutual respect among members. They have helped members work interdependently to achieve common goals because members believe they can rely on one another. The commitments facilitate the team's collective inquiry and help people explore their assumptions and practices. Members recognize that their collective commitments have not only helped the team become more effective, but have also made the collaborative experience more personally rewarding. Violations of the commitments are addressed. Members use them as the basis for crucial conversations and honest dialogue when there is concern that commitments are not being observed by one or more members.

The Professional Learning Community at Work Continuum
The Focus on Results in a PLC at Work (Part I)

DIRECTIONS: Individually, silently and honestly assess the current reality of your school's implementation of each indicator listed in the left hand column. To assess district implementation, substitute the word "district" for "school."

The Focus on Results in a PLC at Work (Part I) We assess our effectiveness on the basis of results rather than intentions.					
Indicator	Pre-initiating	Initiating	Implementing	Developing	Sustaining
The members of each of our collaborative teams are working interdependently to achieve one or more SMART goals that align with our school goals. Each team has identified specific action steps members will take to achieve the goal and a process for monitoring progress toward the goal. The identification and pursuit of SMART goals by each collaborative team are critical elements of the school's continuous improvement process.	Goals have not been established at the district or school level. Teams are not expected to establish goals.	Teams establish goals that focus on adult activities and projects rather than student learning.	Teams have been asked to create SMART goals, but many teachers are wary of establishing goals based on improved student learning. Some attempt to articulate very narrow goals that can be accomplished despite students learning less. Others present goals that are impossible to monitor. Still others continue to offer goals based on teacher projects. There is still confusion regarding the nature of and reason for SMART goals.	All teams have established annual SMART goals as an essential element of their collaborative team process. Teams have established processes to monitor their progress, and members work together in an effort to identify strategies for becoming more effective at achieving the team's SMART goal.	Each collaborative team of teachers has established both an annual SMART goal and a series of short term goals to monitor their progress. They create specific action plans to achieve the goals, clarify the evidence they will gather to assess their progress, and work together interdependently to achieve the goal. This focus on tangible evidence of results guides the work of teams and is critical to the continuous improvement process of the school. The recognition and celebration of efforts to achieve goals helps to sustain the improvement process.

The Professional Learning Community at Work Continuum
The Focus on Results in a PLC at Work (Part II)

DIRECTIONS: Individually, silently and honestly assess the current reality of your school's implementation of each indicator listed in the left hand column. To assess district implementation, substitute the word "district" for "school."

The Focus on Results in a PLC at Work (Part II) Individuals, teams and schools seek relevant data and information and use that information to promote continuous improvement.					
Indicator	Pre-initiating	Initiating	Implementing	Developing	Sustaining
Collaborative teams or teachers regard ongoing analysis of evidence of student learning as a critical element in the teaching and learning process. Teachers are provided with frequent and timely information regarding the achievement of their students. They use the information to: 1) respond to students experiencing difficulty 2) Enrich and extend the learning of students who are proficient 3) Inform and improve the individual and collective practice of members 4) Identify team professional development needs 5) Measure progress toward team goals	The only process for monitoring student learning is the individual classroom teacher and annual state, provincial, or national assessments. Assessment results are used primarily to report on student progress rather than to improve professional practice. Teachers fall into a predictable pattern: they teach, they test, they hope for the best, and then they move on to the next unit.	The district has created benchmark assessments that are administered several times throughout the year. There is often considerable lag time before teachers receive the results. Most teachers pay little attention to the test results. They regard the assessment as something that may be of benefit to the district but is of little use to them. Principals are encouraged to review the results of state assessments with staff, but the fact that the results aren't available until months after the assessment and the lack of specificity mean they are of little use in helping teachers improve their practice.	Teams have been asked to create and administer common formative assessments and to analyze the results together. Many teachers are reluctant to share individual teacher results and want the analysis to focus on the aggregate performance of the group. Some use the results to identify questions that caused students difficulty so they can eliminate the questions. Many teams are not yet using the analysis of results to inform or improve professional practice.	The school has created a specific process to bring teachers together multiple times throughout the year to analyze results from team-developed common assessments, district assessments, and state and national assessments. Teams use the results to identify areas of concern and to discuss strategies for improving the results.	Teachers are hungry for information on student learning. All through the year, each member of a collaborative team receives information that illustrates the success of his or her students in achieving an agreed upon essential standard, on team-developed common assessments he or she helped to create, in comparison to all the students attempting to achieve the same standard. Teachers use the results to identify the strengths and weaknesses in their individual practice, to learn from one another, to identify areas of curriculum proving problematic for students, to improve their collective capacity to help all students learn, and to identify students in need of intervention or enrichment. They also analyze results from district, state and national assessments and use them to validate their team assessments.

APPENDIX C

FOCUS GROUP QUESTIONNAIRE

Focus Group Questionnaire
How does your PLC work?
Fall 2010

Thank you for your participation in today's focus group. After sharing your views and ideas, and hearing those of others in your group, please take a few minutes to complete the following questionnaire. This information will contribute to a deeper understanding of how PLCs work at your school. Reminder that the information will be used in a research study and all information will be confidential with no indicators of your identity.

Please indicate the group that you are representing during today's focus group. *Please check all that apply.*

☐ Teacher
☐ Administrator

Please answer the following:

Number of years working at this school: _____
Number of years working in the education profession: _____
Number of years working in the District _____
Number of years working with 3rd graders: _____

Education level:

☐ Bachelor's degree or more
☐ Master's degree or more

Professional development participation:
Please check all that apply.

☐ Career Ladder

Circle which phase: SPAR Learning Community, which one_____

☐ Attended at least 2 hours of PLC training with national researchers (i.e. DuFours)

☐ Attended at least 2 hours of a book study related to PLC concepts

☐ Member of professional organizations
List: _____

List topics of professional development you have attended in the last 3 years:

_____
_____
_____
_____

The District is in its third year of implementing Professional Learning Communities (PLCs) throughout the District. The questions below are designed to learn more about how PLCs work in the third grade at your school.

1. What are the behaviors and practices of your PLC?

   _____
   _____
   _____
   _____

2. How do you commit to continuous learning?

   _____
   _____
   _____
   _____

   a. How do you determine essential learning outcomes by course and by grade level?

      _____
      _____
      _____
      _____

   b. How do you create SMART goals?

      _____
      _____
      _____
      _____

   c. How do you use student data to make instructional decisions?

      _____
      _____
      _____
      _____

d. How do you create common assessments?

_____
_____
_____
_____

e. How do you decide which students need additional time and support for learning?

_____
_____
_____
_____

f. How do you decide which students need enrichment when they have already learned?

_____
_____
_____
_____

g. How do you manage conflict when you make decisions?

_____
_____
_____
_____

h. How do you share instructional practices with one another?

_____
_____
_____
_____

3. How do you dedicate time for learning?

a. How do you work collaboratively on the tasks related to PLC functions? See question #1 and sub questions a-h under question #1.

_____
_____
_____
_____

b. How do you use instructional time to ensure student learning?

_____
_____
_____
_____

4. How does school and district leadership support a focus on learning?

_____
_____
_____
_____

Thank you for the time you gave to complete this questionnaire.
Please return it to Andi Fourlis.

APPENDIX D

IN-DEPTH INTERVIEW QUESTIONS

In-depth Interview Questions

Part 1: Focused Life History

1. Please tell me about your school experiences.

2. As a student, when did you feel most successful in school?

3. Why and how did you decide to pursue a career in education?

4. What types of professional development and professional organizations are you involved in?

5. What are your thoughts about current educational reform strategies in the US?

Part 2: The Details of the Experience

6. As an educator, please talk about your relationships with your colleagues and students and the role they play in the day to day decisions you make about teaching and learning.

7. Please share a time in your PLC where the learning needs of your students guided your professional development.

Part 3: Reflection on the Meaning

8. How does the experience your described in question 7 differ from other types of professional development you have been involved in?

9. Given what you have said about the role your colleagues and students have played in your decision making, and given what you have said about how student learning needs have influenced your decisions, how do you understand the role of professional development?

10. Given what you have discussed in these interview questions, where do you see your work in your PLC going in the future?

APPENDIX E

IRB EXEMPTION

ASU Knowledge Enterprise Development

Office of Research Integrity and Assurance

To:	Arnold Danzig College of Public Programs
From:	Mark Roosa, Chair Soc Beh IRB
Date:	10/29/2010
Committee Action:	**Exemption Granted**
IRB Action Date:	10/29/2010
IRB Protocol #:	1010005613
Study Title:	Case Study at [redacted] School

The above-referenced protocol is considered exempt after review by the Institutional Review Board pursuant to Federal regulations, 45 CFR Part 46.101(b)(1) (2) .

This part of the federal regulations requires that the information be recorded by investigators in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. It is necessary that the information obtained not be such that if disclosed outside the research, it could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.

You should retain a copy of this letter for your records.

APPENDIX F

COVER LETTER

How does a professional learning community (PLC) work in an third grade at XXXXXX School?

October 1, 2010

Dear XXXXX Case Study Participant:

I am a graduate student under the direction of Professor Dr Arnold Danzig in the College of Public Programs at Arizona State University.

I am conducting a research study to describe how the professional development model known as professional learning communities (PLCs) works in the third grade at XXXXX School. The study will be conducted from October to December of 2010. The anticipated time commitment from each participant is six hours.

Your participation in this study is voluntary. You can skip questions if you wish. If you choose not to participate or to withdraw from the study at any time, there will be no penalty.

There are no foreseeable risks or discomforts to your participation.

Confidentiality will be maintained throughout the study. Your responses, questions and comments will remain anonymous. Notes collected during interviews, focus group responses, field notes and observation notes will be destroyed. Transcription of audio interviews and digitized recordings will be shredded and or deleted at the conclusion of the research study. The results of this study may be used in reports, presentations, or publications but your name will not be known/used . If applicable, results will only be shared in the aggregate form.

If you have any questions concerning the research study, please contact the research team at: Dr Arnold Danzig at Arnold.danzig@asu.edu or Andi Fourlis at afourlis@susd.org

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

Return of the questionnaire will be considered your consent to participate.

Sincerely,

Andi Fourlis

APPENDIX G

RESEARCH APPROVAL

[redacted] [redacted] School District

Education Center
[redacted]

October 27, 2010

Andi Fourlis
4501 E Danbury Road
Phoenix, AZ 85032

Re: Research Proposal

Dear Mrs. Fourlis:

This will confirm approval of your research study, "Professional development in an era of accountability. How professional learning communities work as a model for professional development". A copy of the signed approval form is enclosed.

Please provide us with the results of this research when they are available.

Sincerely,

[redacted]
Executive Director of Accountability & Student Information

[redacted]

Approval to Conduct Research in the [redacted] School District

Date: October 1, 2010	Use of Study:
Applicant: Andi Fourlis	☒ Doctoral Dissertation
Address: 4501 E Danbury Road Phoenix, AZ 85032	☐ Education Specialist Project ☐ Master's Thesis ☐ Other
Phone: (H) 602-867-2464 Phone: (W) 480-677-5229	Duration of Study: ☐ One year or longer ☒ Less than one year

☒ District Employee ☐ Individual or Agency outside of District

Title of Study: Professional development in an era of accountability. How professional learning communities work as a model for professional development.

Purpose of Study: A case study of a third grade PLC and those who support them (instructional coach, special education teacher, principal and assistant principal)

Schools/Staff/Students involved in Study: Seven (7) educators, five (5) teachers, two (2) administrators at Hohokam Elementary School.

RECOMMENDATION BY APPROPRIATE ADMINISTRATOR ON PROJECT APPROVAL:

Yes	No		
☐	☐		
☑	☐	Site Principal [redacted]	Date 10/27/10
☑	☐	Executive Director of Curriculum & Assessment [redacted]	Date 10/27/10
		Associate Superintendent or designee	Date

☑ Approved ☐ Conditionally Approved ☐ Denied