Professional Learning Communities and Their Impact on the Roadblocks That Inhibit Collaboration Among Teachers and Certified Staff at Berkshire Elementary School

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ABSTRACT

NAN ROZELLE BESCH LUJAN: Professional Learning Communities and Their Impact on the Roadblocks That Inhibit Collaboration Among Teachers and Certified Staff at Berkshire Elementary School

(Under the direction of Dr. Barbara Day)

21st century teaching initiatives place emphasis on the formation of collaborative professional cultures. Recent educational literature suggests that there are a number of roadblocks to the creation of such cultures. In 2005, a study conducted at Berkshire elementary identified several of these hindrances. Foremost among them were a lack of time, the isolated nature of the profession, and the presence of divergent points of view as the main roadblocks to forming a collaborative culture (Lujan, 2005).

This study investigated the perceptions of 37 elementary school teachers and staff members at Berkshire Elementary on the impact of the implementation of the Professional Learning Community Model, as defined by DuFour (2006), on the roadblocks through an open-ended survey, quantitative data collected by the High Five Regional Partnership for High School Excellence limited to just the responses from the classroom teachers at Berkshire Elementary, one-on-one interviews, and observations of Professional Learning Community Meetings.

Findings indicate that the model alleviates the roadblocks to collaboration identified in 2005, but that continued efforts need to be made to encourage the development of the collaborative culture.

This study is important because an understanding of the impact of this model on previous obstacles to collaboration may be of value to educators who are trying to establish collaborative communities within their schools and the school examined under this study may be able to make changes to increase the effectiveness of its own collaborative community.

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CHAPTER I

INTRODUCTION

What is collaboration? Friend and Cook (2003) defined it as "a style for direct interaction between at least two coequal parties voluntarily engaged in shared decision making as they work toward a common goal" (p. 5). This definition includes several important characteristics. First, collaboration is voluntary and therefore cannot be forced; both parties have to be willing to work together. Second, collaboration requires that both parties be equal both in their contributions and their decision making power. Third, collaboration requires a shared goal.

New initiatives in teaching require that teachers form collaborative cultures, but this prospect is not as easy as one might think. It is not enough to claim that collaboration is occurring in a school. Friend (2000) pointed out that mentioning collaboration is not the same as actually collaborating. Wilma, a student intern who was cited in a study by Grossman, Wineburg, and Woolworth (2001), illustrated this point when she commented on her field placement where collaboration is part of the mission statement:

People gossip and [whine] and moan, but they don't relate on a professional level. And I don't know what I thought ... I thought everyone would be there with their books and their professional ideas, exchanging high-flown stuff, which is naive. But I guess I thought that there might be some place in the school, within the school environment, where teachers would come together. But they don't, it doesn't happen in the faculty lounge and it doesn't happen at staff meetings (p. 993-994).

As a new teacher, the researcher for this dissertation found the same experience to be true. Teachers with whom she worked with did not seem to be collaborating as she had envisioned. She thought teachers would work together to make lesson plans, discuss teaching ideas, and come to each other to figure out how to reach the students in their classrooms. Instead it seemed that in team meetings they would talk only about superficial things such as field trips and recess times. They might give a copy of a worksheet to another team member, but they weren't talking about the fundamentals of their day with one another.

Friend (2000) explained some of the reasons teachers give for the lack of collaboration described by Wilma. "[Teachers] remark on how difficult collaboration is, how little attention was paid to collaboration in their professional preparation, and how few staff development opportunities are offered related to it" (p. 132). Teachers may try to avoid these difficulties and pretend that shared values and common beliefs are already present. However, this form of community is both fragile and unstable (Grossman et al., 2001).

The idea of collaborating with other teachers in one's grade level seemed obvious to the researcher, and yet, in her experience it was not occurring, at least not in the grade levels that she had observed. Not understanding why this could possibly be, led the researcher to investigate the roadblocks to collaboration at her school in 2005.

During her master's program at North Carolina Central University in 2005 (Lujan, 2005), the researcher wrote a master's thesis titled, "Teacher Collaboration and the Roadblocks That Inhibit It," in which she surveyed, interviewed, and held focus groups with the teachers at Berkshire Elementary School. Berkshire Elementary School included the following in their mission statement:

Our mission is to foster lifelong learning by providing a safe school environment which responds to the needs of a diverse student body. This is accomplished by the school, parents, and community members working together on a daily basis.

The purpose of her research in 2005 was to determine why at this particular school, collaboration among teams was not occurring even though it was a part of their shared mission statement.

Berkshire Elementary School is located in a southeastern town with a population of approximately 5,500 residents spread across 5.35 square miles. The town is located at the junction of two major highways and is within 10 miles of an urban city of approximately 51,500 residents. The town contains residential neighborhoods, a large historic district dating back to the late 18th century, and a considerable number of retail and business areas with an emphasis on antique shopping. The nearby city is the home of a state university with approximately 17,500 undergraduate students and 10,500 graduate or professional students.

Berkshire Elementary School serves grades pre-K through fifth, with students coming from the immediate community and six of the surrounding smaller communities. The smaller communities are more rural than the immediate community and contain several horse farms and houses set on multi-acre plots. The school also includes two EC pre-K classes and a Title One pre-K that serve the entire district. The student population, as provided by the data manager at the school in the winter of 2009, was approximately 75% Caucasian, 14% African-American, 7.5% Hispanic, and 3.5% other (Asian and multi-racial). S/he reported 518 total students enrolled in grades pre-K through fifth. Berkshire Elementary School is one of seven elementary schools in the district.

At the time of the dissertation study in the winter of 2008 and spring of 2009, Berkshire Elementary School had 29 classified employees and 45 certified employees. Classified employees included teacher assistants, tutors, cafeteria workers, an occupational therapist, office staff, and custodial staff. Certified employees included classroom teachers, elective teachers (i.e., art, music, P.E., adaptive P.E., and Spanish), teachers for exceptional children, reading teachers, a teacher for academically and intellectually gifted students, administrators, a counselor, a speech and language therapist, a school psychologist, a social worker, and a nurse.

In her study conducted in 2005 at Berkshire Elementary School, based on the data obtained from surveys, interviews, and an observation of a planning meeting between two grade levels, three major obstacles emerged which aligned with the original research question. The specific obstacles identified were time factors, the isolated nature of the profession, and conflict caused by the divergent points of view of teachers (Lujan, 2005).

First, most of the participants in the survey indicated that time restrictions were a roadblock in trying to form collaborative communities. The restrictions were a result of 20-minute common planning periods, after-school obligations such as meetings and tutoring, responsibilities of individual teachers like grading and planning, and life outside of school such as graduate classes (Lujan, 2005).

Second, the isolated nature of the profession presented itself in the description of six behaviors of teachers which made it difficult to collaborate. Those behaviors included teachers that are competitive, won't share, take and never give, take over, end up "doing their own thing," and refuse to change. Third, conflicts that were a roadblock to collaboration also occurred due to the divergent opinions, teaching styles, and personalities of the teachers involved (Lujan, 2005).

Throughout the process of collecting data, there were a few surprising or unexpected results. Almost one-third of the respondents indicated that people who do not contribute to the collaboration are a roadblock to forming these relationships. It was surprising that teachers would withhold ideas from other teachers but would be willing to take the ideas of others. There were a few explanations for this practice: a desire to receive acknowledgement of recognition for their work, fear of expressing opinions in front of colleagues, and not having enough experience with the curriculum or subject area being taught to be able to offer up ideas or prior practices (Lujan, 2005).

Another unexpected finding is that although collaboration is seen as a benefit to all who participated in the study, only 11 out of 23 respondents volunteered a positive experience that they had with collaboration with their entire grade level team. Most of the respondents recalled a positive experience with at least one other teacher, and one indicated that s/he had not had a positive experience since college (Lujan, 2005).

The implications of these findings are that steps need to be taken within schools to try and prevent these roadblocks from occurring so that a productive collaborative culture can be formed. Since the conclusion of this study in 2005, a new initiative has taken place at Berkshire Elementary School that inspired the researcher to revisit the school with a new study in mind.

Background of the Study

During the 2007-2008 school year, Berkshire Elementary School implemented the Professional Learning Communities (PLC) model. This model is described in length in the literature review section of this study; in brief, a Professional Learning Community is a collaborative venture focused on student learning. Teachers on a PLC team discuss

essential learning outcomes in curriculum, share best practices, give common assessments, and discuss the results of those assessments as a team (Eaker, DuFour, & DuFour, 2002).

At Berkshire Elementary, all staff members participated in training at the beginning of the school year to learn how to participate in a Professional Learning Community. This training was held district-wide and focused on setting norms and establishing specific, measurable, attainable, results-oriented, and time-bound (SMART) goals. In addition to the county-wide training, teachers at Berkshire Elementary had another half-day training at their school site in which time was given to teams to write their norms and at least one SMART goal. Norms for the purpose of a Professional Learning Community are the rules by which the team wants to operate including but not limited to the following: establishing a time for the meetings to take place, a policy for tardiness, a method for turn taking, and a method for resolving conflicts or handling disagreements. Each team was informed that its SMART goal would be the team's focus for the first year of Professional Learning Community implementation and that the goal should relate to improving student achievement in math through the use of a remediation program developed by the team. How the team went about discussing their SMART goal in their team meetings and how they would develop and implement their remediation program was up to them. The school also expected teams to develop common math assessments on at least a quarterly basis. These assessments did not have any required format, but needed to include agreed upon items and needed to be given to all students in the grade level. Team members were trained on the PLC model in terms of tracking common assessment data for the purpose of determining which students needed

remediation and which teacher's students performed best on each objective on a common assessment. The purpose of tracking this information was supposed to be to discuss proven strategies for teaching content and to record student growth.

During the first year, teams were organized by grade level with support and elective staff members assigned to grade-level teams. For example, the gym teacher was assigned to be a member of the third-grade team. Teams set their own meeting agendas. Teams were required to meet weekly and were required to fill out a feedback sheet and send it to the principal each week as an ongoing assessment of their regular meeting time. The feedback sheet included an attendance record including a space to note reasons for absences, notes from the meeting, and a space for questions for the administrator.

Throughout the year, additional full staff meetings were held under which additional tasks were assigned to the Professional Learning Communities teams dealing with vocabulary, such as coming up with a common grade-level vocabulary list. These tasks were supposed to be completed in addition to ongoing work on each team's SMART math goal and remediation program.

During the summer of 2008, two additional professional development days were held at the school site. The purpose of these days was to discuss and develop a pyramid of interventions that would be utilized to improve student achievement within Professional Learning Community teams. The pyramid consisted of tiered interventions increasing in the amount of support given to each struggling student.

During the 2008-2009 year, teams were organized by grade level, with new teams created for support staff and electives staff. This was based on feedback from the support

and electives staff that they thought the time would be better utilized working with partners who were in similar positions rather than with one grade level.

Purpose of the Study

The purpose of this study is to examine the effectiveness of the implementation of Professional Learning Communities, as defined by DuFour and DuFour (2006), in addressing the obstacles teachers encounter when they collaborate with one another which were identified previously as time factors, the isolated nature of the profession, and teachers' divergent points of view (Lujan, 2005).

Research Question

What was the effect of the implementation of Professional Learning Communities on roadblocks to collaboration among teachers? If roadblocks were addressed, did the collaborative culture change?

- How did the implementation of Professional Learning Communities allow/disallow for sufficient time for teachers to collaborate?
- How did the implementation of Professional Learning Communities impact the isolated nature of the profession?
- How did the implementation of Professional Learning Communities impact conflicts that occur when divergent points of view are present?

Significance of the Study

An understanding of the impact of this model on previous obstacles to collaboration may be of value to educators who are trying to establish collaborative communities within their schools. If the model were successful in addressing the obstacles, other schools could consider implementing it in their schools. Conversely, if the model were ineffective, other schools could potentially avoid issues that were identified by the participants in the study. In addition, the school studied under this

research project may be able to make changes to increase the effectiveness of its collaborative community.

There are numerous benefits to successfully creating a collaborative culture both professionally and personally (Appl, Troha, & Rowell, 2001). Jipson and Paley (2000) spoke highly of their collaborative relationship, saying,

We can mutually discuss and/or advance interests, needs, and issues that have individual and shared importance in our teaching, writing, and living. There is really nothing we cannot share or say, and this absence of boundaries between us creates a "shelter" or safe space within which we can encourage, support, and critique each other in the trying out of ideas, feelings, and actions (p. 37).

Calderón (1999) cautioned that "...if children from diverse backgrounds are to succeed in schools, teachers need to work together effectively and efficiently" (p. 94). In addition, Hollignsworth (2001), offered that "Through collaboration, teachers can expand their professional repertoires and provide more effective services for *all* students, including students with disabilities, students who are gifted, students with other special needs, and students without disabilities or special needs" (p. 6).

In addition to the personal and professional benefits collaborative communities bring to the individual educator, Professional Learning Communities can help with teacher retention (Grossman et al., 2001). An individualistic community spirit can lead to the loss of staff members in whom the school has invested significant time and effort (Williams, Prestage, & Bedward, 2001). Schools with a culture of collaboration can foster partnerships that counter isolation and enhance teacher practice (Williams et al., 2001).

Certainly, the benefits to an effective collaborative culture are evident.

Understanding whether the implementation of Professional Learning Communities were successful in addressing the roadblocks that impeded the formation of an effective

collaborative culture at Berkshire Elementary is necessary. This study may fill that need.

Studying the effectiveness of Professional Learning Communities through the eyes of the classroom teacher may make educators better prepared to navigate the rocky terrain of forming their own collaborative communities.

Definition of Terms

The following definitions are used for the purpose of this study:

Collaboration: "a style for direct interaction between at least two coequal parties voluntarily engaged in shared decision making as they work toward a common goal" (Friend & Cook, 2003, p. 5).

Collaborative Culture: A school "organized into collaborative teams of professionals who work interdependently to achieve common goals for which members are mutually accountable." Staff members do not work in isolation. Teams are "empowered to make decisions regarding curriculum, pacing, instruction, and assessment ... collaboratively and collectively." They "build shared knowledge ... before arriving at a decision" (DuFour, DuFour, & Eaker, 2008, p. 346).

Conflict: A clash between two or more individuals as a result of opposing ideas or interests.

Isolation: The condition of being alone.

Norms: Ground rules for team meetings to clarify how the members will work together as a team.

Professional Learning Community (PLC): a collaborative venture focused on student learning. Teachers on a PLC team discuss essential learning outcomes in curriculum, share best practices, give common assessments, and discuss the results of those assessments as a team. (Eaker, DuFour, & DuFour, 2002). The purpose of a PLC is to participate in an "ongoing process of collective inquiry and action research in order to achieve better results for the students they serve. PLC's operate under the assumption that

the key to improved learning for students is continuous, job-embedded learning for educators" (DuFour & DuFour, 2006, p. 3).

CHAPTER II

LITERATURE REVIEW

What is collaboration?

In addition to the work by Friend and Cook, several authors have written about collaboration. According to Nolet and Tindal (1994) "Collaboration occurs when two or more individuals work together to complete a project, create a product, or solve a problem. When people collaborate, they enter into a purposeful, goal-directed relationship with equitable contributions from all participants" (p. 1). Collaboration requires the establishment of shared ideas about teaching and learning. It allows educators to support one another and to combine their talents (Kruse, 1996). In collaborative schools, continuous improvement is possible because educators discuss teaching content and methods, they share ideas, plan together, and work to balance the curriculum vertically and horizontally (Wheelan, 2005).

What are the benefits of collaboration?

Shared Curriculum

There are numerous benefits to collaboration. One of the benefits is a shared curriculum. Teachers who work collaboratively share ideas and success stories based on a commonly agreed upon curriculum. Not only does that mean that all children within one grade level or team learn similar things, but also they are taught in ways that have proved successful in the past.

Development of Best Practices

In addition to a common curriculum another benefit to collaboration is the development of best practices. One of the major benefits for teachers to having collaborative relationships is the opportunity to learn content and improve practice (Nolet & Tindal, 1994). When teachers begin to see each other as partners, they can begin to learn from one another in positive ways to make sense of the teaching and learning problems that occur (Kruse, 1996). Peal (2007) contributed, "Through assessment and the sharing of student-assessment results, teams can focus on what worked for whom and what did not" (p. 2). Teachers who collaborate can improve their instructional practices by sharing experiences and knowledge with one another (Goddard, Goddard, & Tschannen-Moran, 2007). They can coach each other, share student work, compare practices, and swap lesson ideas (Akhavan, 2005). Each of these practices allows teachers to refine their teaching strategies to better meet the needs of their students.

Widened Experience Base

Goddard et. al (2007) spoke to the benefit of collaboration to forming a widened experience base, "Collaboration ... encourages teachers to move beyond reliance on their own memories and experiences with schooling and toward engagement with others around important questions of teaching and learning" (p. 892). Salyer, Thufault, and Curran (2002) added, "Through collaboration teachers can brainstorm ideas that take advantage of the resources available, incorporate the contextual world of the students, assess interpersonal strengths and weaknesses of students and faculty, and design an environment where the academic skills are developed" (p. 205). Together teachers are not

limited by what they can bring to the table individually, but rather are able to dig deeper, work more efficiently, and reflect on best practices.

Meeting Goals

Another benefit to collaboration is the increased ability for teachers to meet goals. Such goals include creating meaningful learning experiences, covering curricula, and addressing standards. When teachers collaborate across disciplines, they are able to create meaningful learning experiences for their students (McCoy, 2000). Working with others allows teachers to integrate curriculum so that they are able to teach more content, allowing teachers to make significant strides to both cover the curriculum and address state standards (Tosh, Troy, & Grieco, 2003). In addition to state goals, teachers who collaborate are able to meet school and team goals more effectively. In a study conducted by Frey and Pumpian (2006), collaborative relationships were shown to allow schools to better meet their goals and objectives.

Raising Student Achievement

One of the greatest benefits to collaboration is the increased ability of teachers to raise student achievement. In a study by Gruenert (2005), collaborative schools at the elementary, middle, and high school level were shown to have higher student achievement. Wheelan (2005) confirmed this finding showing that student achievement was increased in schools where faculty members work well together.

Reduce Isolation

Collaboration has many additional benefits. Teachers who collaborate are able to reduce isolation. Teachers develop a sense of community and experience less isolation from their peers when they work together in a team (Nolet & Tidal, 1994). Teamwork

speeds up and simplifies the process of curriculum development and change because all team members bring their own expertise and work together to create a final product. This not only takes less time, but ensures that the end product is based on sound ideas (Black & Blake, 2001). Collectively, teachers give each other support as they attempt to address the challenges associated with a contemporary student population (Kruse, 1996). This support allows them to take curricular and instructional risks (Smith, 1998). Working as a team can empower educators to feel comfortable with one another as they work to improve the school community (Tosh, et al., 2003). Teaching can be a very isolating profession since much of the school day is spent behind closed doors. Collaboration allows teachers an opportunity to work together, building off of each other's strengths, giving each other support to try new things, and helping each other meet goals.

Benefit to Pre-Service Teachers and Higher Education

Not only do teachers benefit from their own collaboration, but other members of collaborative projects benefit as well. Pre-service teachers and professors benefit when participating in collaboration between schools and the university. Pre-service teachers get a sense of what teaching looks like in action as well as how teachers work together in schools. Professors also benefit by being able to develop content that they can then share with their students (Markowitz & Crane, 1993).

Reflection

An additional benefit that collaboration brings is the process of reflection.

Reflection on current practice allows for teachers and administrators to be proactive with problems, as opposed to responding only when a problem becomes an issue (Kruse, 1996). Reflecting with other teachers adds vitality to teaching; it creates opportunities to

refine and extend one's thinking (Smith, 1998). Reflection allows teachers to consider how students will respond when developing materials, teaching strategies, and assessment instruments (Harvard & Hodkinson, 1994).

Diversity

Collaboration allows teachers diversify their teaching ideas. The process of collaboration brings together a varied group of people and enables educators to undertake projects that might be impossible for an individual to achieve. Pre-service teachers are even able to contribute to the group by bringing ideas that are new for current educators (Andrews & Smith, 1994). Creative solutions are possible (Muronaga & Harada, 2000), and the variety of skills, ideas, and strategies brought to the table allow for a degree of richness not possible through the efforts of a single person (McCoy, 2000). When working with others, each member of the group brings a unique skill-set to the table (Markowitz & Crane, 1993). Working alone does not have these same benefits. Achieve Shared Vision

Finally, collaboration is a means to achieve a shared vision within a school (Kruse, 1996). In an article by Burnham, Discher, and Ingle, (2003) the writers shared an example of a school where collaboration led to the unity of a staff in curriculum, expectations, and effort. They wrote, "We have many success stories that have affected positive change and development in our school" (p. 54). When teachers, parents, students, and administrators work together toward collective goals, there is shared responsibility for what happens in the school (Conzemius & O'Neill, 2001). Collaboration allows for teachers to work toward a common vision and achieve mutual goals.

What are the roadblocks to collaboration?

Nolet and Tindal (1994) pointed out a conundrum: "Given the apparent benefits of collaboration among teachers, it is surprising that it doesn't occur more regularly in schools, but, unfortunately, ongoing collaboration among teachers is still the exception rather than the norm" (p. 1). This sentiment is confirmed by other authors as well. Some teams of teachers collaborate and some never seem to be able to do so (Kruse, 1996). There are even educators who don't see the need for teamwork and collaboration. They question its effectiveness and consider it a fad in education (Wheelan, 2005).

Teachers' collaborative opportunities are likely to be hindered by a number of factors. Several studies indicated lack of time as a significant problem when attempting to form collaborative communities (Friend, 2000; Lam, Yip, & Lam, 2002; Leonard & Leonard, 1999; and Emihovich & Battaglia, 2000). Lam et al. (2002) uncovered information about the isolated nature of teaching and its effect on collaboration. Their sentiments are echoed by other researchers who found that trying to establish collaborative communities among teachers often causes conflict because of their independent interests and divergent points of view (Achinstein, 2002; Calderón, 1999; Grossman et al., 2001; Little, 2003). There are a number of other factors that appear in the literature; however, the discussion will be limited to these main three as identified for Berkshire Elementary School in 2005 (Lujan, 2005).

Time Factors

Lack of Time

A lack of meeting time is one of the most obvious roadblocks to collaborative cultures. The organization of schools does not lend itself to the opportunity to

collaborate. Teachers work in their own classrooms and spend a minimal amount of time per day outside of them. Almost all of the workday is taken up by supervising or teaching students with little time left over to collaborate with adults (Nolet & Tindal, 1994).

According to Emihovich and Battaglia (2000), "Educators indicate that few opportunities exist for disseminating and exchanging teacher-generated professional knowledge" (p. 233).

A universal lament exists among educators about lack of time to work together (Friend, 2000). Lam et al. (2002) found in both workshops and a questionnaire survey, that teachers reported time constraints and psychological pressure as the two most outstanding difficulties for their participation in collaboration. More specifically, the teachers involved in their study found it difficult to squeeze time out from their tight schedules to collaborate with others. In a study by Leonard and Leonard (1999), they report, "Teachers frequently discussed time constraints in the context of formal collaboration, stating that they felt inundated with meetings and associated responsibilities" (p. 240). These teachers felt as though they did not have time to foster collaborative relationships, although they recognized the importance of such relationships.

In most schools, a limited amount of time is available within the school day when teachers are not working directly with students. A 45-minute planning period is common at the elementary school level. Horsheed (2007) described the typical tasks in a 45-minute planning period,

[If] one considers that elementary teachers may spend a couple of minutes walking their classes to and from the special [art, music, P.E.] where students will go ... 45 minutes may be reduced to 35 – not enough time for substantive work.

And teachers need those time slots for tasks such as planning, copying, grading, and assembling materials for their next lesson (p. 44).

Although the availability of time is necessary for collaboration to be successful, professionals, given their many competing responsibilities, have a limited capacity to participate in these endeavors. Friend (2000) asked, "How much of this type of collaboration can a single teacher reasonably be expected to do" (p. 131 & 160)? It is easy to fill up a 45-minute planning period with the multitude of tasks that a teacher has to complete, leaving no time for collaboration with colleagues during the school day. *Necessity of Time for Collaboration*

Research indicates that time is necessary in order for a collaborative effort to be successful. In a project by Grossman et al. (2001), the authors' stated that time and resources are necessary for teacher collaboration to be successful. Friend echoes the sentiment, suggesting that collaboration is an approach to work tasks based on sophisticated knowledge and skills that requires an extraordinary amount of time and effort to sustain (2000). In addition, in developing collaborative cultures, it can take as long as one year before participants have even begun to fully understand the benefits (Walker, 1999).

Isolated Nature of Teaching

In addition to the roadblock of time constraints, the isolated nature of teaching has been cited as a roadblock to collaboration. Peal (2007) described the history of isolation among teachers,

Not long ago, phrases such as 'my classroom,' 'my school,' 'my students,' and 'my business' prevailed within educational institutions. From classroom teachers to school principals, issues of personal turf and ownership reigned commonplace in practice and in conversations, reflecting the adage: Once the bell rings, classroom doors close and each person does his or her own thing (p. 1).

It is no wonder why "teaching has been called 'the second most private activity" (Wheelan, 2005, p. 2).

Goddard, et al. (2007) wrote, "From the one-room schoolhouses that characterized schooling in the United States over a century ago to modern multi-room school buildings, teachers have traditionally taught students in isolation" (p. 878). Many teachers are accustomed to planning and teaching behind closed doors (Hollingsworth, 2001). Norms of privacy are maintained, in part, by the temporal organization of the school day, which limits teachers' interactions to fleeting encounters at lunchtime or to the rushed minutes before and after school (Grossman et al., 2001). When teachers do work together in the existing social structure of schools, "[They] return to their respective classrooms individually not collectively" (p. 975).

In schools, teachers are separated into classes, isolated and insulated from one another's work (Lam et al., 2002). Cookson (2005) recalled his first teaching job: "It really was like being dropped into the deep end of a swimming pool in order to learn how to swim" (p. 14). He describes most schools as being "organized in an egg crate manner, making professional collaborations difficult" (p. 14). Barth (2006) recorded a couple of salient quotes relating to the isolated nature of the profession. He quoted a teacher as saying, "Here, we all live in our separate caves." And a notice on the wall of a faculty lounge read, "We're all in this – alone" (p. 9). Even the architectural design of school buildings, with each teacher working in his or her own classroom, with little interaction among peers throughout the day promotes isolation.

Reasons for Isolation

Grossman et al. (2001) suggested additional reasons for the isolated nature of the teaching profession:

Few teachers entered the profession to work with other adults. When pressures develop from working with other adults in crowded and often financially strapped settings, retreating to the classroom provides a convenient safety valve. Given a setting in which teachers do not necessarily share common visions and pedagogical philosophies, it is far easier to mark papers alone than to negotiate with other adults who do not share your beliefs (p. 990-991).

Most teachers enter the profession because they want to work with children. Classrooms become a teacher's terrain where s/he is held accountable for the students in his/her room and at the end of the day, test scores reflect on that one teacher.

This 'go-it-alone' philosophy means that teachers are constantly reinventing the wheel. Emihovich and Battaglia (2000) reported, "A common lament from many principals is that veteran teachers are reluctant to share ideas about practice since the 'Lone Ranger' model still dominates the thinking of many teachers who were not prepared under the new teaching models" (p. 235). Barth (2006) contended that "school people carry around extraordinary insights about their practice – about discipline, parental involvement, staff development, child development, leadership, and curriculum," which he calls craft knowledge. He continued, "If one day we educators could only disclose our rich craft knowledge to one another, we could transform our schools overnight" (p. 9). In order to do this, however, schools need to be restructured so that teachers have opportunities to interact with one another.

One of the reasons that teaching is so isolated is because some teachers fear critique from their peers. In spite of the strong evidence that sharing is promising for teacher development, teachers generally do not welcome it (Lam et al., 2002). Barth

(2006) described the typical classroom, "with the door shut and a piece of artwork covering that little pane of glass. The cost of concealing what we do is isolation from colleagues who might cause us to examine and improve our practices" (p. 9). Gruenert (2005) explained, "Intuitively, collaboration makes sense, yet the traditional culture of education still holds to the value of autonomy and individualism" (p. 43). Lam et al. (2002) cautioned that although isolation may protect teachers from inspection and intrusion, "...it deprives teachers of the opportunities to learn from and with one another and to reflect on crucial aspects of teaching" (p. 182).

Necessity of Movement to Collegiality

In the spirit of collaboration, Lieberman, Saxl, and Miles (1988) indicated that a movement is underway from the norms of privatized and adversarial relationships to those standards that encourage collegiality and commitment. Schools are seeking ways in which to get teachers to collaborate with one another and break the isolation that persists among them.

Divergent Points of View

In attempting to move from isolation to collegiality, tensions between collective obligations and individual priorities, preferences, and intentions arise (Little, 2003).

Individual differences among team members can prevent collaboration from occurring (Smith, 1998). Although not all differences of opinion are negative, this particular review of the literature focuses on conflict as a roadblock to collaboration.

Often, the result of a failed teaming session is due to argumentative and stubborn attitudes of teachers (Pipho, 1997). If teachers are unwilling or unable to resolve

conflicts, collaboration cannot occur. Achinstein (2002), described the issues surrounding conflict and collaboration,

The term community often conjures images of a culture of consensus, shared values, and social cohesion. Yet, in practice, when teachers collaborate, they run headlong into enormous conflicts over professional beliefs and practices. In their optimism about caring and supportive communities, advocates often underplay the role of diversity, dissent, and disagreement in community life, leaving practitioners ill-prepared and conceptions of collaboration under explored (p. 421).

Inevitability of Divergent Views

Graham (2007) reported the inevitability of divergent views, "When educators are asked to make collaborative decisions, there are bound to be differences of opinion" (p. 5). Grossman, et al. (2001) described the composition of a typical school as teachers with a "dizzying mixture of philosophies, educational backgrounds, subject matter commitments, political and religious beliefs, and opinions about students and learning, as well as varying commitments to their own continued learning" (p. 991). There are countless opportunities for conflict to occur in this diverse setting.

Lack of Consensus

The difficulty lies when teachers cannot seem to come to a consensus based on these differing opinions. A teacher in a study by Leonard and Leonard (1999) "suggested that it was difficult to 'mix personalities'" (p. 240). Grossman et al., (2001) cautioned that disciplinary differences are sometimes cast as a personality clash ending in a "...deeper entrenchment and unwillingness by either group to step outside their perspective to understand the other" (p. 971). This stubbornness makes it difficult for teachers to find consensus or resolve conflict. When teachers in a school come with different philosophies it can be very difficult to find common ground, and the collaborative process itself can start off on a negative foot (Calderón, 1999).

What is conflict?

Achinstein defined conflict by saying,

Conflict can be understood as both a situation and an ongoing process in which views ... are perceived to be to some degree incompatible. That is, conflict can be an event whereby individuals or groups clash, in which divergent beliefs and actions are exposed (p. 425).

Conflict is something that arises in a number of studies on collaborative teams. The discussions held during a study by Grossman et al. (2001) jarred participants out of complacency and asked them to reconsider their beliefs. In the Washington teacher community studied by Achinstein (2002), conflicts were challenging and "...described as painful for teachers who perceive themselves as a tightly knit community of friends" (p. 431). Teachers debated how to address challenging students, student concerns, and adult responsibility for different approaches to teaching or interacting with students (Achinstein, 2002). Little (2003) summarized,

Substantively, these studies point to the difficulty that teachers encounter in achieving sustained and deep consideration of teaching problems and possibilities, even in conditions formally structured for that purpose, and to related difficulties in contending with difference and disagreement on matters of practice (p. 919-920).

Conflict Resolution Methods

When the school faculty reflects polarized philosophies, beliefs, or program preferences, the team can have difficulty forming a consensus on norms for interaction. Calderón (1999) stated, "When difficulties arise among the teams, the work is minimized or subverted; comfort and status quo become the implicit goal" (p. 95). In addition, teams who are highly competitive are less likely to be tolerant of divergent points of view and engage in negotiation practices (Leonard & Leonard, 1999, p. 240). The maintenance of teacher communities can pivot on the suppression of conflict. Grossman et al. (2001),

indicated that some groups may regulate their interactions with the "... understanding that it is 'against the rules' to challenge others or press too hard for clarification. This understanding paves the way for the 'illusion of consensus'" (p. 955). In some settings, avoiding conflict by agreeing to disagree, or voting for consensus, means that collaboration has not actually occurred; rather, teachers may just go back to their classrooms and do what they think is right regardless of the consensus or points raised by their peers.

Suppression of Conflict

Although schools have some formal mechanisms to address conflict, conflict is often suppressed in these arenas. Killion (2005) explained, there "is a lack of adequate processes for handling disagreements. Eventually, organizations are burdened with the weight of small problems that have escalated into large ones because issues went unresolved" (p. 54). Communities come to rapid consensus, suppress dissenting voices, and maintain a sense of unity while not actually coming to a shared decision that all parties are happy with. Achinstein, (2002) described a lunchtime conversation which demonstrated the Washington teacher community's stance toward conflict and consensus, which ended disagreement by getting rid of the dissenters:

Ellen: There are horror stories of our faculty at incredible odds.

Dan: It used to be that way.

Val: But people like each other here now.

Ellen: An approach has been implanted so we don't see the conflict.

[The principal] uses the term—consensus.

Dan: Yeah, we took those who disagreed and shot them. (Laughter)

Val: That's true. They are not here. If you are not going to conform, you are going to leave. The precedent has been set up that those unwilling to do that will not be here (p. 431).

At the end of the school year, a teacher with a dissenting opinion left the school. If teachers with differing opinions did not leave the school the conflicts were often "...revealed in private interviews or in brief moments in lunchrooms, and impromptu or informal faculty meetings. In this way, the public perception of unanimity among school-teachers was sustained" (Achinstein, 2002, p. 434). Unfortunately, unanimity is not the same as collaboration.

Walker (1999), explained the negative view on conflict among educators,

Conflict is an inevitable byproduct of collaboration. In most cases, we do not view conflict as an opportunity to solve problems and to create new structures. Instead, we try to convince ourselves that it will go away [and] hope that someone will rescue us ... Affective conflict, however, quickly erodes trust within the partnership (p. 303).

Isolation as a Response to Conflict

Not only does the movement from isolation cause conflict, but conflict can result in isolation because sometimes teachers withdraw or isolate themselves as a result of conflict. Dave, a teacher, wanted to leave the study by Grossman et al. (2001) early. "... He was worried that if he stayed he would become impatient with colleagues and say things he would later regret" (p. 957). Dave figured that the best course of action was to minimize contact by isolating himself from the collaborative group (Grossman et al., 2000). Isolation can be seen by teachers as a solution to avoiding conflict which they feel unprepared to handle. Nolet and Tindal (1994) explained, "Many teachers lack both specific skills associated with collaboration as well as a general sense of the purpose and benefits of collaboration" (p. 2). In undergraduate teacher education programs, there is little emphasis on the teaching of team membership and leadership skills, leaving

teachers in a position where they do not have the skills to collaborate with their peers (Wheelan, 2005).

Conflict as a Barrier to Forming a Collaborative Culture

In addition to a lack of skills in resolving conflicts, the number of conflicts that occur can be a deterrent to forming a collaborative community. Achinstein (2002) reported that many teachers involved in collaborative reform become "... frustrated with repeated conflicts, with not getting to solve the problems. Stress, burnout, and teacher turnover may [be] high prices to pay for such an openness to conflict" (p. 449).

While diversity and conflict can be positive in a collaborative culture, they can also be impediments. Teachers who are unwilling or unable to resolve conflicts with their peers can make it difficult, if not impossible, to collaborate. In order for collaboration to occur, teams need to learn how to work through conflicts and come to shared consensus. Furthermore, once those decisions are made, teachers need to execute the shared decisions in their classrooms once the doors have been closed.

What is necessary in order for collaboration to occur?

Shared Goals

There are a multitude of suggestions as to how to go about forming a collaborative culture within a school in spite of the obstacles presented. The first is to have a plan; it keeps the group focused on their shared goals. The goals themselves should be reasonable if a goal cannot possibly be attained, it will be a challenge to rise to the occasion (Akhavan, 2005). For example, the goal can be subject specific, instead of focusing on the entire school-wide curriculum, by focusing on a single subject such as math (Tosh, et al., 2003). In addition everyone in the team needs to understand the

benefits for each member; this provides stakeholders with a tangible reason for putting forth the effort. Once the plan is established, that includes the goals, roles of each stakeholder, and the tasks they will be responsible for, collaboration can begin (Markowitz & Crane, 1993).

Administrative Support

In order for collaboration to be successful, there must be support from the administration in terms of supplying resources, providing planning time, and providing recognition (Markowitz & Crane, 1993). Administrative support can be pivotal as it has the ability to provide the structure and assistance to facilitate the building of a collaborative culture (Muronaga & Harada, 1999). Administrators can also influence the structure of the collaborative culture. In an interview with Richard DuFour, Principal Becky Burnette described the structure in her school:

I facilitated each team in establishing operational norms or protocols that would guide their work. I also helped each team identify their specific student achievement goals. We worked together as a staff to ensure that each team's goals were connected to and would advance our school-wide goals in student achievement. Finally, I created weekly feedback sheets so teams could keep me informed of their activities and give me timely notice of any problems they were encountering. I respond in writing to each team's feedback sheet each week (DuFour, 2001, paragraph 8).

Shared Participation

All members of the faculty and staff must be included and each person's contribution equally valued (Kruse, 1996). Shared participation is necessary as well; pooling the available resources can lead to the accomplishment of shared goals (Muronaga & Harada). Members of the team must be committed, even when frustrations present themselves (Markowitz & Crane, 1993). "A collaborative approach to conflict requires discussion in which both parties commit to engaging in genuine dialogue to

understand and appreciate the perspectives of others" (Killion, 2005, p. 54). In addition to full participation and commitment, professionalism is also a must. With diverse ideas about teaching and learning, team members must be able to trust and respect one another.

Professional Learning Communities: A Model for Collaboration

Professional Learning Communities as defined by DuFour and Eaker include all of the elements above that are considered necessary in order for collaboration to occur. DuFour and Eaker (1998) wrote, "Educators create an environment that fosters mutual cooperation, emotional support, and personal growth as they work together to achieve what they cannot accomplish alone" (p. xii). Here they touched on the necessary elements: having a shared goal, benefits for all members, a structure that fosters collaboration, and a commitment from all members.

Professional Learning Communities start with shared mission, vision, values, and goals. Eaker, et al., (2002) described a metaphor representing each of these four elements as legs of a stool, each holding equal importance. Without one the stool would lose its support. These four elements are what separate a grade level team from a Professional Learning Community. DuFour and Eaker (1998) indicated, "Collective commitments to guiding principles that articulate what the people in the school believe and what they seek to create" is the fundamental base of a Professional Learning Community (p. 25).

Shared Mission

Mission statements articulate the purpose of the organization. A mission statement for a school that operates as a Professional Learning Community should answer two questions: what kids are expected to learn and how teachers will respond when kids do not learn. (DuFour & Eaker, 1998). The primary goal of Professional Learning

Communities should be that all teachers are working together to ensure that learning is taking place for all students; not just that students are taught but that they learn (DuFour, 2004).

Shared Vision

Vision is defined as what a school might become in the future if its members stick to their shared mission. Vision is a target that motivates the school "to work together to make it a reality" (DuFour & Eaker, 1998, p. 62). A shared vision answers the question: What do we hope to become? A good starting place is to have teachers envision where they would like the school to be in five years. In order for a vision to be shared, it must be created with all the members of the Professional Learning Community. This is not something that will take place easily but is essential to the functioning of the PLC. DuFour and Eaker (1998) explained, "Building a shared vision is the ongoing, neverending, daily challenge confronting all those who hope to transform their schools into learning communities" (p. 65). A shared vision can have many benefits; it motivates and energizes people, creates a proactive rather than problem-driven orientation, gives direction to people within the organization, establishes specific standards of excellence, and creates a clear agenda for action (DuFour & Eaker, 1998).

Shared Values and Goals

The final building blocks of a learning community are values and goals. Utilizing the shared vision, a list of values is created by thinking about how educators must behave in order to make the shared vision a reality. DuFour and Eaker recommend limiting this list of values to no more than 10. Values are the things that educators commit to doing in order to achieve their shared vision. They should be linked directly to the vision

statement, be direct, focus on behaviors and on what the group who is writing them can do, not what other groups can do. Goals tell what steps are going to be taken and when. They "serve as landmarks in an improvement process" (DuFour & Eaker, 1998, p. 100). They break up the journey and provide opportunities to renew enthusiasm toward continued change by providing opportunities to demonstrate progress toward the vision established in the first place.

Continuous Improvement

In addition to shared mission, vision, and values, members of a Professional Learning Community must also be continuously trying to improve practice. In order to do that, teachers must question what they are doing in their classrooms, try new things, test their effectiveness, and reflect on whether or not the new methods work. Not only must they be inquisitive, but they must work together in order to work through this process. This means public reflection, shared meaning, joint planning, and coordinated action. Members of a Professional Learning Community must talk to each other about their beliefs about education. They must work together to achieve common ground. They must develop an action plan to test their shared assumptions, and all members must carry the plan out (DuFour & Eaker, 1998).

Effective Communication

Professional Learning Communities also must have effective communication.

They must articulate their plans related to the shared vision, values, and goals of the community. They must monitor or assess to determine if they are achieving the goals they set out to accomplish. They must ask questions that probe the effectiveness of their efforts. They must model the kind of change they seek. They must allocate time toward

the achievement of their goals. If a team is not spending time on the goals, then that communicates that the goals are not important to the team. They must celebrate their accomplishments, because that which is celebrated is valued. They must be willing to engage in discussions where conflict arises and must be able to come to a shared consensus. Finally, members of a Professional Learning Community must communicate in such a way that every member of their team understands what they are trying to say (DuFour & Eaker, 1998).

Prerequisites

In order to be effective, Professional Learning Communities must have met four prerequisites as defined by DuFour and Eaker (1998). The first deals with time. DuFour and Eaker wrote, "Time for collaboration must be built into the school day and year" (p. 121). This means that the school day must be structured such that teachers are provided with a "regularly scheduled time for collegial work and planning" (DuFour & Eaker, 1998, p. 123). Second, "the purpose of collaboration must be made explicit" (DuFour & Eaker, 1998, p. 123). Teams must be given a specific purpose or task to accomplish over a set period of time. This gives teachers a sense of direction. Third, teachers and staff members need training and support on how to collaborate effectively. Meetings must be focused on instruction, curriculum, assessment, and strategies for improvement. In order to do this, teams must establish norms by which they will operate, goals that they wish to accomplish, ways to assess the effectiveness of their team, and a process by which to resolve conflicts that occur. Teams must be asked to reflect on the functioning of their team. Finally, educators must accept their responsibility to act as professionals and

colleagues. If all other obstacles are taken care of, a member of the team who is not committed to collaborating will make it difficult to make positive changes.

School Culture

School culture is the shared purpose and guiding principles on which a school runs. School culture also can be considered the personality of the school, the unwritten rules that the group follows, and the way members of the school do things (Gruenert, 2008). Some schools foster collaboration, others isolation. Some schools promote self-efficacy, others fatalism. Some schools are student-centered, while others are teacher-centered. Some schools "regard teaching as a craft that can be developed," others regard teaching "as an innate art" (DuFour, et al., 2008, p. 90). Some schools assign responsibility for learning to teachers, while others assign that responsibility to students. Some schools view faculty members as colleagues, while others view them as adversaries. Some schools encourage continuous improvement, while others fight to preserve the status-quo (DuFour, et al., 2008).

In successful schools, the culture is founded on strong leaders, democratic principles, accountability, relationships and caring, passion for learning, meaningful learning, high expectations, authentic learning and assessment, empowerment, and commitment (Wilson, 2008). In DuFour and Eaker's (1998) explanation of Professional Learning Communities, they talked about the development of shared mission, vision, values, and goals which make up the culture of the school.

Impact of School Culture on PLC Success

In the previous sections on the requirements for an effective Professional

Learning Community and for successful collaboration, there are multiple references

about the culture of the school. According to Habegger (2008), "school culture is at the heart of improvement and growth in any building" (p. 42). In order for collaboration to occur and initiatives like Professional Learning Communities to be successful, the school must have a culture where learning is promoted, students and teachers are engaged, teachers are empowered with confidence and feel valued, and parents and community members are included (Habegger, 2008).

In an article by Eaker and Keating (2008), the authors spoke directly about the impact of a positive school culture on the implementation of Professional Learning Communities. In order for schools to function as Professional Learning Communities, PLC practices must "become embedded into day-to-day school culture" (p. 14).

Structural changes are only part of what it takes to make a Professional Learning Community successful. Changes needed to take place "in the assumptions, beliefs, expectations, and habits that constitute the norm for those working in [the Professional Learning Community]" (p. 15). Changes included a shift from teaching to learning, from working alone to working together, and from intentions to results. DuFour and Eaker's discussion of a collaborative process to develop a shared mission, vision, values, and goals is central to the challenge of changing school culture (DuFour & Eaker, 1998). In addition to the four fundamental elements, Eaker, et al., (2002) also stress the importance of a school culture that emphasizes collaboration, learning, leadership, focused school improvement plans, celebration, and persistence.

A final note on shifting school culture by becoming a Professional Learning Community comes from DuFour, et al., (2008). In their work, they have come across educators who claim that they "do PLCs on Thursday mornings" (p. 21). This is an

example of a school that has not made the culture shift to Professional Learning Communities. PLCs are not something that you "do" one day a week during your meeting time. It is something that is embedded. The faculty subjects "…every practice, program, policy, and procedure to ongoing review and constant evaluation" (p. 21). They don't "do PLC" they "are a PLC" (p. 21).

Summary

Although time and resources are necessary for teacher collaboration to be successful, one of the chief complaints of teachers is that there is insufficient time to work together (Grossman et. al, 2000; Friend, 2000). Specifically, teachers indicated that meetings and other responsibilities of their positions left them with little time to collaborate (Leonard & Leonard, 1999). The traditional education setting requires teachers to work behind closed doors, and even if collaborative efforts are attempted, those teachers return to their classrooms independently (Hollingsworth, 2001; Grossman et al., 2001). Lam et al. (2002) go so far as to say that there are few teachers who entered the profession to collaborate with others. When teachers do attempt to collaborate with one another, conflicts arise based on different approaches to teaching, different values, and different personalities (Achinstein, 2002; Appl et al., 2001; and Grossman et al., 2001). Time factors, the isolated nature of teaching, and divergent points of view hinder teachers' abilities to form collaborative communities.

If established correctly, Professional Learning Communities should be able to address these roadblocks to collaboration. Shared planning time for the purpose of conducting Professional Learning Community meetings would be established in order to allow for teachers to meet together to accomplish shared goals. Horsheed (2007) suggests

that school leaders use specials time, consider recess, review funding sources, and think about student grouping in order to provide sufficient time for teachers to collaborate. Peal (2007) reflected that,

The onset of professional learning community (PLC) philosophies brought about a subtle change among educators, with their language shifting toward a greater sense of collective ownership. As a result, principals have begun to talk about 'our school' and teachers have started to refer to 'our curriculum' and 'our students.' In a field where personal domain has reigned, this sense of shared responsibility is a welcomed shift, with students reaping the rewards" (p. 1).

Thus there is a shift from the isolated nature of the profession toward a shared vision and work toward shared goals in teams.

Finally, in Professional Learning Communities, Graham (2007) explained that "teachers have to work through contention. In fact, research suggests that it is the way in which the teacher teams deal with conflict that ultimately determines the extent to which a school can become a true professional learning community" (p. 5).

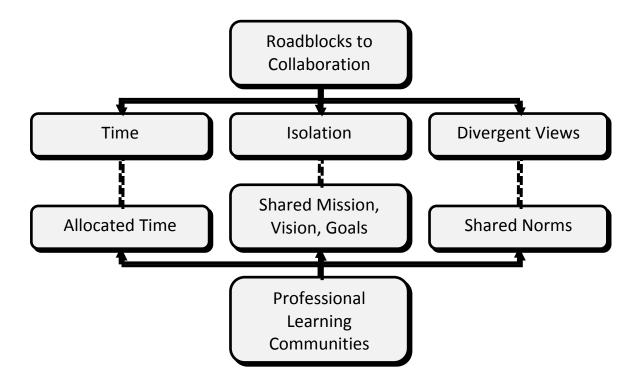


Figure 1. Roadblocks to Collaboration and the Impact of Professional Learning Communities at Berkshire Elementary

Conceptual Framework

Figure 1 represents the conceptual framework used to guide this study. It illustrates the roadblocks identified by Berkshire Elementary School in 2005 to collaboration among teachers: time, the isolated nature of the profession of teaching, and divergent points of view. Connected to each of the roadblocks is the element of Professional Learning Communities that hypothetically addresses the roadblock and would allow for collaboration among teachers (Lujan, 2005).

In terms of allocated time to address the roadblock of time, DuFour and Eaker (1998) confirm that time must be built into the school day and school year specifically for

collaboration. This time must be regularly scheduled will allow enough time for collegial work and planning among teachers.

In terms of a shared mission, vision, and goals to address the roadblock of isolation among teachers, DuFour and Eaker (1998) indicated that the basis of a Professional Learning Community is a "...collective commitment to guiding principles that articulate what the people in the school believe and what they seek to create" (p. 25). The move from an isolated nature of the profession occurs when teachers begin to refer to our curriculum and our students instead of my curriculum and my students.

Regarding shared norms which address the roadblock of divergent views among teachers, DuFour and Eaker (1998) indicated that teams must establish norms by which they will operate, goals that they wish to accomplish, ways to assess the effectiveness of their team, and a process by which to resolve conflicts that occur. In addition, teachers must be willing to engage in discussions where conflict arises and must be able to come to a shared consensus. In order to do this effectively, teachers need training and support on how to collaborate effectively and must accept their responsibility to act as professionals and colleagues.

The conceptual framework served as a foundation for this study. Questions were designed with the three roadblocks in mind. Utilizing the elements of the conceptual framework allows the researcher to investigate whether or not the implementation of Professional Learning Communities has addressed the roadblocks to collaboration at Berkshire Elementary.

CHAPTER III

METHODOLOGY

The purpose of this qualitative study was to examine the effectiveness of the implementation of Professional Learning Communities, as defined by DuFour (2006), in addressing the obstacles teachers encountered when they collaborated with one another. Qualitative methods were chosen because they allow for a level of depth and detail allowing participants to speak their own words that cannot be achieved with quantitative methods. In addition, qualitative methods allow responses to open up new emergent topics not initially considered and can reveal complexity in a way that quantitative data cannot. In a 2005 study at Berkshire Elementary, teachers identified that their collaborative opportunities were hindered by time factors, the isolated nature of the profession, and teachers' divergent points of view (Lujan). The conceptual framework (see Figure 1) served as a foundation for the survey questions and interviews designed around the specific research questions relating to this study.

Research Question

What is the effect of the implementation of Professional Learning Communities on roadblocks to collaboration among teachers? If roadblocks are addressed, does the collaborative culture change?

• How does the implementation of Professional Learning Communities allow/disallow for sufficient time for teachers to collaborate?

- How does the implementation of Professional Learning Communities impact the isolated nature of the profession?
- How does the implementation of Professional Learning Communities impact conflicts that occur when divergent points of view are present?

Pilot Testing

A pilot test was conducted in spring 2008. The purpose of the pilot test was to conduct a preliminary test of data collection tools and procedures to identify and eliminate problems allowing the researcher to make corrective changes or adjustments before actually collecting data from the target population.

Pilot Test Participants

At the time of the pilot study, there were 21 Berkshire Elementary classroom teachers at the kindergarten through fifth grade level – three at each of grades 1, 3, and 5, four at each of grades K, 2, and 4. Of the 21 classroom teachers, 19 agreed to participate in the pilot study. One declined participation without giving a reason; the other was unreachable as s/he was on medical leave.

Pilot Study Materials

Two surveys were used as a part of the pilot study. The purpose of the first was to determine the background of the staff at Berkshire Elementary School (Appendix A) and was given at the same time as the consent forms. Only 10 participants received the second survey which consisted of 10 open-ended questions on the topic of Professional Learning Communities including opportunities for teachers to write about both the positive and negative experiences they have had with Professional Learning Communities (Appendix B). Open-ended questions were chosen because they allow participants to include more information, including feelings, attitudes and understanding of the subject than closed-ended questions do. Using a survey allowed the researcher to describe the

characteristics of a large population. Participants were chosen based on a sample from each grade level. One teacher was selected randomly from each grade level that had three teachers and two teachers were selected randomly from each grade level that had four teachers. This was done to get a sample of responses from all grade levels. Because the purpose of the pilot study was to assess the effectiveness of the questions in addressing the research questions, all the teachers did not need to be included. Samples of each survey are included in the appendices.

Pilot Test Procedures

All of the classroom teachers received a letter briefly describing the pilot study and requesting their consent to participate. Upon consent, they received a short survey requesting demographic information including gender, ethnicity, the highest educational level attained, years of experience and whether or not they were Nationally Board Certified (Appendix A). The ten teachers selected at random representing one to two teachers per grade level were given the second survey to complete (Appendix B).

Pilot Test Timeline

Spring 2008

- 1. February 2008 Study Overview, Consent Forms, and Demographics Survey Distributed
- 2. March 2008 Surveys Distributed
- 3. April 2008 Surveys Collected
- 4. April 2008 Analysis of Pilot Test Data

Analysis of Pilot Test Data

After all 10 surveys were handed in (a 100% return rate for those who consented to participate), the answers from each question were organized into a table. Exact quotes were included so as to preserve the thoughts of the participants. Based on the data collected, the survey instrument was edited to more specifically target the purpose of the

study. Questions that produced ambiguous answers were clarified, and additional questions were added to provide more specific information related to the purpose of the study.

In the responses to the first question regarding the participants' definition of Professional Learning Communities, one of the participants described what s/he thought the term Professional Learning Community should mean as opposed to what it actually does mean. That question was modified to more clearly ask for a definition of the concept for someone who does not understand as opposed to simply asking for a definition. When looking at the responses related to time, the researcher noted a lack of discussion relating to the frequency of meetings and duration of meeting time. To correct for this, questions were added that specifically address how often and how long teams meet. In addition, the pilot survey did not address the difference in meeting times and duration from the period before Professional Learning Communities were established. A question requesting a comparison with meeting times and duration between the present and prior to the implementation of Professional Learning Communities was added to address this issue.

The topic of norms (i.e., ground rules for team meetings to clarify how the members will work together as a team) was addressed in the pilot study survey, but not in regard to their effectiveness. If a team were not following the norms, this did not come out in the survey responses during the pilot. A question regarding norm effectiveness was therefore added to the survey. Responses relating to conflict were limited. The question in the survey didn't ask participants to identify if conflicts occur in their teams or to discuss their team's response to those conflicts. A question was added to find out if conflicts occur and how the norms established by the participant's team addressed the

conflict. Finally, the question related to roadblocks in implementation of Professional Learning Communities was changed to be less negative, allowing participants to indicate why they think their team did not encounter roadblocks if they couldn't think of any.

Dissertation Study Participants

The dissertation study also took place at Berkshire Elementary School. The dissertation study focused on certified staff members, including classroom teachers, electives teachers, exceptional children teachers, and support staff.

It is important to note that the site chosen for this research was significant because this was a follow-up on research conducted at the same site in 2005. If this research were conducted at another school, those teachers might not indicate the same roadblocks to collaboration that were identified by these teachers in 2005 (Lujan, 2005). Of the 21 classroom teachers included in this study, 10 served as classroom teachers at Berkshire Elementary in 2005. In addition to close to half of the classroom teachers remaining the same from one study to the next, the principal in 2005 was still the principal in 2009. Berkshire Elementary provided the same environment and many of the same people, with the most relevant change being the implementation of Professional Learning Communities and therefore was the best choice for this follow-up study. Another school might, for example, overwhelmingly point to a lack of administrative support as the reason for a lack of collaboration among teachers. The research questions might not be suitable at a different site because the questions were tailored and designed as a follow-up to the research conducted in 2005 at Berkshire Elementary (Lujan, 2005).

Although there was a focus on the three roadblocks as identified in the 2005 study at Berkshire Elementary (Lujan, 2005), questions used in surveys and interviews were not

limited to these three roadblocks, and the analysis of data allowed for other themes to emerge. There could have been other barriers to collaboration that were operating at the school and the analysis allowed for those to emerge if they were present.

The following offers a summary based on information from the demographics survey. It is provided not because the summary explains the resulting collaborative culture at Berkshire Elementary, but rather to describe the makeup of the staff. During the analysis stage of research, data were looked at along the demographic markers to see if any interesting findings were present, but it was not the hypothesis of this research that there would be a difference in how a person with 5 years of experience versus a person with 19 years of experience might answer the questions posed in this study based on their years of experience, for example.

Out of the 45 certified employees, 37 were asked to participate in the study. Those who were excluded included the administrative staff, any additional certified employees who did not serve on a school-based Professional Learning Community team, and the researcher. Of the 37 certified employees who were asked to participate, 97% – or 36 certified employees – agreed. One declined without giving a reason. All 36 participants completed the survey. Out of the 36 participants, 15 declined compensation (42%). As shown in Table 1, the gender of the participants in 2005 included 1 white male, 17 white females, and 4 black females. In 2009, it included 2 white males and 1 Native American male (1 white male was a classroom teacher) and 30 white females and five black females (17 white females and 3 black females were classroom teachers). Of the 22 participants in 2005, there were 15 who held a four-year degree and 7 who held a master's degree. Of the 36 participants in 2009, there were 19 who held a four-year

degree (16 of whom were classroom teachers), 16 who held a master's degree (5 of whom were classroom teachers), and one who held a Certificate of Advanced Studies (who was not a classroom teacher), as shown in Table 2. A Certificate of Advanced Studies is a post-master's program and is sometimes referred to as a sixth year degree. All of the certified employees held a certificate or license in their area in 2005 and 2009. In 2005, seven of the participants had less than five years of experience, 7 had five to nine years, 5 had 10 to 14 years, 1 had 15 to 19 years, and 2 had 20 or more years. In 2009, four of the participants had less than five years of experience (3 or whom were classroom teachers), 10 had five to nine years (6 of whom were classroom teachers), 8 had 10 to 14 years (4 of whom were classroom teachers), 7 had 15 to 19 years (6 of whom were classroom teachers) (see Table 3). As shown in Table 3, in 2005 there were five participants who were Nationally Board Certified and in 2009 there were seven (five of whom were classroom teachers).

Table 1
Demographics of Participants at Berkshire Elementary School

Demographics										
	Male			Female						
	W	В	NA	W	В	NA				
2005 Classroom Teachers	1	0	0	17	4	0				
2009 Certified Staff (Classroom Teachers)	2 (1)	0 (0)	1 (0)	30 (17)	5 (3)	0 (0)				

Table 2 Educational Attainment of Participants at Berkshire Elementary School

Educational Attainment							
	BA/BS	Masters	Certificate of Adv. Studies				
2005 Classroom Teachers	15	7	0				
2009 Certified Staff (Classroom Teachers)	19(16)	16(5)	1(0)				

Table 3
Years of Experience in Education of Classroom Teachers at Berkshire Elementary School

Years of Experience in Education & Nationally Board Certified Teachers										
	0-4 Years	5-9 Years	10-14 Years	15-19 Years	20+ Years	NBC				
2005 Classroom Teachers	7	7	5	1	2	5				
2009 Certified Staff (Classroom Teachers)	4(3)	10(6)	8(4)	7(6)	7(2)	7(5)				

The High Five Regional Partnership for High School Excellence, a partnership between five corporate sponsors and five school districts committed to improve public schools, conducted a quantitative study on Professional Learning Communities in the five school districts that make up their partnership. Area 7 of the survey dealt with demographics (the entire survey can be seen in appendix J). Figures 2 and 3 summarize only the responses from the classroom teachers at Berkshire Elementary, to the following statement: My hours of formal professional development that focused on PLC implementation (since September 2005). Figure 2 includes the total number of hours of

High Five Professional Development: none (33%, or 7), 1-4 hours (19%, or 4), 5-8 hours (5%, or 1), 9-12 hours (24%, or 5), and over 16 hours (19%, or 4). Figure 3 includes the total number of hours of School District Professional Development: none (10%, or 2), 1-4 hours (14%, or 3), 5-8 hours (29%, or 6), 9-12 hours (29%, or 6), 13-16 hours (10%, or 2), and over 16 hours (10%, or 2).

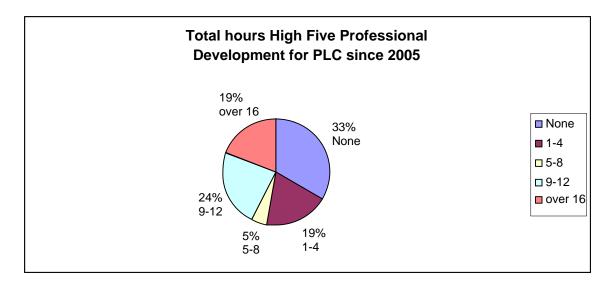


Figure 2 Hours of High Five Professional Development in PLCs Since 2005

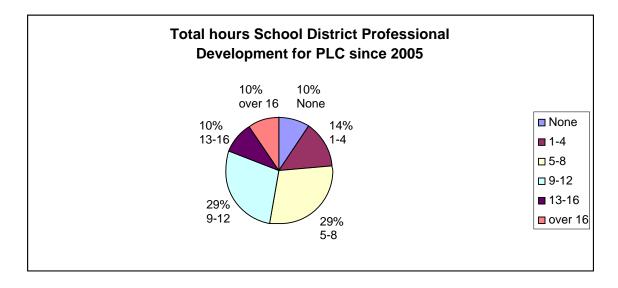


Figure 3 Hours of School District Professional Development in PLCs Since 2005

Eight participants, who made up two of the grade level Professional Learning Teams at Berkshire Elementary (referred to as Alpha Team and Beta Team), were asked to participate in interviews and observations. Interviews were chosen as a method because they allow researchers to learn about things that cannot be directly observed; they allow participants to reveal their perspective on their behaviors; they allow for expanded answers because the interviewer can probe for more details or change the line of questioning in a direction not predetermined. The method of observation was chosen because it allowed the researcher to understand the context behind the survey and interview data. Observation allowed the researcher to describe the collaborative culture firsthand and the extent of collaborative efforts of two PLC teams. The two teams were selected based on scheduling. Since the researcher needed to be able to attend three months of meetings, the researcher selected teams that met based on shared availability. All eight members of the Alpha and Beta teams agreed to participate in interviews and observations. They all completed their interviews, and the researcher was able to observe three months of meetings with both teams. In the Alpha Team one meeting was cancelled during the three-month period because of a snow day.

The Alpha Team consisted of three classroom teachers and a support staff member. One classroom teacher on the Alpha Team had six years of teaching experience, and this was the participant's fifth year in this grade level and at Berkshire Elementary. The second classroom teacher had 10 years of teaching experience, and this was the participant's eighth year at Berkshire Elementary and sixth year teaching this grade level. The participant's experience is in three districts within the state. The third classroom

teacher had 28 years of teaching experience, and this was the participant's first year at Berkshire and the participant's 21st year teaching this grade level. The participant's experience is in four schools within the district. The support staff member had 10 years of teaching experience, and this was the participant's eighth year at Berkshire Elementary and seventh year as a support staff teacher. The participant's experience is in two districts within the state. All members of the team had participated in the district-sponsored one-day training on Professional Learning Communities. Three members of the team participated in the half-day training at Berkshire, and the other participated in four hours of PLC training over the course of a school year at the participant's previous school. Two members of the team participated in the two-day summer development of the pyramid of interventions at Berkshire.

The Beta Team consisted of three classroom teachers, the same support staff member who served on the Alpha Team, and an exceptional children's teacher. One classroom teacher had five years of teaching experience, and this was the participant's second year at Berkshire Elementary and second year teaching this grade level. The participant's experience was in three schools in the district – two middle schools prior to working at Berkshire and an elementary school out of state. S/he attended the district-sponsored one-day training on Professional Learning Communities, the half-day training at Berkshire, and the two-day summer development of the pyramid of interventions at Berkshire. The second classroom teacher had nine years of teaching experience, and this was the participant's first year as a classroom teacher at Berkshire Elementary and third year teaching this grade level. S/he also served as a permanent substitute at Berkshire Elementary for five years prior to reentering the classroom. The participant's experience

was in two schools within the district. S/he attended the half-day training at Berkshire, and the two-day summer development of the pyramid of interventions at Berkshire. The third classroom teacher had three and a half years of full-time public school teaching experience and six months of part-time private school teaching experience, and this was the participant's first year at Berkshire Elementary and first year teaching this grade level. The participant's experience is in three schools in two states. The participant attended an afternoon professional development on Professional Learning Communities at the participant's last school.

Teacher as Researcher

It is important to be clear that the researcher also operated as a teacher within the school being studied. She began working at Berkshire Elementary School in 2002 as a classroom teacher. She worked as a classroom teacher for two years and then assumed the role of Spanish teacher working with all students in grades kindergarten through fifth. She was not involved in leading any staff development at the school in the area of Professional Learning Communities. She has served on two grade level teams and currently serves on a Professional Learning Community team with other electives teachers in the school: the Physical Education teacher, the Music teacher, the Art teacher, and the Media Coordinator.

Additionally, she has helped to organize several social events and activities. She is a member of the Hospitality Committee that plans social events for the staff and has led events such as the annual Boo Buddy exchange (a secret buddy program conducted during the month of October) and the yearly Afternoon Tea. For the past five years, she

has also served on a committee to plan the annual Absolutely Incredible Kids Day program. This program recognizes two teachers on staff and the entire student body.

Throughout her tenure at Berkshire Elementary, she has had the opportunity to develop relationships with the teachers with whom she works. She has had the opportunity to provide support to colleagues as they have worked on their own further education by sitting in on presentations and offering feedback. She has gone to weddings, hosted and attended baby showers, made scrapbooks for going-away parties, and has attended retirement festivities. She has participated in cookie exchanges and women's dinners. She's gone to game nights, movies, and hosted colleagues at her house for crafting and parties. She has had the opportunity over the past seven years to offer her assistance with planning, translating, interpreting, and other tasks. She has also had experience working with this staff in the past while conducting research for her master's thesis and during the pilot study of this research.

It is because of this relationship that the researcher believed participants would be more forthcoming during the data collection process. In addition, this study asked questions about school culture and climate which were included to provide the teachers and staff with an opportunity to illustrate the relationships between teachers first hand. It is the belief of the researcher that given this opportunity, teachers will echo the sentiment of the researcher that teachers at Berkshire support and feel connected to one another. Five of the survey questions dealt directly with school culture. She thought teachers and staff members, many of whom have developed a relationship with her in the past seven years, might be more willing to share details than if she had asked the same questions of a group of teachers with whom she had no experience. In interviews, she had the

opportunity to ask questions that someone who did not have the history with the interviewees might not have known to ask.

This presumption that insider research is likely to be positive does not go without a research basis. Coghlan (2007) wrote an article regarding executives who do research in their own organization for doctorates. The main benefit to insider research that he mentions is the fact that insider researchers are already immersed in the organization and have built up knowledge of the organization from being a member during the processes being studied. He calls this "preunderstanding," which includes jargon, what topics are safe to discuss, how the informal organization is structured, and that they can "draw on their own experience in asking questions" and are able to observe "without others necessarily being aware of their presence" (p. 296). At the same time, "insiders can assume too much and not probe as much as if they were outsiders" (p 297). He suggests that insider researchers reflect often on their experiences "in order to expose underlying assumptions" (p. 297).

To address issues of bias, the researcher wrote a positionality memo in which she periodically included her reactions to the data and how she thought her role in the school might be affecting her analysis. This may have helped to eliminate some of the bias that might have occurred if this reflection had not taken place throughout the research. In addition to the positionality memo, she did not conduct in-depth observations and interviews within her own Professional Learning Community team. They had the opportunity to participate in the survey, but for interviews and observations she worked with other teams.

Throughout the process of developing the research study, it was not the position of the researcher that PLCs were necessarily the ultimate solution to a lack of collaboration among teachers. The question in 2005, remained the focal point in 2009, why aren't teachers collaborating? Why does something that seems so obvious not take place when three or more teachers are together? If the roadblocks which teachers claimed were the reasons for a lack of collaboration in 2005 were addressed, would teachers collaborate or would new reasons emerge?

Dissertation Study Materials

For the dissertation study, two surveys were used again. The background survey was repeated as the demographics and the educational level of some of the educators had changed; however, it was made part of the consent form to reduce the number of forms (Appendix I). The second survey included 20 open-ended questions on the topic of Professional Learning Communities, including opportunities for teachers to write about both the positive and negative experiences they have had with Professional Learning Communities (Appendix C). Question 10 was omitted from analysis due to an apparent misinterpretation of the question by the majority of respondents.

Quantitative survey data from a Professional Learning Community survey conducted by the High Five Regional Partnership for High School Excellence also were utilized. The researcher was provided with the data collected from the classroom teachers at Berkshire Elementary School who participated in the survey. The survey was distributed electronically via e-mail on December 3, 2008. Participants had until December 15, 2008, to complete the survey. Of the 22 classroom teachers who work at Berkshire, 95%, or 21 classroom teachers completed the survey.

The following information on reliability and validity of the High Five Regional Partnership for High School Excellence PLC Study was provided by Vann Langston, Executive Director of High Five:

The High Five PLC Survey was first developed, reviewed, approved, and administered in five...school systems during the 2007-08 academic year. Two reports prepared by...one of the districts involved, documented the validation process for the implementation survey. A brief summary of those reports follows here.

Content Validity. A literature review (Reichstetter, 2006) helped to determine the essential elements of a strong PLC and High Five PLC survey themes and related components.

- A strong adherence to a student learning vision is to consistently guide teaching and learning decisions (Hord, as cited in Reichstetter, 2006, p. 1).
- Teams are committed to engaging in an ongoing cycle of continuous improvement (DuFour, as cited in Reichstetter, 2006, p. 2).
- An embedded collaborative culture exists with a focus on learning (Shellard, as cited in Reichstetter, 2006, p. 2).
- PLC team members analyze current practices together in relation to student results (Mitchell & Sackney, as cited in Reichstetter, 2006, p. 2).
- Leadership is shared (Phillips, as cited in Reichstetter, 2006, p. 2) and facilitates the learning of all staff members (Pedler, Burgoyne, Boydell, as cited in Reichstetter, 2006, p. 2).
- Supportive conditions, especially time, are required (Hord, as cited in Reichstetter, 2006, p. 3).
- Ongoing common formative assessments and their results show instructional effectiveness and whether students have or have not learned the essential curriculum (DuFour, DuFour, Eaker, & Many, as cited in Reichstetter, 2006, p. 3).

A review of an existing PLC survey and a PLC continuum (DuFour, DuFour, Eaker, and Many, 2006) also helped to determine appropriate elements and components for the High Five PLC survey.

The High Five Regional Partnership Metrics Committee, including evaluation and research department and curriculum and instruction department leadership from five school systems, used the information from the review and from the DuFour

PLC survey to discuss, develop, and subsequently approve the High Five PLC survey.

Face Validity. A group of selected teachers and education administrators reviewed and contributed feedback on both the elements and components of the proposed survey. They determined, along with separate reviews by the Metrics Committee and the Working Group from the High Five Regional Partnership, that the items within the survey appeared to measure what they were intended to measure.

Survey Reliability Analyses 2008-2009. Across all five districts in 2008-2009, there were 12,976 survey respondents who indicated that they were participating in a PLC. For those participants, there were 28 main items to which they could respond "Strongly Agree", "Agree," "Disagree," or "Strongly Disagree." The four options on the scale represent a forced-choice scale with no middle choice. Participants could also indicate that they "Did not understand" or simply not respond to the item. Despite the forced-choice nature of the scale, omit rates ranged from only 1% to 7% with most items in the 1-3% range.

For the 28 items, responses were rescored into two categories: Agree (which included "Agree" and "Strongly Agree") or Disagree (which included "Disagree" and "Strongly Disagree"). Agree were treated as 1s and Disagree treated as 0s in a Cronbach's alpha analysis. The reliability of those 28 items as a single scale is very strong (Cronbach Coefficient Alpha = 0.924479). The table (which appears in Appendix K) shows the individual items correlated with the total scale. The data also show that the scale would not be significantly improved or impaired by a reduction in the number of items.

Dissertation Study Procedures

The first step upon approval of the research proposal by the dissertation committee was to apply for approval from the Academic Affairs Institutional Review Board. The notice of approval by expedited review is included in Appendix E. It was determined that the risk involved in this research was no more than minimal.

To obtain access, the researcher contacted the Chief Academic Officer of the school district of Berkshire Elementary School. The researcher requested permission and access as an employee of the district as part of fulfilling requirements for an advanced degree. Once the Chief Academic Officer had the Academic Affairs Institutional Review Board documentation and had a brief description of the research including the conceptual

Elementary. The researcher met with the principal at Berkshire Elementary to request permission to conduct research at the school and gave the principal a letter describing the purpose of the study and a brief description of the study methods that would be employed (see Appendix F). Following the principal's consent, the Chief Academic Officer provided a letter of permission to conduct research within the school district (see Appendix G). The researcher also requested permission to utilize quantitative data from a survey conducted by the High Five Regional Partnership for High School Excellence in December 2008. The researcher requested the data from Berkshire Elementary School specifically as opposed to the data of the entire district or of the five districts who participated in the study.

Based on the recommendation of the Academic Affairs Institutional Review
Board, the researcher met with two teams prior to distributing consent forms to request a
consensus on whether or not the teams would be willing to participate in interviews and
would allow the researcher to observe their meetings for three months and record the
interviews and meetings as part of the study. Both teams consented unanimously.

The certified staff members who served on Professional Learning Communities received a letter describing the purpose of the study along with a request to participate and to grant permission to audio tape them during interviews, grade level meetings and/or planning sessions throughout the research period of the winter and spring of 2009. This letter also described compensation for participation, a five dollar gift card for completing the survey, and an additional five dollar gift card for those team members who participated in interviews and observations (Appendix H). In accordance with the

Academic Affairs Institutional Review Board, a consent form and an explanation of the purposes of the research and the expected duration of the participant's involvement, along with a description of the procedures to be followed, was provided to the participants (see Appendix I). A prepared statement described the extent to which confidentiality of records identifying the participant will be maintained. Participants were also given an explanation of whom to contact for answers to pertinent questions. All participants were informed that participation was voluntary, that refusal to participate involved no penalty, and that they could discontinue participation at any time.

Those who completed the consent form were included in the study. Upon consent, participants received a 20-question open-ended survey on the topic of Professional Learning Communities, including opportunities for teachers to write about both the positive and negative experiences they have had with Professional Learning Communities (see Appendix C).

Interviews were scheduled based on times that participants were able to meet.

Interviews took place in their classrooms during after-school hours or during workdays when students were not present. Each interviewee was interviewed for approximately 30 minutes to one hour. The interviews were semi-structured with questions based on their survey responses. An interview protocol is presented in Appendix D. In addition to surveys and interviews, for three months those two teams were observed during their Professional Learning Community meetings, each of which lasted approximately 20 minutes to one hour in length. Since teams met once per week, this resulted in approximately 10 to 12 observations per team.

Recordings were transcribed with all names changed to preserve anonymity of the participants; after transcription, the recordings were destroyed. Subjects were instructed not to put their names on the questionnaires so that anonymity would be protected (that is, the information was collected in a manner in which a subject's individual responses could not be linked to that subject without the linking sheet which was kept under lock and key). The study lasted approximately one semester, taking place in the winter and spring of 2009.

Dissertation Study Timeline

Winter 2008 and spring 2009

- 1. Filed IRB Application.
- 2. Sought Permission at District Level to conduct research and utilize quantitative data of the classroom teachers at Berkshire Elementary from a survey on PLCs given to five districts as part of the High Five Regional Partnership for High School Excellence Berkshire Elementary School.
- 3. Met with two teams to request consensus on consent to observe, interview, and record
- 4. Distributed study overview and consent forms including demographics survey.
- 5. Distributed open-ended survey on Professional Learning Communities and collaboration.
- 6. Began attending Professional Learning Communities meetings.
- 7. Collected and analyzed open-ended survey on Professional Learning Communities and collaboration.
- 8. Arranged interviews with selected participants.
- 9. Conducted interviews and continued to attend Professional Learning Community meetings.
- 10. Transcribed interviews. Typed up notes on Professional Learning Communities meetings.
- 11. Analyzed data using Atlas.ti.
- 12. Drew conclusions and typed up results.
- 13. Met with committee to discuss findings.

Analysis of Dissertation Study Data

This study is largely descriptive in nature. The researcher looked at any descriptive and interpretive concepts that stood out. The goal of data analysis in this

study was to determine if the implementation of Professional Learning Communities addressed roadblocks to collaboration and whether or not collaboration was occurring in Professional Learning Community teams. Beyond that the researcher looked at the culture of collaboration among teachers. Data analysis took place simultaneously with data collection.

Transcription of interview data took place in stages. First the researcher listened to the recordings, noting any major themes that emerged. Next the researcher transcribed the recordings utilizing Naturally Speaking software. Finally, the researcher listened to the recordings a third time, comparing them with the transcription to make any necessary changes. Survey responses and notes from observations were also typed along with observer comments to facilitate the coding process.

The researcher also utilized quantitative data from a survey conducted by the High Five Regional Partnership for High School Excellence. These data were used to generally describe the opinions classroom teachers at Berkshire Elementary held regarding the collaborative culture. The researcher explored how codes and survey data helped to explain each other.

In the quantitative survey distributed by the High Five Regional Partnership for High School Excellence, teachers were asked to anonymously rate how strongly they agreed with a set of statements to indicate what PLC behaviors they really see in their team and in their school regarding their experience. These statements were organized into six areas, including focus, collaboration, strategies, assessments, impact, and support. There were also five additional questions which asked teachers to identify how often team-developed formative assessments were administered, how often their PLC met, the

length of their typical PLC meeting, and the total number of hours spent in Professional Development for PLC led by High Five and by the school district. The survey consisted of closed-ended questions. The closed-ended questions were rated using a four point Likert Scale with the following anchors: 1 = Strongly Agree, 2 = Agree, 3 = Disagree, and 4 = Strongly Disagree. A mean rating of 2.50 or lower was considered positive, where as a rating higher than 2.50 was considered negative. Also, clusters of at least three respondents (14%) providing a rating of three or four was noted as concerned subgroups.

Tables Four-Eight related to the quantitative survey data present the percentages, frequencies, and means of responses to the 28 items organized by the themes of time, isolation, divergent views, collaboration, culture, and benefits.

Coding was done using Atlas.ti software. Transcripts from interviews, answers from surveys, and notes from observations were coded based on a priori themes and also on themes that emerged during analysis. Specifically the researcher looked to the data and its relation to the research questions that served as the basis of this study. Time, isolation, divergent views, collaboration, and culture served as inductive codes. Teachers' responses were organized into these five themes. Within each theme similar responses were grouped together and enumerated for the purpose of summarizing the results. Similar responses that did not fit within the five a priori themes were assigned deductive codes. This allowed additional themes to emerge from the data. Conclusions were focused on the larger research questions, based on similarities that occurred. When unrelated responses occurred, these results were also examined to determine what conclusions could be drawn. Any unexpected information that became apparent was also analyzed.

Limitations of the Dissertation Study

The three factors that may have hindered or affected the findings of this study were a limited observation time, researcher bias, and a change in the original study population from 2005 to 2009. If the researcher had not been working full time, she could have observed any of the Professional Learning Community meetings. However, as some of the teams met during the school day, it was not cost-effective to attend their meetings. There were teams that met outside of the school day, so the researcher focused observations on two of those teams. Secondly, the researcher worked at the school in the study and bias is a limitation of all insider research. Self monitoring for bias was essential for objective reporting since all the data being collected through observations, interviews, and surveys were filtered through the researcher. Finally, only 10 of the original 22 classroom teachers were present in the 2009 study. Since just over half of the participants were no longer present in the school the change in staff might have accounted for some of the changes in the collaborative culture. To account for this, the data for the 10 teachers were filtered out for the major research questions to show the impact on those teachers who were present in both studies.

Further, the findings may only be applicable to schools set in a similar environment, with similar circumstances, or who implemented Professional Learning Communities in the same manner. For example, a school set in the middle of an urban area might not have the same experience establishing and implementing Professional Learning Communities.

CHAPTER IV

FINDINGS

For the purpose of this study, the data are shared as they address each question in the study. In addition, following the data from the entire participant base, there is a filtered analysis of the survey data collected from just those teachers who were present in the 2005 study at Berkshire Elementary as it relates to the major research questions.

Those three research questions were:

- How does the implementation of Professional Learning Communities allow/disallow for sufficient time for teachers to collaborate?
- How does the implementation of Professional Learning Communities impact the isolated nature of the profession?
- How does the implementation of Professional Learning Communities impact conflicts that occur when divergent points of view are present?

Finally, the overarching question of this study was: What is the effect of the implementation of Professional Learning Communities on roadblocks to collaboration among teachers? If roadblocks are addressed, does the collaborative culture change?

Other themes emerged from the data through the process of coding which are presented at the end of the chapter. These new categories were established when common terms were mentioned by four or more participants and were identified as emergent themes. Emerging themes included: benefits, roadblocks, and impressions. While these themes did not relate directly back to the research questions, they provided insight into

the feelings participants had regarding Professional Learning Communities and contributed to the recommendations for improving the collaborative culture at Berkshire Elementary School.

Defining PLCs

Defining Professional Learning Communities was an essential step in this study. In order to discover if PLC implementation had improved the collaborative culture of the school, it was first necessary to determine if the participants possessed a unified definition of PLCs. The rest of the data would not have been relevant if the teachers did not have a common understanding of what made a Professional Learning Community different from a generic teaching team.

When asked to define Professional Learning Communities, the staff members at Berkshire Elementary School expressed many similar ideas. All participants indicated that a Professional Learning Community is made up of a group of teachers, professionals, and/or educators. Fifteen of the participants (42%) went further to clarify that this group was made up of colleagues or peers who work with the same grade level, discipline, or content area. One participant indicated that "a PLC is a group of educators who meet on a regular basis to discuss and share ideas on topics of mutual interest." Fourteen of the participants (39%) indicated that teams provide common instruction, concepts, skills, strategies, pacing, and assessment for students.

The primary function of a Professional Learning Community cited by 22 of the participants (61%) is to collaborate or work together. Thirteen participants (36%) indicated that Professional Learning Communities provided an opportunity for colleagues to discuss students, concerns, teaching methods and strategies, pacing of instruction,

progress toward goals, and curriculum. One participant said specifically that teachers needed to have the opportunity to "have intelligent conversations like other professionals do." Eight participants (22%) indicated that team members share and plan during meetings. They share techniques, lessons, and ideas and plan common assessments, curricula, and teaching strategies. One participant saw planning as the primary function saying, "It is a more intense grade level meeting or planning committee."

Fifteen of the participants (42%) indicated that the goal of Professional Learning Communities was to improve teaching practices or enhance student learning.

Additionally, 13 participants indicated that a goal was meeting student needs.

Professional Learning Communities included problem solving, according to three of the participants. Five of the participants (14%) saw reflection as a goal of Professional Learning Communities, specifically reflecting on progress toward goals and monitoring student achievement through the use of common assessments. Finally, three participants saw Professional Learning Communities as an avenue through which colleagues could support one another in their jobs.

Implementation of Professional Learning Communities at Berkshire Elementary

According to DuFour and Eaker (1998), the implementation of PLCs should start with a shared mission, vision, values, and goals. At Berkshire Elementary the following mission statement is in place: "Our mission is to foster lifelong learning by providing a safe school environment which responds to the needs of a diverse student body. This is accomplished by the school, parents, and community members working together on a daily basis."

In terms of vision, the staff at Berkshire has worked together to develop a school improvement plan in which they have identified school-wide goals for improvement and values which focus on the things that the staff commits to do to achieve those school-wide goals. At the beginning of the school year, teams were asked to make a team goal that related to the school improvement plan.

DuFour and Eaker (1998) also wrote that members of a PLC need to committed to continuous improvement through public reflection, shared meaning, joint planning, and coordinated action. As reported later in the chapter, the Alpha and Beta teams reported that they do not discuss the results of their common assessments for the purpose of improving practice. It is through the discussion of the results of common assessments that public reflection and coordinated action can occur. The researcher observed that both teams discuss common curriculum in terms of what should be taught. According to participants, the Alpha Team does not discuss strategies for teaching as a team. The researcher observed the Beta Team discuss strategies for teaching as a team at times. It was reported that both teams have plans for achieving their team goals which they carry out, though one of the members of the Alpha Team does not always carry out the plan in the manner in which it was intended according to two of his/her teammates.

DuFour and Eaker (1998) recommended that PLCs must have effective communication. Effective communication includes discussion of the team's plan related to goals to determine if they were achieving the goals that they set out to accomplish. In both teams, the researcher did not observe the teachers engaging in a monitoring process to determine if they were achieving their team goals.

According to DuFour and Eaker (1998), the prerequisites for a PLC to be effective, are time built into the school day, an explicit purpose, training and support on how to collaborate effectively, and a commitment of all participants to act as professionals and colleagues. At Berkshire time is reportedly built into the school day for grade level and electives PLC teams, but not for support staff or exceptional children teams. The purpose for the teams meetings has been identified as working toward the team goal in the area of math and vocabulary. Teachers at Berkshire have not received any district provided training on how to collaborate effectively. Finally, as reported later in the chapter, several participants describe their teams as professional and collegial.

Based on the data collected at Berkshire Elementary, the implementation of Professional Learning Communities is lacking in comparison to the ideal implementation as described by DuFour and Eaker (1998). The two observed teams did not discuss the results of common assessments for the purpose of improving practice. One team observed did not discuss strategies for teaching as part of their PLC meetings and one of the members of that team did not always carry out the plan agreed upon in team meetings when s/he returned to his/her classroom. In addition, although time was built into the school day for shared planning among classroom teachers, support staff and exceptional children's staff members were not provided shared planning during the school day.

Research Question I.

The first research question asked: How does the implementation of Professional Learning Communities allow/disallow sufficient time for teachers to collaborate? In order to determine the impact of Professional Learning Communities on the roadblock of time, questions related to the frequency of meetings, consistency of meetings, use of time,

adequacy of amount of time allotted, and comparison to previous teams were asked through surveys and interviews.

Survey Data

Frequency. Questions four and five in the survey dealt with the timing of meetings of Professional Learning Community teams. These were included to give participants an opportunity to describe how often their team meets and whether or not the team meets outside of their regularly scheduled meetings. Based on the survey responses, all participants indicated that their team met regularly as part of the implementation of Professional Learning Communities. All of the grade level teams reported that they met weekly and that the administration provided an additional half-day once a month for the grade level to meet during the school day for an additional meeting. The electives team reported that they met weekly. The exceptional children's team reported that they met monthly, and the support staff team reported that they met as needed, every one to two months. When asked to identify a negative experience with Professional Learning Communities, five participants said that finding a common time to meet was difficult. Classroom teachers all had common planning periods, but other staff members had to find a common time to meet since there wasn't one built into their schedules.

Additional Meetings. In addition to regular meetings, two grade-level teams reported that they met an additional time during the week to discuss curriculum planning, field trips, fundraisers and other topics. Two grade-level teams reported that they met on a daily basis informally at lunch, recess, and during planning to discuss topics, plan lessons, and share tips. The other two grade-level teams reported that they met occasionally to discuss grade-level specific issues or situations, emergencies or

immediate concerns, things like upcoming field trips, and additional time outside of the regular meeting was sometimes needed to complete a task that did not get finished during that week's Professional Learning Community meeting.

The electives team indicated that they met informally throughout the week to share ideas and keep up with what the others were doing. The exceptional children's team indicated that they often were in Individualized Educational Plan meetings together. The support team meets as needed when student concerns or issues arise, their team members are all located in the main office and this allows for them to have ongoing and informal discussions that take place on a daily basis. Two participants indicated that they met individually with another team member to plan outside of the regular Professional Learning Community meeting time.

Sufficient Time. When asked if the structure of Professional Learning

Communities allowed for sufficient time to collaborate, participants had differing

opinions. Almost half (47%) agreed that there was sufficient time to collaborate amongst

teams. Ten classroom teachers attributed this to the monthly half-day meeting that is

scheduled by the administration. "Now that we have the two-and-a-half-hour block once

a month, I feel we do have sufficient time to collaborate. This time is uninterrupted and

away from the students." Of the original 2005 respondents, 60% (6) agreed that there was

sufficient time.

More than one-fourth of the participants (28%) indicated that more time was needed in order to collaborate within Professional Learning Communities. Some cited a need for more time because there was more to discuss than could be accomplished in a once-a-week meeting, "We just have so much to do and trying to focus on several

curriculum areas is difficult." Some teams have to meet after school due to the fact that all of the team members do not have shared planning time. "Most of us are unable to meet at any other time than after school due to our schedules with children. And then, we have other responsibilities that we need to take care of for our students' education." Of the original 2005 respondents, 30% (3) thought more time was needed.

Almost one-fifth (22%) of the participants indicated that sometimes there was sufficient time, and other times not. "Sometimes we feel a different issue is more of a priority than the assignment given to us by the district/administration, but we are required to work on the assignment given." In addition to assignments, visitors to the meeting can be time-suckers as well, "Yes, unless we have visitors come to our group, we usually accomplish all of our goals in our set time period." Non-classroom teachers indicated that they could use more time to meet with other teams, or with job-alike teams in the county; "yes, though it might be beneficial to have time for our group to collaborate with other groups." Of the original 2005 respondents, 10% (1) said it depended on what they had to discuss that day.

Use of Time. When asked to recall a negative experience with Professional Learning Communities, six participants said that they wished that there was more time or that they could use the time the way the team wished. One participant said that guests who came to the meeting tended to eat up the team's time. Three participants said that time was eaten up by tasks and discussion topics assigned to the team, which left little time for sharing lesson ideas.

Comparison to Previous Teams. When participants were asked if their

Professional Learning Community team meets for a different amount of time than before

Professional Learning Communities were put in place, most participants indicated that they met more, or that their meetings were more focused, structured, or effective. Onefourth of participants (25%) indicated that the structure of Professional Learning Communities meant that their team met more than they did in the past. "We spend more time together planning now." Five participants (14%) indicated that the time they spent in their team was more focused than it was in the past. "I feel that grade-level meetings can primarily address business, while PLCs are generally focused on instruction, the teaching/learning process, and assessment." Five participants (14%) felt that meetings were more structured or organized as a result of the implementation of Professional Learning Communities. "It seems to be more structured and paperwork must follow." Almost one-fifth of the participants (22%) thought that the amount of time they spent meeting with their team was the same as it was before Professional Learning Communities was implemented. The question did not apply to six participants (17%) who were new to their position or new to the school. Of the original 2005 respondents, 20% (2) said their team met for more time now than they did before PLCs; 80% (8) said that their team met the same or that the time was more focused, organized, beneficial, or consistent.

Quantitative Survey Data

The quantitative survey included items that addressed how often PLC teams met and the length of typical meetings. One-hundred percent (21) of the teachers selected the statement: My PLC typically meets weekly when asked to describe the frequency of their PLC meetings. Figure 4 summarizes the responses to the following statement: The length

of my typical PLC meeting is 30 minutes to an hour (86%, or 18 teachers) and more than one hour (14%, or 3 teachers).

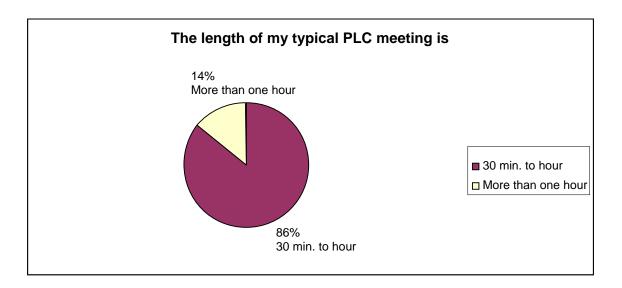


Figure 4 Length of PLC Meetings

Interview Data

Consistency. When asked about consistency in adhering to the schedule of meetings, the Alpha Team indicated that there are rarely conflicts with the meeting time. In the case of a conflict if there is something pressing to discuss, the meeting is rescheduled. Otherwise the meeting is cancelled. In the interview, one team member indicated that the attendance of another member was not consistent: "There are times that [s/he] just says [s/he] is not coming to the meeting, and [s/he] is just absent." The Beta team indicated that there are sometimes conflicts with the meeting time, especially on early release days which tend to occur on their meeting day. In the case of a conflict, they either reschedule or talk informally at another time if there is something urgent that needs to be decided. Usually they meet as a PLC during the early release day activities. One

team member said that they personally had missed meetings this year due to illness:
"There have been times when I haven't been there because I've been sick."

Comparison to Previous Teams. When asked how they felt about collaboration among colleagues before PLCs were put into place, one Alpha Team member said,

I think [the PLC] probably allows more time. The whole set up of the mandatory meeting time and everything just sets up more time for it, but the idea of it is the same. The focus is more on curriculum now instead of grade-level procedural things.

Another Alpha Team member said,

I don't feel like collaboration was as easy before PLCs, only because now, we have a set time every week, so that does help. Other times it was just get them while I can, which there is still a lot of that, but the time provided, the time set, does make sure that I do talk to them once a week, so that it has helped.

Frustration. When asked what was frustrating about being a member of the team, one Alpha Team member said that it was frustrating that all the PLC meetings took place after school. "I would like it better if we could do it at the planning time one day. It's not really bad after school, but sometimes, after school, you know you're just ready to go."

Research Question II.

The second research question asked: How does the implementation of Professional Learning Communities impact the isolated nature of the profession? In order to determine the impact of Professional Learning Communities on the roadblock of isolation, questions related to the impact on isolation, recollections of experiences in teams, consistency of meetings, aspects of being on the team and comparison to previous teams were asked through surveys and interviews.

Survey Data

When asked how the implementation of Professional Learning Communities impacts the isolated nature of the profession, the majority of the participants (86%)

indicated that they helped to alleviate isolation. Almost one-third of participants (28%) explained that the structure of Professional Learning Communities forces teams to meet on a regular basis. "I think it helps give a structured and accountable time for professionals to reflect and plan for the curriculum. Lessons are implemented purposefully and according to an agreed-upon pace." In addition to meeting on a regular basis, eight participants (22%) said the structure promotes collaboration. "PLCs allow educators to collaborate and communicate. Teachers are able to see what others are doing." Approximately one-fifth of participants (19%) suggested that Professional Learning Communities helped teachers to build relationships. "It provides opportunities to build relationships (both personal and professional)." A couple of participants indicated that this would be especially helpful for new employees; "It can aid in alleviating that isolation, especially for young teachers." Of the original 2005 respondents, 90% (9) said that PLCs alleviates isolation by forcing teachers to interact, requiring meetings, allowing collaboration, giving teachers a chance to bond, encouraging teachers to look at results together, work together, and integrate; 10% (1) saw no impact on isolation saying that teachers who were isolated before still isolate themselves now.

Although the majority of participants indicated that Professional Learning

Communities had a positive impact on isolation among teachers, one-seventh of

participants (14%) saw no impact and negative implications for implementing

Professional Learning Communities. Two participants spoke to the nature of the members

of their Professional Learning Community. One wrote, "No real impact as far as I have

seen. Those who shared before still share and those who were closed off are still closed

off." Another stated, "It helps to bring teachers together. However, it is what you make it ... our team wants to work together and collaborate so it fits our personalities." Negative implications included a lack of opportunity to work with other teams, a narrow focus, a scheduled time which might not be convenient or timely for the topics that need to be discussed, and "Sometimes it takes away the creativity of teaching by forcing us to do the same things."

Positive Experiences. When asked to recall a positive experience they have had in their Professional Learning Community, five participants responded by saying the relationships they had developed amongst team members and feeling part of a team were positive experiences. "Ours is a humorous group and I've learned more about the other special area and support people at our school." "Overall it has allowed me to feel more involved with the grade levels with which I am working."

Quantitative Survey Data

Table 4 presents statements related to the impact of PLCs on isolation. These statements received an overall mean rating of 1.50, which was below the upper bound (2.50) of the "Agree" category. Also, the mean scores for all of the statements within the area were at or below the mean criterion level. One-hundred percent (21) agreed or strongly agreed with the statements: As a PLC, we use team-adopted common standards of success to evaluate student learning; as a PLC, we have adopted strategic and specific, measurable, attainable, results-oriented, and time-bound (SMART) goals that we are working to achieve. Ninety-five percent (20) of the teachers agreed or strongly agreed with the statement: As a PLC, we are able to be open and honest with each other about

what we do well and not so well (e.g., in instruction, in teacher-student relationships, in teamsmanship).

Table 4 Quantitative PLC Survey Results 2008-2009 for Berkshire Elementary; Isolation

Isolation	Strongly Agree	Agree	Disagree	Strongly Disagree	Weighted Average
Use team-adopted standards to assess learning	43% (9)	57% (12)	0% (0)	0% (0)	1.57
Adopted SMART goals that we are working to achieve	57% (12)	43% (9)	0% (0)	0% (0)	1.43

Interview Data

Consistency of Meetings. When asked what was positive about being a member of the team, one teacher on the Alpha Team said, "that we actually sit down and get together every week." When asked to compare this PLC with other teams they have been a member of, s/he indicated that in his or her experience, at every school that s/he has taught,

we've had this type of thing, even if it [were not] called PLC... I don't see much difference other than sticking to meeting every week. At other times [meetings would] start out the year, but then you get so many other meetings and stuff that it wouldn't keep on happening. In this case it keeps on happening every week, because they don't have a choice is what I think.

One member of the Beta Team could not recall meeting with the grade-level team prior to the implementation of PLCs: "I don't remember technically doing that [not on a weekly basis]. No, uh-uh, no, it was whole staff."

Pacing and Common Curriculum. When asked about positive aspects of being on the team, one member of the Alpha Team spoke about pacing and common curriculum,

We do have some pacing that we are all teaching the same thing at the same time, which makes it good because we know that all the students are getting the same basic concepts at the same time. When we do change classes on Fridays at least every student has been exposed to that information, which makes it really nice to have that collaboration.

Comparisons with Previous Teams. When asked to compare their team with teams from the past, one member of the Beta Team said, "Sometimes, I mean I try to go in every morning and say hey and give them a hug, but sometimes you become this person in these four walls and you find it difficult to see anyone outside of the walls." When asked to compare this team to ones they had been on in the past they said, "At the other school I worked you never heard of PLC, working together... a teacher was its own entity, and nobody helped anybody and it wasn't that kind of beast." When asked how they felt about collaboration before PLCs were implemented, they said, "There was some that I did, but it wasn't, it was almost like a competition, you know what I mean, teacher against teacher, which teacher's better. It wasn't a team." A teacher in the Alpha Team said, "This year, not everyone is willing to share and so everyone becomes guarded."

Research Question III.

The third research question asked: How does the implementation of Professional Learning Communities impact conflicts that occur when divergent points of view are present? In order to determine the impact of Professional Learning Communities on the roadblock of disagreement, questions related to the presence of divergent points of view, methods of conflict resolution, aspects of being on the team and recollections of experiences in teams were asked through surveys and interviews.

Survey Data

When asked if divergent points of view occur among their Professional Learning Community Team, the majority of participants (61%) indicated that yes, divergent points of view did occur. "Yes, there are different points of view. Usually, we discuss them in a professional manner and move on to the next topic." An equal number of participants

(19% each) responded that divergent points of view occurred rarely or not at all. One participant said, "Not as much as I'd like to see. Honestly, by the time we meet, the teachers are so tired they listen more than contribute. A few tend to take the lead." Another participant said, "We rarely if ever have had any conflicts or disagreements. I think because we get along so well and respect one another's ideas." For non-classroom teacher teams, part of the lack of conflict was attributed to a difference in content areas and a lack of control over what needed to be discussed at meetings. "Not often. Most of our discussion revolves around mandates and it doesn't matter if we agree. We are able to find consensus on how to address the mandates." Of the original 2005 respondents, 100% (10) agreed that divergent points of view did occur.

Conflict Resolution. In a follow-up question, participants were asked to describe how their team was able to resolve these conflicts or, if no conflicts occurred, why they thought their team did not experience divergent points of view. Several traits of teams were attributed to their ability to manage conflicts. One-third of the participants (36%) said that their Professional Learning Community members were respectful of one another. Five participants (14%) said that their team acted in a professional manner when conflicts arose. Other participants said that their team members were flexible, easy-going, got along, accommodating, open minded, on task, dedicated, and fair.

Different methods were described by which teams resolved conflicts when they occurred. Six participants (17%) said that their team came to a consensus in order to solve conflicts. "Conflicts are presented and discussed openly until consensus is met – the PLC I am a part of consists of very flexible and open-minded, fair individuals." One-tenth of respondents (11%) said that their team ultimately decided based on what was

best for the children. An equal number (11%) responded by saying that at times their team would agree to disagree. "Yes, divergent points of view occur often and it depends on the person's willingness to accept others' ideas. Sometimes it is easy. Sometimes we just can't agree. We always try to be respectful of each other though." Other methods of resolution included taking a majority vote (8%) and the leader or senior member of the team had the final say (6%). "Yes, it happens, but we usually go with the majority." Of the original 2005 respondents, 100% (10) indicated that their norms allowed them to manage conflicts through respect and a variety of conflict resolution methods.

Difference as a Positive Aspect. When asked to recall a positive aspect of their team, one participant recalled the following as a positive experience,

Knowing that we are on the same page as our colleagues but not having to be identical (robots) in everything we do is relieving. We are expected to use research-based practices/best practices to yield student success but with some flexibility. There is consistency!

S/he values having some commonalities while still being able to have differences in the way they teach in their individual classrooms.

Negative Experiences. When asked to recall a negative experience, four participants recalled a time in their Professional Learning Community when divergent points of view presented themselves. Two said that it was a negative experience when their opinion was not supported by the rest of their team. "I presented an idea and was 'shot' down." One said that divergent points of view led to loss of focus during a team meeting. One said it was negative "when there is someone in the group who adamantly disagrees."

Quantitative Survey Data

In Table 5 statements related to divergent points of view were presented. These statements received an overall mean rating of 1.57, which was below the upper bound (2.50) of the "Agree" category. Also, the mean scores for all of the statements within the area were at or below the mean criterion level. One-hundred percent (21) of the teachers agreed or strongly agreed with the statement: We use decision-making processes such as brain-storming, problem identification, consensus, and prioritization. Ninety percent (19) of the teachers agreed or strongly agreed with the statement: As a PLC, we have a process to effectively resolve conflict.

Table 5 Quantitative PLC Survey Results 2008-2009 for Berkshire Elementary; Divergent Views

Divergent Views	Strongly Agree	Agree	Disagree	Strongly Disagree	Weighted Average
Use sound, structured decision-making processes	62% (13)	38% (8)	0% (0)	0% (0)	1.38
Have a process to effectively resolve conflict	33% (7)	57% (12)	10% (2)	0% (0)	1.76

Interview Data

The interview data supported divergent points of view. When asked if the structure of PLCs supports their team's efforts to collaborate, one Beta Team member said,

I think whether or not you collaborate in your team is very dependent on the members that you have on that team. I mean, you can have all the structure of the guidance and norms, but when it comes right down to it, there are unspoken things that are going on in that meeting that unless somebody is willing to say you're breaking our norm. It is not going to be addressed, and even if somebody does say our norm is being broken, then you've got confrontation and conflict and most people want to avoid that. I think they are purely niceties.

In his/her opinion even with a structure to support collaboration, team members might be avoiding topics that might present divergent points of view to avoid conflict.

Overarching Research Question: Impact on Collaboration.

The overarching research question asked: What is the impact of the implementation of Professional Learning Communities on roadblocks to collaboration among teachers? If roadblocks are addressed, does the collaborative culture change? In order to determine the impact of Professional Learning Communities on collaboration, questions related to the presence of collaboration in teams, between individuals, and with support and exceptional children's staff were asked. In addition interviewees were asked to recall experiences in previous teams. SMART goals of the teams and their methods for addressing those goals were discussed to determine the extent to which collaboration was occurring on teams. Interviewees were asked if their teams used common assessments and if they discussed those assessments as part of their PLC meetings. In addition, the participants were asked to share areas where the team could improve and suggestions for improvement, and strategies for collaboration through surveys and interviews. Meetings were observed for three months to determine if collaboration was occurring in meetings, and if so, to what extent.

Survey Data

When asked whether or not they collaborated in their Professional Learning Community team, the majority of participants (94%) said that their team did. Almost half of the participants (47%) indicated that their team collaborated by sharing ideas, materials, and/or teaching strategies. "We often share ideas for how to help specific students be more successful and involved. We also give ideas for presenting our content more effectively." Another participant said, "Yes, very much so. I bring any type of material, professional or otherwise, that would help my team stay on track, cut out work,

make teaching a slight bit easier. I am the oldest on the team with lots of resources and I don't mind sharing them." Approximately one-fifth of participants (17% each) indicated that their team collaborated by planning instruction and common assessments. "Yes we collaborate in our PLC. One example is grade level remediation. We look at skills/concepts that we have taught, create an assessment, and then look at the results of the assessment as a team. We then discuss strategies for teaching each concept that seem to work the best and set up groups to remediate students in their area of need." More than one-tenth of participants (11%) shared that their team collaborated by solving problems presented by fellow team members. "Absolutely, we are always offering suggestions to problem solve crisis situations." Other forms of collaboration included: completing tasks, brainstorming, planning remediation, and communicating. "We do collaborate to get the tasks completed." Of the original 2005 respondents, 90% (9) said that they collaborated in their PLC team. Two participants said that their team did not collaborate. One said, "No, I'm not clear on my role in the PLC and/or how to use it effectively." Another said, "No, there is not enough time for all of that. We tend to stick to what works for us because it is safer and less time consuming." Of the original 2005 respondents, 10% (1) indicated that collaboration did not occur in his/her PLC.

Professional Learning Communities, several participants (67%) recalled a time when they collaborated with members of their professional learning team. Five participants said that it was a positive experience when their team shared ideas with one another. "It has allowed us time to look at the curriculum more in depth and share ideas about the best way to cover each subject/topic." In addition to sharing ideas, four participants recalled a

positive experience when the team gave good advice for a problem they were having in their classroom. "A team member made a suggestion to help a student that I had not considered and it led to an excellent outcome."

Three participants each said that it was positive when their Professional Learning Community worked toward a common goal or developed common assessments. "At Christmas we were studying Christmas around the world. We all brought different ideas to the table to make sure we really covered the topic the best way possible." One participant recalled the following experience, "When I presented an idea for the grade level everyone got on board and we all made it happen." "Last year, we created several great common assessments for Math that were very helpful."

Commiserating, raising student achievement and planning were positive experiences for two participants each. "We laugh a lot and share our common frustrations." "When we switch for enrichment, some of my lower students who didn't get a concept that I'd tried to teach sometimes master the concept with another teacher's learning style." "All of our PLCs have been positive. To have the opportunity to 'put our heads together' to develop lesson plans and activities is rewarding."

Quantitative Survey Data

In Table 6 statements related to collaboration were presented. These statements received an overall mean rating of 1.68, which was below the upper bound (2.50) of the "Agree" category. Also, the mean scores for all of the statements within the area were at or below the mean criterion level. Ninety-five percent (20) of the teachers agreed or strongly agreed with the statement: As a PLC, we document and monitor our PLC processes so that we can continue to improve. Ninety percent (18) of the teachers agreed

or strongly agreed with the statement: As a PLC, we systematically gather evidence about the impact of various instructional strategies on student learning. One teacher marked that s/he did not understand the statement.

Strategies for Collaboration. One-hundred percent (21) of the teachers agreed or strongly agreed with the statement: As a PLC, we have made a conscious effort to align our instruction to achieve our essential learning outcomes. Ninety percent (19) of the teachers agreed or strongly agreed with the statements: As a PLC, we are identifying increasingly more effective instructional strategies; as a PLC, we utilize those increasingly more effective instructional strategies that our team identifies. Ninety-five percent (20) of the teachers agreed or strongly agreed with the statement: As a PLC, we require every student who has not yet mastered the essential learning outcomes to participate in additional learning opportunities every few weeks.

Collaboration on Assessments. Eighty-one percent (17) of the teachers agreed or strongly agreed with the statement: As a PLC, we have developed a variety of common formative assessments using different approaches (e.g., performance assessment, essays, tests, and quizzes). A subgroup of 19% (4) disagreed. Ninety-five percent (20) of the teachers agreed or strongly agreed with the statement: As a PLC, we have aligned our common formative assessments to the essential learning outcomes. Eight-six percent (18) of the teachers agreed or strongly agreed with the statement: As a PLC, we examine the results of our common formative assessments to identify students who need additional learning opportunities (enrichment or re-teaching). A subgroup of 14% (3) disagreed. Eighty-one percent (17) of the teachers agreed or strongly agreed with the statement: As a PLC, we examine the results of our common formative assessments to determine which

instructional practices are most effective in achieving student mastery. A subgroup of 19% (4) disagreed. Figure 5 summarizes the responses to the following statement: As a PLC, we usually administer team-developed common formative assessments: Not at all (5%, or one teacher), once every three weeks (24%, or five teachers), once a quarter (61%, or 13 teachers), or once a semester (10%, or two teachers).

Table 6 Quantitative PLC Survey Results 2008-2009 for Berkshire Elementary Collaboration

Collaboration	Strongly Agree	Agree	Disagree	Strongly Disagree	Weighted Average
Document and monitor our processes so that we can improve	43% (9)	52% (11)	5% (1)	0% (0)	1.62
Systematically gather evidence concerning instructional strategies	35% (7)	55% (11)	10% (2)	0% (0)	1.75
Worked to align our instruction with learning outcomes	48% (10)	52% (11)	0% (0)	0% (0)	1.52
Are identifying more effective instructional strategies	29% (6)	62% (13)	10% (2)	0% (0)	1.81
Utilize increasingly more effective instructional strategies	33% (7)	57% (12)	10% (2)	0% (0)	1.76
Require students in need to participate in other learning opportunities	48% (10)	48% (10)	5% (1)	0% (0)	1.57
Developed common formative assessments using different approaches	43% (9)	38% (8)	19% (4)	0% (0)	1.76
Aligned our common formative assessments to learning outcomes	48% (10)	48% (10)	5% (1)	0% (0)	1.57
Examine results to identify students who in need	57% (12)	29% (6)	14% (3)	0% (0)	1.57
Examine results to evaluate instructional practices	33% (7)	48% (10)	19% (4)	0% (0)	1.86

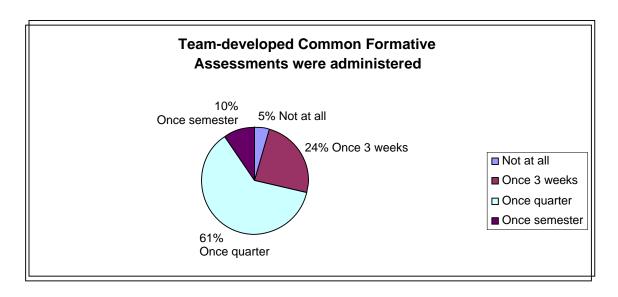


Figure 5
Frequency of Team-Developed Common Formative Assessments

Interview Data

Alpha Team SMART Goals. Questions relating to the goals of teams were asked to identify the purpose for collaboration, the shared plan by which collaboration should occur, and the participants' views on the effectiveness of their team on achieving or working towards those goals were included in interviews. When asked what the team's SMART (specific, measurable, attainable, results-oriented, and time-bound) goals were and how effective the team was for each the Alpha Team reported three goals: 1) to increase End of Grade test scores in reading, 2) to increase End of Grade test scores in math, and 3) to develop a common vocabulary list for the grade level. One member indicated that their reading goal was being addressed by tutors coming into the school.

Vocabulary Goal. In terms of the vocabulary goal, one team member discussed the progress the team was making in that area. "[One of our goals is] working on common vocabulary collection and terms." "We haven't discussed it since we wrote the SMART goal. We've done a little bit of the vocabulary training … but we haven't

discussed a common way to keep them, or discussed common words at all. We really haven't done anything with it [as a team]. We kind of decided it would be put off until the end of the year when we had gone through all the units and do it then." In one meeting the team was supposed to discuss four chapters out of a teacher's guide on how to implement a science notebook for the purpose of vocabulary instruction. When the team leader asked another team member if s/he had read the chapters s/he was supposed to.

[s/he] was mad, because I called [him/her] out at the meeting. But I mean, we were supposed to read it, and I was like, what are we supposed to do? I guess there's nothing for us to do. And then [s/he] came back (after the meeting) and asked me if I had actually given [him/her] a book. [S/he] takes things very personally, [s/he] always feels that [s/he]'s being attacked, [s/he]'s extremely defensive, [s/he] got mad, I guess because of that. I just said, 'Did you read it?' And [s/he] said, 'No, I couldn't find it.' And I said, 'Well I guess we don't have anything to talk about.' Then [s/he] came over (after the meeting) and told me that [s/he] found the book and I was like okay, and then [s/he] went over and told [the other classroom teacher] that I was being rude to [him/her].

Math Goal; Pre-Test. In terms of the math goal, the Alpha team has continued a program they implemented the previous school year. The teachers give a common pretest at the beginning of the unit that has been created by the grade level chair. They use the results of that assessment to determine which students will be served by the AIG (Academically or Intellectually Gifted) teacher. The AIG teacher will pull the students who have been identified as AIG as well as the students that did not miss many questions on the pre-test for that unit. The teachers utilize the information from the pre-test on an individual basis in order to determine what objectives they will need to focus on and what objectives they do not need to spend as much time on in terms of instruction. One teacher indicated that they would also pull small groups if there were certain objectives that only a small group of students seemed to be having trouble with.

Mid-Week Check. Every week (with the exception of weeks where a pre-test is given or when there is an early release day or short week) a mid-week check is given, which is a short assessment on three objectives to determine what remediation is needed. Every two weeks the results of those mid-week checks are charted on a spreadsheet to determine which students will be put into which group for remediation or enrichment on the objectives that were tested. The goal is to pair the teacher whose students performed the best on that objective with the students who need remediation with that objective. One teacher on the team saw this as a way that their team exceeds expectations: "our team goes out of the way to make sure that we graph and chart those midweek scores so that we know which teacher's strength can work best for the students that need help." However, when that is not possible, or as indicated by one teacher, when that teacher is not willing to take that particular group, the teachers will volunteer to take the group that is working on the objective that they want to remediate. "If the person is willing to take that group, then we do. I don't know, sometimes individuals just want to do what they want to do." This remediation and enrichment occurs every other Friday. "Everyone does rearrange their kids into the different groups."

Post-Test. At the end of the unit the teachers give a post-test which is the same as the pre-test to determine whether or not the students have made sufficient growth in the objectives for that particular unit. The support staff member said "I disagree strongly with making kids take that assessment again, if they've already mastered it." S/he said that "a lot of times, I think that the End of Grade fear, [the teachers] want to make sure that they can show, so they will go ahead and give it again anyway." S/he brought this up at one of

the meetings and said that they would not be sending the kids back to take the post-test, but rather would give them a post-assessment only on the parts that they missed.

Results of Common Assessments. Although the teachers are giving common assessments and are remediating students every two weeks, they reported that they are not discussing the results of their pre-tests and post-tests in their PLC. "We never discuss the results of common assessments during PLC." "We don't have discussion about the post-test. That's kind of the individual and the student grade that comes from that. It is a portion of the grade." "I don't discuss the results of the post-test with anyone but the AIG teacher."

Perceptions of Team Members on Goal Progress. According to two of the team members, the third member is inconsistent with what s/he is supposed to with these checks. One member said, "Not everyone on our team is a team player, [s/he] does not always do it and does not do it when we're supposed to, or just doesn't do it at all. Just last week for example, [s/he] didn't turn [his/her midweek check scores] in so they could be put in the spreadsheet. Another member said, "We have issues with getting the information that we're supposed to get to be able to make the spreadsheet. In the first place, sometimes people don't do it, or don't do it on time, or can't find it, or claim they never got it. It is often that I don't get it." The third classroom teacher said, "As a team, the teachers and the students seem to be taking [the math goal] seriously. I don't see how it could be taken any more seriously. We're doing it on schedule, we don't miss it, even at Christmas, Thanksgiving, all those times, and we stuck to it." The same teacher saw their progress toward the math goal as a way in which they exceeded expectations. "I think it's over and above what happens in most PLCs, in not just this [district], but in

[other districts], I have friends in all these places and a lot of people don't have something that's consistent week after week with their team."

When asked to describe their ideas for improving the team's effectiveness, one member of the Alpha Team said that "it would be nice if everyone did what they were asked to do in a timely fashion. That would be a huge thing that if you know you're asked to do this, whether you agree or disagree, like it or don't like it, if we agree to do it [in the meeting] then do it."

Beta Team SMART Goal. The Beta Team's goal was to raise End of Grade test scores in Math. When asked how effective the team was for their goal, one teacher said, "I think we spend a lot of time, I mean as a team, that's probably what we spend the most time on, discussing math. I mean subject-wise and planning and remediation and just everything that goes into it." "We're doing pretty good with meeting math goals and staying where we need to be on the curriculum, I mean the pacing guide, and not getting behind and trying to keep everybody together."

Pacing. In order to achieve their goal, the Beta Team discusses their pacing in math in three-week blocks of time. One team member said, "They have changed to do their math where they're mostly doing the same unit at the same time." One teacher said, "Generally, not in PLCs, but we meet in the hallway or outside, we'll go over to [one team member's] classroom after school and we'll discuss what's working and what's not." Another teacher said, "There's like random like not scheduled meetings where we're just talking like 'Where are you in math?' and 'Are you ready for this?' or 'Can we give a test?' because we've found out that [for example] even though we gave a pre-test that had some things on it, we're not ready to give that on the post-test yet. So you know

that's what we talked about on Thursday to plan out — 'Okay this is what's going to be on the first test' — and then after that we talked about what else do we need to fit in before the end of the nine weeks." Since these conversations do not take place during the PLC meeting, one of the Beta Team members said, "I haven't heard a lot of discussion about math. It seems like lately it's been more vocabulary and the writing." Another team member said,

I would say that the PLCs haven't really been used as a form to develop curriculum and collaborate. It's really been the PLCs have just been about getting these writing assessments done and getting goals set, so outside of our PLC time, I'd say our team is pretty effective at it, but it just doesn't happen during PLC time because we have administrators and everybody else in here.

Common Assessments. The team develops common assessments to give at the beginning and end of each three-week block. When asked how they developed their common assessments, one teacher said,

We've used Test Magic or Accelerated Math, or we just make up a test and run it by the rest of [the teachers]. It's given at the three-week mark or of course at the nine weeks. And we try to, when we make them up especially, to give an exact number per objective so when it comes time to do a report card, it makes it easier to judge like which objectives they really had difficulty with or really mastered.

Another teacher said,

We talked about it in our half-day planning time. We usually go over to the media center with the pacing guide and whatever we can kind of dig up out of the filing cabinets here and try to piece together an end of three weeks test or an end of quarter test and just try to get the three-week pacing guide for us that's a little more detailed than the one the district gave us.

The team utilizes data from the pre-test to determine which students will be served by the AIG teacher by meeting with the AIG teacher and looking over the test results. One teacher said,

We kind of talk about where we're going with it after that. We kind of look at how the kids did on the pre-test, and the ones they got correct we obviously don't

teach very much and the ones where it seems like everyone across the board missed it we know what to focus on and discuss tactics on how to teach that.

Absence of Collaborating at a Higher Level. Collaboration was seen by the participants as an area where teams failed or could improve upon. One member who serves on both teams said.

I think in general we failed what PLCs are. I mean, I actually do like to be able to get together with them weekly, because it's nice for us to be able to figure out all these other things that we have going on; however, are we talking any specific interventions? Are we talking strategies? Are we sharing things that we should be sharing? No. So that is a failure in general, for both groups [during their PLC time].

S/he said, "We don't do PLCs like we're supposed to do them anyways. They turn into grade-level meetings and they turn into what needs to be done for the week." On the Alpha Team s/he said, "I know there is some 'Well, there's no need to share because they're not going to do it anyway.' And I understand you don't want to waste your time, but there needs to be something so that because even that third member feels like sometimes, like it would be nice if [s/he] had ideas, and it would be nice if [s/he] had help." When asked whether or not the structure of PLCs supported efforts to collaborate, one member of the Alpha Team said, "If we collaborated, yes it would." Another Alpha Team member said,

No, and I don't think that in education that the PLC is effective at all as it should be. We have this PLC meeting where we really don't want to collaborate because you know, teaching is one of those areas I've found where people will share if you ask, but most people will not willingly share because they had to scratch and claw to get there and they feel like you need to scratch and claw to get there too and it's just the nature of the beast and you know that going in. You hear that when you're in school – you hear that when you get out, you know that that's the way it is. And the good teachers scratch and claw and survive. I think the PLC is a waste of time in an educational setting, and that's just me.

Another teacher on the Beta Team thought the team failed an expectation because,

even though we share ideas and we respect each other, I think maybe just doing some more collaborating at kind of at a higher level in the sense of talking about certain activities because I found that last year, unless I really went and asked or went and watched, I really didn't know what the other teachers were doing.

"I think we could do a lot better at that. It's just a discussion we need to have more because last year it was helpful when I got to see other teachers. It might be a discussion like, 'I taught this' or you know, a very brief discussion of like how someone could replicate it." One of the Beta Team members suggested that the team might want to coordinate "lessons like in the way certain math skills are taught, because I go to one room and one teacher's teaching it one way and I go into the next room and s/he's teaching another way and then the children come to my room for the same concept, but they've been taught different ways, which makes it real interesting for me to try and help them." One of the Alpha Team members said, "We know which concepts we're teaching, but we do not often know what activity each teacher is doing and that again goes back to one of our weaknesses I think is that we do not share."

Collaboration Between Individuals. Reportedly, sharing of teaching ideas does occur between individuals on the teams. When asked where they turn for ideas for instruction, one member of the Beta Team said, "If they are teaching something and they're open to it, I'll go up and say 'well, have you tried showing them this way,' so I'll do it right there in class." Another team member said, they have "talked to my team members." Another member of the Beta Team said, "I turn to both [of my teammates] for ideas." A member of the Alpha Team said, "[S/he] and I do sometimes share ideas about how we teach in our classroom." One teacher on the Alpha Team said, "If you ask," the teachers on the team share ideas for instruction. The other teacher on the Alpha Team said,

a lot of times if you ask [him/her], if you say, I'm studying this, do you know of anything good or [s/he] runs across something in an area, [s/he] will say, 'Oh I tried this, you might want to use this,' or [s/he] will bring copies to me. I'll usually ask [one of my colleagues]. I just go in and ask [him/her], 'Do you know what to do for this?' or 'I noticed that you are copying this, how are you going to use it?'

"If someone were to ask for something, everyone is willing to share."

Collaborating with Support Staff. When asked what was positive about being a member of the team, one support staff member who serves on both teams said,

I do know more about what's going on with both grade levels: What they're teaching, what they're doing. We are able to keep some things on pace a little bit better. I can hear a bit more about what's happening, what they need, and what they're doing.

When asked how s/he felt about collaboration among their colleagues before PLCs were established, the exceptional children's member of the Beta Team said,

Prior to the PLCs I wasn't required to go, and what they discussed was a lot of times grade-level stuff, field trips, stuff that it wasn't really applicable to me. So this, at times, does get me more insight and it's more focused. But then still there's, sometimes it doesn't really apply to me, but it's good stuff for me to know. It's good to know what they're having to do and what the kids are having to do, so it's good information.

Improving Team Effectiveness. When asked about his/her ideas for improving the team's effectiveness, one member from the Alpha Team recommended having administrative intervention. "I really think they need some administrator to come in here and say this is what you need to be accomplishing and you're not accomplishing this.

And you're not sharing ideas, and you're not collaborating, and you're not working together."

Advice on Collaborating Effectively. When asked what advice they would give to another team about how to collaborate with one another effectively, interviewees gave

different responses. "Don't be judgmental, be open to other ideas and consider them, and don't act like you know it all."

Set goals and norms at the beginning of the year telling you know, this is how we're going to make decisions, etc. I mean having that discussion and deciding, this is how we're going to make decisions, etc., this is what is going to happen if we come up with a dilemma or someone is not agreeing, this is how we're going to handle it." "Have a sense of humor.

"Get along somewhat socially and professionally, and just a willingness to listen to your coworkers." "Be respectful." "Be open and supportive of others and their ideas and try to really have a true sharing of the work and ideas. Be collegial with one another and positive." "Chart information on a spreadsheet. It makes a huge difference. It's so easy to look and see everything that way." "Be open to sharing because it really helps when you can hear what other people are doing and how other people have done a certain lesson or what they do in their classroom."

Comparisons with Previous Teams. When asked how their PLC team this year compares with other teams, one member of the Beta Team said,

It's a lot different than some other teams that I was on where it was kind of like there wasn't any kind of cohesiveness at all and it was just like we had no reason to collaborate instructionally, other than that we had the same students. Like I had them for science and you had them for language arts and social studies and 'okay, so is he a butthead in your class too?' so it was always a really weird conversation. So I've had both sides of the coin, where it's very effective, and everybody gets along, and then where there's really not any kind of communication other than behavior.

Meeting Data

Meetings were observed for the purpose of identifying if collaboration was occurring on teams and the extent to which participants collaborated with one another.

Alpha Team. For the most part, throughout the three months of observations, the Alpha Team participated in superficial collaboration. Superficial collaboration as defined

by Marsh (2004) is "limited forms of sharing that do not progress beyond advice-giving and material sharing – there are no deeper forms of interaction such as joint planning, observation, and experimentation." The teachers on the Alpha Team dealt with many different tasks during their PLC meetings. The summary of the meeting data for the Alpha Team is organized by these tasks including math, reading, writing, field trips and fundraising, responses to requests received via e-mail, End of Grade tests, tasks related to the support staff member on their team, and work on their vocabulary goal.

Math. In terms of math, the teachers reported their top two choices for textbook adoption. They also discussed the dates for pre-tests, post-tests, mid-week checks, and enrichment/remediation Fridays. When discussing the dates for the mid-week checks, they would also share the objectives that would be included on the mid-week check. After receiving training on the Cognitively Guided Instruction (CGI) program during a professional development for classroom teachers at Berkshire Elementary, the associate principal came to an Alpha Team meeting to ask the teachers how they planned to implement CGI into their classrooms. S/he wanted them to come up with a plan for implementation as a grade-level. The team spent one meeting picking word problems out of a variety of word problem resource books and distributed packets of those problems at the next meeting. Two of the teachers talked about how they use math journals in their classrooms and it was agreed that they would utilize their journals for student work on the word problems. The other teacher said that s/he would have his/her students keep their work together in a folder since s/he did not do math journals in his/her class. The problems would be presented in an order decided on an individual basis. Two math tutors were also hired, and the teachers discussed who would use the tutors in their classrooms and how the tutors would be used during the enrichment/remediation every other Friday.

Reading. For reading, they wrote a list of students who would receive tutoring on two occasions – one for each of the two tutors hired to prepare students for the reading End of Grade test. Two of the teachers volunteered information about their students to the reading tutors in terms of behavior they had witnessed when students read in their classrooms.

Writing. In terms of writing, one teacher brought up the writing training, saying s/he wanted to do that. Another teacher on the team said s/he had completed it and talked about how s/he had printed off certificates saying they had completed it.

Field Trips and Fundraising. On the topic of field trips and fundraisers, they discussed field trips in terms of bussing, the agenda, room assignments, and scholarships for students who could not afford the trip. One of the teachers failed to turn in the information stating the number of parents that needed bussing for the field trip. In later meetings they discussed a date for a chaperone meeting, the cost of the trip for students and parents, and the field trip permission form and letter that would be sent home. They discussed fundraisers: setting up a sales table at Math Night, selling candy bars in the car rider line, checking with the PTA on funds from a previous fundraiser at the social, and dates for donut sales.

Responses to Requests. In response to e-mail requests, they brainstormed topics and speakers for the ESL teacher for a Latino Parent Night they were hosting. For Black History Month, they discussed possible speakers and individual teachers volunteered to make contacts to get those speakers in. One teacher said s/he would arrange for a speaker

to come in but never followed through, so the speaker never came. The grade-level chair asked if anyone would volunteer for a curriculum mapping meeting taking place at an unknown date over the summer, but no one would volunteer without knowing the date.

Another teacher volunteered to go to a math implementation meeting. At one meeting a teacher on the team reminded the others that they needed to have their spelling bee reps reported to the Media Coordinator by the end of the week for the school spelling bee.

End of Grade Tests. Topics related to the End of Grade tests were also discussed during meetings. The teachers commiserated over the fact that test preparation materials had arrived but were not the ones they had selected after three meetings of discussions with and for the administration where their feedback was requested. Instead the administration had found out about a last-minute deal on materials and had purchased those instead. At one meeting one of the reading tutors asked one of the teachers for advice on what s/he had done with their students the previous year since they had such good scores on the End of Grade tests in reading. S/he offered up that s/he gave them lots of examples of longer passages with questions in preparation for the test. At one meeting an administrator attended and passed along information about benchmarks on the End of Grade tests being raised such that the students would have to get 67% of the questions correct instead of 50% as in past years.

Tasks Related to Support Staff. The meetings served as an opportunity for the support staff member on the team to communicate with the team as a whole. S/he asked their opinion about the reading students they served; did the teachers want the kids to choose novels based on interest or be assigned books based on their ability level for the upcoming unit on the civil war? S/he asked if they had any contributions they could send

for a memory book project s/he was doing with a group of their students. S/he and one of the teachers on the team discussed a joint venture on a community service project they were doing with the students for Earth month. S/he also talked after the meeting on one occasion about a question on the pre-test and what the correct answer was supposed to be. At one meeting s/he explained his/her position on having the students who take a pre-test not having to take a post-test on the material they got right the first time, so s/he said s/he would be keeping those students in his/her room while the classes took the post-test in the classrooms. During one meeting, s/he asked the teachers when it would be a good time to come into their classrooms to discuss a new group s/he was starting with 12 students from the grade level. S/he discussed the timing of the group's final presentation, the application process, and the dates during which the group would meet. S/he would also ask at times if the teachers would like copies of resources s/he had related to topics they were teaching in their classrooms.

Vocabulary Goal Work. Work in the meeting included the SMART goal they developed at the beginning of the school year: to develop a common vocabulary list for the grade level. On two separate occasions members of the vocabulary committee at the school visited the meeting to dispense vocabulary training. In one they were shown the six stages of teaching vocabulary. In another, the committee member went over a packet of vocabulary teaching strategies and talked about how the teachers should code the word list for refinement over the summer at the district level. Teachers were asked to code the word list based on the number of times they used the words in their classrooms. One teacher on the team, who had actually led a staff development the previous year on vocabulary instruction, commented that the strategies in the packet were all ones s/he had

already trained the staff on. During one meeting, the teachers were supposed to have read four chapters out of a science notebook handbook and were supposed to discuss the chapters and also talk about how they had been implementing science notebooks in their classrooms. One teacher said s/he had read the first two chapters, but did not have the handbook with them at the meeting. S/he did not volunteer ways in which they had been using the notebooks in the classroom. Another teacher on the team said that s/he had used the notebooks and instructed students to draw a picture of an experiment, make a prediction, write vocabulary, make lists of materials for experiments, write steps for an experiment, make charts, and draw graphs related to the experiments. During the second discussion on the science notebook handbook, the teachers sat around the table reading sections out loud from the four assigned chapters. Occasionally, the teachers would make comments about what they had read aloud, or about a diagram pictured in the chapters.

Beta Team. In the Beta Team, meetings were conducted in a different manner altogether from the Alpha Team. The summary of the meeting data is shared by meeting rather than by task because over time the focus of the team shifted from tasks assigned by members outside of the team to agenda driven meetings.

Meeting I. One 65-minute meeting was spent going over the schedule with one of the reading tutors to determine when it would be a good time to pull each teacher's kids for tutoring. S/he also asked the teachers to do Directed Reading Assessments on all of the students that they felt needed to be included for tutoring so that they could be put into groups. During the last five minutes of the meeting, the principal let the team know that they were ordering test preparation materials for them, and the teachers said that after the meeting they were going to talk about their upcoming field trip.

During the meeting, the following conversation took place, precipitated by the reading tutor:

READING TUTOR. I would think this PLC thing would be a really strong helpful piece that you're not reinventing the wheel every time that y'all can share together and help each other be smarter.

TEACHER 3. It would be nice if we could use the time for planning, which we've been told that we can't do.

TEACHER 1. This time has been set aside for PLC, but a lot of times this is the only time that we really have other than the once a month time they're giving us. So today we got that taken care of in that time, but a lot of times when we meet as a PLC we need to do planning stuff.

READING TUTOR. Now, call me stupid, but if you're looking at kids of a variety of needs in terms of differentiation, how is that different than planning in a PLC?

TEACHER 1. PLCs were more designed to talk about the results and what you're going to do about them. We were told that it shouldn't be just planning. We shouldn't be talking about field trips and stuff that wasn't instructional. But sometimes it's the only time that the three of us are together.

Meeting II. In the next meeting, the teachers spent 40 minutes talking with the principal about how to fill out the spreadsheet for the other tutor. The reading tutor made a second request for the teachers to conduct Directed Reading Assessments so they could make the groups, which resulted in a discussion about when they could find the time to conduct the assessments in a timely manner. The last 20 minutes of the meeting was spent with an announcement by the associate principal making sure they had received the e-mail about the change on the writing test day, deciding on a date for the pre-test in math, and one teacher complaining about the fact that the awards assembly had been scheduled during his/her planning period for the second time this school year.

Meetings III and IV. The next meeting took place during a workday, and the teachers used the time to develop a common assessment to use as a pre-test for their next

math unit. The meeting after that was spent on a variety of tasks. The reading tutor showed them how to read the results of the benchmarks they had given the kids who had been selected for tutoring. A member of the vocabulary committee reviewed the vocabulary strategies packet and how to code the vocabulary list. They spent time discussing with the principal when they could do the writing test scoring during the school day in preparation for the deadline coming up the following week. It was decided that they could work for a two-hour block during the day on Monday by rearranging their specials schedule with another grade-level team. (Observer comment: Later an e-mail was sent saying that the teachers should continue grading writing assessments during their PLC time and move it up a day so they could get them done in time for the Wednesday deadline). The principal also sought feedback for when the snow day should be made up. Would the teachers prefer to make it up on two afternoons or on a Saturday? Finally, the teachers discussed a problem that came up with the tutoring kids not getting enough time to eat their lunch because the cafeteria was never ready for them when it was time for the grade level's lunch. The principal said s/he would handle that with the cafeteria manager.

Meetings V and VI. The next week's meeting was spent scoring writing tests as decided in the previous meeting. The following meeting the teachers discussed what topics they had been teaching at math. They also discussed difficulties they had been having with getting parents to come in for success plan conferences and completing the success plans. Success plans are written contracts between the student, parent, and teacher indicating what all three parties will do to address the areas in which the student is performing below grade level. Teachers are supposed to meet with parents at least

every nine weeks to discuss the progress the student is making towards those goals and a the meeting all three parties sign the contract. They discussed reading and ideas for how to prepare students for the End of Grade test in reading. One teacher talked about a test-taking strategy teachers use in another grade level for reading. Another teacher talked about how s/he had been making copies of seven stories and questions that relate to the stories every week out of a book and giving the kids a week to complete them. The students have to get 67% right. If the students get 67% right, the participant marks a three on it, and if they don't, the participant makes the student correct the entire thing. S/he offered to copy the packets for the other two teachers. The teachers also talked about Math Night, what activity they were going to do, how it worked, and when they needed to be there.

Meetings VII and VIII. The meeting after that was led by the associate principal, who conducted test administration training and then discussed with the teachers at length the purpose of success plans and when they needed to be completed in order for retention letters to be sent. At the following meeting the teachers began by scoring writing tests at a table together. When the associate principal arrived they started a discussion about the recent training they had participated in on Cognitive Guided Instruction Math. They wanted to know if they had been implementing any of the things they had learned about in the training the previous week. Two of the teachers shared that they had been working more with word problems in their classrooms. After that the associate principal went into a discussion about what should go on in a PLC and what should not go on in a PLC.

AP. Like, do you all normally have an agenda?

TEACHER ONE. We don't type one out, but we talk about it, but we don't print it out.

AP. You don't know anything before you come to the table.

TEACHER TWO. I usually know there are things we need to do when we come to the PLC.

(Observer comment: Discussion ensued about what they had planned to do for this particular meeting)

TEACHER THREE. We feel like our PLC has been taken over with the writing test. With all due respect, we've had administrators telling us what we need to do in our PLC and we haven't been able to do any planning in our PLCs since Thanksgiving.

EC TEAM MEMBER. It's different from last year because last year we had one or two assignments that we worked on throughout the year.

TEACHER ONE. This year there's a lot more go back to your PLC and do this or do this or do this. ...

TEACHER TWO. Like the vocabulary stuff.

EC TEAM MEMBER. It's too many assignments to do, to digest them all and get them ready and to understand what you're supposed to do. ...

AP: So maybe we need to focus more on what you guys need to do.

TEACHER TWO. We already know what we got to do. ... This, this, that, and 17 million other things.

TEACHER THREE. Common assessments would be nice and actually talk about [our grade's] curriculum.

(Observer comment: Discussion ensued about the fact that the team did that last year.)

AP: What can we do? I will be honest with you, I have been in four buildings, and you guys are given more time than I've ever seen in my life, in as far as in a schedule to get to do things. So I will just say, I know it seems like a lot to you.

TEACHER TWO. Whoa, whoa, wait a minute, we're given a lot more time but we're also have a lot more mess.

AP: Some people don't get the [two hours] at all. I know what you've got to do, and I hear what you're saying, but everybody's going through the same thing. But you are in a much better position than some in the district. Because the principal, [s/he] has tweaked that schedule and done a whole lot with it that other principals have not done.

EC TEAM MEMBER. [S/he] has gone to bat for us, and [s/he] will say [the teachers have] got too much.

AP: [S/he] has done that on more than one occasion and gotten [his/her] hand slapped.

EC TEAM MEMBER. I wish there was a way for us to say 'Uncle we give.' You can't expect us to learn this well, if we're getting so many assignments.

AP: That is kind of a trend in education in general. We have to kind of go with the flow. What can we do for you? So that we can help you function like a PLC should function. Because we want you guys to get together and put your brains together instead of you having to work by yourself to figure out your planning and all that kind of stuff because you're doing something like this. What can we do to help, because that's what we're here for.

TEACHER TWO. What is the objective, what is the reasoning for PLCs?

AP: So you're not working by yourself.

SUPPORT STAFF MEMBER. It was set up to talk about specific strategies for kids, where to intervene with kids, what strategies to use for students and what are you teaching and what's working and what's not.

(Observer comment: Discussion ensued about an example of the kinds of discussions that should be happening in PLCs, what they could be doing.)

TEACHER ONE. We never have a PLC where we don't come here with something to do. If we came and we didn't have this, this, and this that we need to do, then it would sound like that. That's what they all sound like when we do the planning. But when we get around this table there's always either someone coming in to talk about stuff or train us on something. We do have those conversations.

(Observer comment: The EC Team Member and the Support Staff Member don't get to be there for those conversations because they don't take place at PLC time.)

TEACHER ONE. So when you ask, what can we do, it's just like, truthfully, we could be given a PLC time where it's just a PLC time and not with you've got to read this or we've got to sit down and talk about this. ...

(Observer comment: Discussion ensued about ideas for how they could accomplish this in their PLC.)

AP: We need to figure out how to do it. ... It's not working that you guys get together to score writing tests. We need to have an agenda. You need to discuss it and it needs to be in depth and you need to be on the same page.

TEACHER THREE. That's what we did before Thanksgiving.

TEACHER ONE. (Talked about the writing tests and how much time they are taking up this year.) All the other stuff we could be doing.

AP: Don't do it during your PLC time — do it after school another afternoon.

TEACHER THREE. There's a lack of time. I'd like to have my prep periods. It seems there's a shortage of time — planning periods get taken for awards assemblies, etc.

TEACHER ONE. We've got people up there who have never worked in a school building before, and it's just like do they have any idea of how much this is putting on the teachers. I'm more overwhelmed this year than I was last year.

AP: We're trying to help.

By the end of the meeting the team developed an agenda to use for the following week. The Associate Principal suggested,

Address stuff in a memo that can be in a memo ... If it's not deep discussion, do it outside of PLC. We've got grade levels that do this, who talk about what they're going to teach, they go over the common assessments, they talk about the results of the assessments ... It can be done. It's a process ...

Meeting IX. During the weekly meetings that followed, the Beta Team always had an agenda for what they planned to discuss. In one meeting one of the agenda items was to discuss four chapters out of the science notebook handbook. None of the teachers had read, so the support staff member summarized the chapters and one of the teachers mentioned how s/he used science notebooks in his/her class in the past. They discussed math pacing, and the support staff member shared some resources that s/he had for word problems for the math unit they were working on. One teacher shared a strategy s/he used with his/her students to teach them how to convert improper fractions into mixed numbers. They began a brief discussion about the next writing prompt, what the topic was, and the support staff member shared some read-aloud books they might use to introduce the topic. They discussed mini lessons in reading. One of the teachers on the

team teaches mini lessons to his/her whole class occasionally, but not everyday in his/her classroom. The other teachers did not have the training on mini lessons and so the resource teacher and one of the reading tutors shared ideas about how they could incorporate mini lessons into their reading instruction. Finally, they talked about pacing for social studies and it was determined that the classes were all still working on government.

Meeting X. During the next meeting the teachers talked at length about the pacing for the writing prompt that they were required to give the next week. They talked about how they were going to introduce the prompt using picture books and examples from their personal lives and talked about how they planned to model what they were looking for in their students' writing samples. The associate principal asked them how they planned to use the dictionaries and thesauruses they requested, and the teachers explained that they needed them for their vocabulary instruction. They were also asked to come up with a plan for CGI implementation. The associate principal also talked with them about how throughout the school the administrative team had noticed some teachers using tutors for replacement instruction, s/he reminded the team that the reading tutors were to be used to supplement. The teachers talked about how they could use tutors during their writing time.

Meeting XI. In their two hour meeting, one teacher showed how s/he had mounted word problems to cardstock and laminated them for group work as a strategy for implementing CGI word problems. The team developed a sheet for word problems work that included a space for students to write the problem, show work on two different ways to solve the problem, and space with lines for the students to write how they solved the

problem. They discussed math pacing and what "Full Court Press" is, how it works, etc. because the newest team member didn't know. Full Court Press is a four-day intensive test preparation period that is conducted school-wide in grades 3-5. Special area teachers, exceptional children's teachers, and support staff are assigned to classrooms in grades 3-5 to work with small groups on math and reading test preparation. They report every morning for four mornings in a row the week before the test. They talked at length about the standard course of study for the next unit determining what needed to be taught for that unit. Finally, the associate principal came and reminded the team to make sure they set their dates for their last two field trips.

Meeting XII. In another meeting, the team talked about CGI implementation. Since the word problems were taking a huge amount of time they modified the sheet they came up with to reduce it to one way instead of two and discussed the idea of giving students the whole day to work on it instead of just at the beginning of math. The support staff members in attendance offered some suggestions on implementation. They talked about the progress their students were making on the writing prompt and how they have been working with kids to pull the writing out of them. The support staff member shared all the interactive read alouds s/he had pulled and went over a description of mini lessons and their format. Part of the meeting was used to discuss when they would be able to score the writing prompts. They decided to score the writing tests individually and divided up the classes, assigning two readers to each, one classroom teacher and one support person.

Significance. The shift of the Beta Team's focus on tasks assigned by members outside of the team to agenda driven meetings allowed for a shift from superficial forms

of collaboration to higher level collaboration. By the end of the three month period, members of the Beta Team were spending their Professional Learning Community meetings discussing curriculum not just in terms of what content to teach, but in terms of what ideas or strategies could be used to teach that content in their classrooms.

Overarching Research Question: Impact on Culture.

The overarching research question asked: What is the impact of the implementation of Professional Learning Communities on roadblocks to collaboration among teachers? If roadblocks are addressed, does the collaborative culture change? In order to determine the impact of Professional Learning Communities on culture, questions related to the relationships between teammates, the extent to which their team socialized outside of school, the self-perception of participants, the status of open communication, the norms, suggestions for improving team effectiveness, frustrations, ways in which the team exceeds expectations, aspects of the teams, comparisons with previous teams, focus of the culture, culture-wide strategies, and culture of support were asked through surveys and interviews.

Survey Data

There were questions included on the survey that gave the participants an opportunity to describe the relationship that they have with their teammates, the extent of those relationships, and how they feel they are viewed and responded to as members of the team. The purpose of this line of questioning was to explore how team members interact with one another, how they view one another, and how they respond to one another. Other aspects of the survey address school culture as well in terms of discussion regarding the goals of Professional Learning Communities, the norms of teams, and

questions on divergent points of view; however, these questions were specifically geared toward culture. For example, in response to a question regarding a positive experience in Professional Learning Communities, one participant said that "having our administrators stop in periodically to see if we have any questions or concerns is always nice."

Mentioning administrative support is tied to school culture.

Relationships. When asked to describe the relationship they have with the members of their Professional Learning Community team, nearly one-fifth (22%) of the participants described their relationship as respectful. Likewise, one-fifth (22%) of the participants described their relationship as friendly. This was followed by the description that their team "works well together" (19%). One participant said, "We work well together and respect each others' ideas and input." Of the responses, 14% indicated their team was professional. Participants also used the adjectives excellent (6%), good (14%) and wonderful (3%) to describe their team's relationship. Relationships were described as open or candid by 14% of participants. One participant said, "We have good relationships, it is safe to discuss, give your opinion and to disagree." Approximately one-tenth of participants (11%) indicated that their relationship was close, collaborative, collegial, dependable, and trusting. "I have a very close bond with my PLC members" was one participant's response. Other descriptive words included: comfortable, committed, cordial, cooperative, diverse, inclusive, positive, understanding, and valuable. One participant said, "We get along well and do not leave anyone out when making decisions." Negative descriptions were less frequent. Two participants indicated that there were certain members of their team with whom they were not close or had a more sterile relationship and one participant indicated that his/her team was guarded. In

addition, when asked to identify a negative experience they had in their Professional

Learning Community, one participant said that teachers whose students do not perform

well on common assessments in their team "are not assisted to learn how to improve on
those areas. They are just made aware of their shortcoming and left to fix it themselves."

Socializing. When asked if their Professional Learning Community team meets outside of school socially, almost half of the participants (47%) indicated that they spent some time outside of school with members of their team. Members of two of the teams said that "on workdays we may run out to lunch together," but one team member said that in their opinion, lunch on a workday doesn't count as meeting outside of school socially. Eight of the participants (22%) indicated that while the entire team doesn't get together to socialize, they have done things with part of the team including socializing, fellowship, eating lunch or dinner, shopping, going to a movie, or meeting at another member's home. One team had a Christmas social and one team member commented the team had "high hopes of doing it some more." One participant indicated that their team chats, shares anecdotes, and goofs. Celebrating the end of the school year was another social engagement mentioned by a participant. According to another participant, members of their team call each other on occasion and also network on Facebook.

Self-Perceptions. Question three asked participants to write how their teammates would describe them. Approximately one-fifth (19%) of the participants responded that his/her teammates would describe them as helpful. "I think they would describe me as helpful and that I contribute to the team." This was followed by a tie between flexible, task-oriented, sharing, and a team player by 17% of the participants. One participant said his/her teammates would describe them as "direct, to the point and efficient." Another

said, "I think that the PLC would describe me as a team player and one who shares and is resourceful." Approximately one-tenth (11%) of the participants responded by saying they do what's best for students, are hard-working, professional, and responsible. One participant said they thought their teammates would describe them as "Open to new ideas and thinking about the students' needs first." Another responded by saying their Professional Learning Community team would describe them as "someone that works too hard and too many hours." Other responses included honest, eager to learn, a good listener, aggressive, approachable, caring, comfortable, committed, cordial, direct, friendly, fun, informal, inquisitive, insightful, integral, knowledgeable, a leader, nice, organized, pliable, a problem-solver, respectful, sexy, a teammate, and vocal. One participant said, "They might describe me as willing to participate and ready to take on any necessary tasks, but not super eager to be spending every [meeting] discussing topics not necessarily relevant to my interactions with my students."

Status of Open Communication. Question nine asked participants to describe how their Professional Learning Community team responds to their contributions. One-third (33%) of the participants said that their team responded receptively to their contributions. One participant said, "Team members are usually very receptive. We enjoy hearing/seeing what works for students!" This was followed by 17% of participants each describing their team's response as accepting, positively, or with their own opinion. Examples of these responses include the following: "They are very accepting"; "Positively, I have always felt comfortable sharing in my PLC"; "They are open about letting me know whether they agree or don't and why". Approximately one-tenth (11%) of the participants said that their team responds respectfully to their contributions. Other

responses included: gratefully, by listening, by applying my ideas, fine, favorably, valued, supportively, with pleasure, well, and professionally. Two participants indicated that their ideas were met with little or no response. One participant indicated that "outside of our team when individuals add to our load it is often met with disdain."

Norms. Questions seven and eight asked participants to recall their Professional Learning Community Team's norms and the extent to which their team follows the norms they have established. Of the nine teams, all had a norm that dealt with the meeting time for their Professional Learning Community. Some included a meeting end time as well. "We will meet at a specific time and place each week." Eight of the teams had a norm about respecting all members of the team. "Respect the differences within the group." Confidentiality was listed as an expectation for seven of the teams. "What we say will be held in confidence." Expectations for attendance and what to do if someone had to miss a meeting were included as a norm for six of the teams. "We expect attendance and notification if we aren't able to attend." Likewise six teams had a norm about staying on task during the meetings. "Get the job done!" Five teams had a norm about everyone having input and taking turns so that everyone had an opportunity to be heard without interruption. "Allow all to have input and consider everyone's input." Being prompt was a norm that was held by four teams. "Everyone is on time." Four teams had an agenda or list of concerns which kept the meeting focused. "What we will discuss is listed first so everyone knows our purpose for meeting." There were also norms about how to make decisions, four teams used consensus, two teams made decisions based on majority rule, and one team also agrees to disagree. "We will make decisions by listening to all ideas and majority will decide." "Vote by consensus and agree to disagree."

Of the 36 participants, there were three who could not recall all of the norms their team had established. One was new to the position, one said s/he had missed part of that meeting, and the other couldn't remember them all. With the exception of the person who didn't know any of the team norms, all other participants indicated that their team was effective in following the norms they had established. "We stick to the norms very well." However, when asked to recall a negative experience with Professional Learning Communities, one member said that "feeling uncomfortable when one or two people just want to vent and complain" was negative. Another said, "Occasionally our PLC meetings become burdened with negativity and are not productive. We have had trouble meeting on a regular basis this year as well, due to the inflexibility of group members." These are two examples of difficulties teams had following their norms.

Quantitative Survey Data

In Table 7 statements related to the impact of Professional Learning Communities on culture were presented. These statements received an overall mean rating of 1.81, which was below the upper bound (2.50) of the "Agree" category. Also, the mean scores for all of the statements within the area were at or below the mean criterion level.

Focus of Culture. Ninety-five percent (20) of the teachers agreed or strongly agreed with the statement: As a PLC, we have identified essential learning outcomes for our students. (Essential learning outcomes, also called power standards, are the course and grade level critical knowledge, skills, and dispositions that students are expected to retain long after the assessment is completed, that are applicable to multiple academic disciplines, and that prepare the student for success in the next grade/course.) Seventy-six percent (16) of the teachers agreed or strongly agreed with the statement: As a PLC, we

believe that all of our students will master the essential learning outcomes. A subgroup of 24% (5) disagreed. One-hundred percent (21) agreed or strongly agreed with the statement: As a PLC, our SMART goals are aligned to our school's SMART goals.

Collaborative Culture. Ninety-five percent (20) of the teachers agreed or strongly agreed with the statement: As a PLC, we have established norms (e.g., ground rules for team meetings, including holding each other accountable for student learning) to clarify how we will work together as a team. One-hundred percent (21) of the teachers agreed or strongly agreed with the statement: As a PLC, we abide by the explicit team norms we developed; as a PLC.

Culture-Wide Strategies. Ninety-five percent (20) of the teachers agreed or strongly agreed with the statement: As a PLC, we utilize the school-wide intervention pyramid (sequence of required interventions).

Culture of Support. Eighty-one percent (17) of the teachers agreed or strongly agreed with the statement: As a PLC, we receive feedback and support from leadership on our implementation of PLC concepts and practices. A subgroup of 19% (4) disagreed. Fifty-three percent (11) of the teachers agreed or strongly agreed with the statement: My school celebrates team progress toward the implementation of PLC concepts and practices. Forty-eight percent (10) of the teachers disagreed with that statement. Sixty-seven percent (14) of the teachers agreed or strongly agreed with the statement: My school celebrates team progress toward SMART goals for student achievement. Thirty-three percent (7) of the teachers disagreed or strongly disagreed with that statement.

Table 7 Quantitative PLC Survey Results 2008-2009 for Berkshire Elementary; Culture

Culture	Strongly Agree	Agree	Disagree	Strongly Disagree	Weighted Average
Identified essential learning outcomes	43% (9)	52% (11)	5% (1)	0% (0)	1.62
Believe our students can master these outcomes	24% (5)	52% (11)	24% (5)	0% (0)	2.00
Our SMART goals are aligned to our school's SMART goals	57% (12)	43% (9)	0% (0)	0% (0)	1.43
Have established norm rules for working as a team	57% (12)	38% (8)	5% (1)	0% (0)	1.48
Abide by the explicit team norms we developed	48% (10)	52% (11)	0% (0)	0% (0)	1.52
Open and honest about strengths and weaknesses	43% (9)	52% (11)	0% (0)	5% (1)	1.67
Utilize the school-wide intervention pyramid of interventions	29% (6)	67% (14)	5% (1)	0% (0)	1.76
We receive feedback and support from our leadership	29% (6)	52% (11)	19% (4)	0% (0)	1.90
My school celebrates team progress towards implementing our PLCs	10% (2)	43% (9)	48% (10)	0% (0)	2.38
My school celebrates team progress toward SMART goals	5% (1)	62% (13)	33% (7)	0% (0)	2.29

Interview Data

Status of Open Communication. When asked how they would describe the status of open communication on their team, participants had different views. On the Alpha Team one team member said,

I feel that if I made a suggestion [one member of the team] would look at me and nod and pretend like s/he's taking it into serious consideration, but depending on what his/her own personal opinion is about it, s/he might go away and not actually be receptive. Basically most of the time the other member is receptive.

Another team member said that the seasoned teachers on their team "have very embedded ideas about how things should be and often are not as open to suggestions from a [less experienced] teacher and think the [less experienced] teacher should listen to their suggestions." S/he said that was something that was frustrating, "working with two headstrong people who believe that their way is the best way." One team member said, "It depends on what it is, but if it's some things that have gone on here at [Berkshire], and

this is how it's been done, so this is how it's going to be." The last member of the team said,

I feel like people can suggest whatever s/he wants to. However, that doesn't mean that it's always going to be taken positively and accepted or implemented ... [One member] probably feels like s/he can say whatever s/he wants to say, but because it's not accepted by the others the majority of the time, I assume that's why s/he doesn't even bother.

"The third member that's come in new, that's brought tension, and I know the other two people feel like what's the point with that third person."

Improving Team Effectiveness. When asked about their ideas for improving the team's effectiveness, two teachers on the Alpha Team recommended removing one of the teachers from the team. One said, "[The PLC] needs to be split up as a team." The other commented concerning, "Removing the weak link." When asked to compare their current team to past teams, one teacher on the Alpha Team said,

This team is strained compared to the one that we had last year and even the one before that. Like I said, there's one teacher who doesn't really want to be here, and it's no fault of [his/hers] or ours. [S/he] just doesn't want to be here so [s/he] doesn't always play fair. And it's really hard when one person won't play when you're on a team of three pretty much.

One of the other teachers on the team said,

This is the worst. It's not even the school stuff, a lot of times I feel personally attacked, never to my face, but to [my teammate]. [S/he] can say what [s/he] wants about me teaching, I don't need [him/her] to validate me, I don't need approval from [him/her], but if you're going to talk about my personal life and you don't even know me, that's not appropriate for the work setting that we have here. It makes it really, really hard to sit in a meeting with [him/her], you know, to deal with that, it's just hard.

Frustrations. When asked what was frustrating about being a member of the team, one Alpha Team member said, "It's frustrating in [this PLC] in just the terms of the dynamics of the personalities. That's frustrating sometimes you don't feel accomplished." A fellow team member said,

oh God, the feeling of never accomplishing anything, never getting anything done, and never feeling like, 'Yay, that was really productive!' or feeling really good about anything. I feel really bad about myself when I leave these meetings. I feel bad about my grade level. It's depressing. It's just the team energy, like last year it was fine. It worked, you know, but complete breakdown this year.

On the Beta Team, one member said, "They are all trying to feel their way and I think they're unsure of themselves ... I think sometimes they think should I or am I going to look like I don't know what I'm doing." The other members of the team were positive in regards the status of open communication on their team. "I feel like they listen ... We're pretty open; we get along really well."

Everybody on the team has the same personality: 'Well, what do you think about it?' 'Well, let me hear what you thought.' You're not afraid to say something for fear of being shot down or looked at like you're insane.

We do a really good job of not only communicating, but taking into consideration everybody's ideas and taking everybody seriously. Everybody listens and I just think we all get along really well so that really helps when it comes to making big decisions.

Exceeding Expectations. When asked to give an example of where their team exceeds an expectation or goal, one teacher on the Beta Team said,

I just think we're really flexible. I just think that one of the hardest parts of our job is all pressure and things that are being put on us at one time and ... last year as my first year at this school I didn't feel near the pressure, just different things being asked to do this and that as I do this year. But I think that we're just really good about being flexible and you know doing whatever it takes for the kids and that's what we've been told from the administration, too.

Another teacher on the Beta Team said they exceed expectations by "getting along and supporting each other."

Positive Aspects. When asked what the most positive aspect of being a member of their PLC team was, one member of the Beta Team said

I just enjoy coming to work, you know. I've worked with teams where I don't like the people I work with and I'm like ugh, I don't want to have to be on their team, and it's just nice knowing that we really get along and we agree on a lot of things.

It's always a very respectful environment, and that's not always the case whether you talk to somebody at another school or other teams. I've been in the opposite situation, and that's just a really good feeling, just to know that you really feel like they care about you.

Another member of the Beta Team said, "They cooperate very well – they talk and listen to each other very well. They make everyone feel like they're a vital part of [the team], and there's food." What was positive for another teacher on the team was that "when we have a job to do, all three of us can work together to get it done, instead of just one person having to do it." Another teacher seconded those comments, saying that "our ability to work together – I think we are able to pool our resources when we need to" was positive.

Comparisons with Previous Teams. When asked to compare this team with ones they had worked on in the past, one Beta Team member said,

This team is much less stressful than the ones I have worked on in the past. Whereas this team is learning and probably a lot of the time trying to figure things out and really get things done, the other team was so focused. You could hardly breathe. It was stressful, and it wasn't as enjoyable. It was efficient and it was effective, but part of being without kids and working with your colleagues to me should be that it's enjoyable, that you get to enjoy being with your colleagues and sharing that knowledge, and it being an open exchange. Not thinking about every word you are going to say and 'is this going to piss somebody off?'

Emergent Themes

Other themes emerged from the data through the process of coding; these new categories were established when common terms were mentioned by four or more participants and were identified as emergent themes. Emerging themes included benefits, roadblocks, and impressions. These data did not fit well with the original research questions, but helped to describe the feelings of the participants about Professional Learning Communities and also helped to inform the recommendations to the school regarding its collaborative culture.

Benefits

Survey Data

One of the questions on the survey asked participants to identify the benefits of Professional Learning Communities. The majority of participants (69%) said that the opportunity to share ideas and collaborate was a benefit of Professional Learning Communities. "PLCs give teachers an opportunity to collaborate and get professional advice from colleagues." Six participants (17%) said that because of Professional Learning Communities, teachers could improve their practice. "Teachers (professionals) are coming together to improve the quality of our teaching." Similarly, six participants (17%) said that the opportunity to build relationships, feel like part of a team, and tackle isolation among teachers was a benefit to Professional Learning Communities. "They might force the lone wolf type to collaborate with his/her colleagues." Five participants (14%) said that being part of a PLC gave teachers an opportunity to support one another. In addition, five participants (14%) said that students benefit from the work that is done in Professional Learning Communities. "Students benefit because they are getting the best of all the members of the team not just their specific teacher's best." Five participants (14%) attributed these benefits to the structure of Professional Learning Communities. "They provide a structured venue for teachers to collaborate and support each other."

Quantitative Survey Data

In Table 8 statements related to the theme of benefits were presented. This theme received an overall mean rating of 2.06, which is below the upper bound (2.50) of the "Agree" category. Also, the mean scores for all of the statements within the area were at

or below the mean criterion level. Seventy-one percent (15) of the teachers agreed or strongly agreed with the statements: I am a better teacher because of my work with my PLC; my students are learning more because of my work with my PLC. Twenty-nine percent (6) of the teachers disagreed or strongly disagreed with those statements. Ninety percent (19) of the teachers agreed or strongly agreed with the statement: The PLC process has the potential to provide a more supportive environment for teachers. Seventy-five percent (15) of the teachers agreed or strongly agreed with the statement: Time spent with my PLC will save me time overall. Twenty-five percent (5) of the teachers disagreed or strongly disagreed with that statement. One teacher marked that s/he did not understand the statement.

Table 8 Quantitative PLC Survey Results 2008-2009 for Berkshire Elementary; Benefits

	Strongly	Agree	Disagree	Strongly	Weighted
Benefits	Agree	, i.g. c c	2.008.00	Disagree	Average
I am a better teacher because of my work with my PLC	14% (3)	57% (12)	24% (5)	5% (1)	2.19
My students are learning more because of my work with my PLC	14% (3)	57% (12)	24% (5)	5% (1)	2.19
PLCs can provide a more supportive environment for teachers	29% (6)	62% (13)	5% (1)	5% (1)	1.86
Time spent wtih my PLC will save me time overall	30% (6)	45% (9)	20% (4)	5% (1)	2.00

Roadblocks

Survey Data

When asked if there were any roadblocks they encountered when implementing Professional Learning Communities, over half of the participants (53%) said that time was the biggest roadblock. For non-classroom teachers, it was finding a time for everyone on their team to meet. "Time is the biggest factor. It often is difficult to set aside a time for everyone to meet. This, coupled with the time constraints of most folks would be the only roadblock I can see." Another wish for non-classroom teachers was to

have more time to meet with job-alike teachers in the district. "There is not enough time to meet with teachers from other schools." For some, it was having enough time to do their job because some of their planning time was used up to meet with their Professional Learning Community. "The only roadblock that I see is that PLC work limits the amount of time I have to prepare materials for my own class." One participant specifically mentioned the early release days for the county which are devoted to Professional Learning Community work, but none of the early release days are devoted to working in your own classroom. For others it was having enough time within the PLC meeting to accomplish their team's goals. "Time is the biggest roadblock, just having enough time to get things done."

In addition to issues with time, clarity on the purpose of Professional Learning Communities, lack of training on the PLC model, and robotic teaching were mentioned as three other roadblocks. Some participants (8%) said when team members were not clear about the purpose of Professional Learning Communities it was a roadblock. "I think the main roadblock is understanding what type of information needs to be shared and discussed during the PLC vs. the grade level meeting." "We're not always clear of the objectives, and the definition of what we are to do seems to frequently change." "Teachers who have had little or no PLC training or experience. I feel like they believe they are in this alone, their students are 'their students' and they don't trust anyone else to teach them." One participant said that having to teach too similarly was a roadblock. "Roadblocks are being asked to teach too similarly to each other. It takes away from individuality in the profession." Another participant said that team members who were

not willing to share were a roadblock to PLCs. "Yes, I think sometimes not everyone is willing to share and collaborate. It puts things at a standstill sometimes."

Interview Data

Alpha Team. When asked what was frustrating about his/her team, a teacher on the Alpha Team said that his/her team exceeded in "complaining, being negative, and ripping [things] apart, [but] other than that no." S/he said his/her team failed in sharing the workload. "All the responsibility falls on me and [one other teacher on the team]. The other [person doesn't] volunteer to do it, but yet s/he's going to complain about it the entire time you do it."

Beta Team; Purpose of PLC. When asked to give an example of where their team exceeds an expectation or goal, one member of the Beta Team said,

I think at this point we're still struggling to understand what the PLC is about and what we're supposed to be doing and trying to keep from doing something during the PLC that we're not supposed to be doing, but we need to do anyway, so I think it's still trying to get a good idea of what the purpose is. I think it's way too soon to expect that you would exceed an expectation, at this point if you've met every week, that's like 'Woo!' That's big.

"It's trying to determine the purpose of the team and my purpose in the team that's frustrating."

When asked to identify a way in which his/her team failed to meet an expectation or goal, one member of the Beta Team talked about why his/her team failed at the primary goal of a PLC. The roadblock s/he addressed was that not enough time had elapsed in order for the team to have evolved into what a PLC should be "I think we're at the learning stage of discovering how we can benefit [from the PLC]."

Unclear on Expectations. Another teacher on the Beta Team said,

I feel a little bit like I'm kind of in a lake with a rock tied to me right now, so I don't really know what's expected of me. I'm at a new school, all the procedures

are new, all the curriculum is new, and I have no idea if I'm meeting End of Grade standards, I don't really know, our whole team is new, I would say I have no idea if we're really exceeding anything or if we're just kind of floundering to stay up.

The participant gave two examples where the team was not meeting expectations because the team didn't know what was expected,

We didn't fill the cabinet up front with student work, because we didn't know we were supposed to, and as far as getting this field trip together that we're getting ready to go on in about a week, I guess there's a one-month deadline which none of us knew about, so we failed those two expectations.

Another teacher on the team said, "I think sometimes knowing what it is we're supposed to be doing" is an area in which their team fails to meet a goal or expectation.

Inexperience of Team. When asked to compare this PLC to previous teams, one Beta Team member said, "This one's a very inexperienced team, at this grade level and at this school. The one team that I had been at before, the one guy had been at the school for five years and the other woman had been there for four years or something so they both had a lot more experience than I did, whereas this one, we're all in our first or second year." Another fellow Beta Team member compared this team with the one from the previous year,

It's harder this year in that [one of my team members] is new and sometimes I forget that [s/he] is new ... and that's a struggle. It's nice to have somebody that has experience that's on the team that you can rely on instead of having to feel like you're the one that has to be relied on.

Another Beta Team member saw the team's inexperience as a frustration,

There are some things that we were expected to know how to do or whatever, do it the right way, but we don't know just because we're all kind of in the same boat, which is where we just haven't been around here long enough.

One team member said,

I think they're just individually struggling so much, you wish you could be doing more. I wish we could be accomplishing more in terms of instruction. I feel like they could actually have good conversations about strategies and things you could do, but I don't think that they're at a place where they can get there yet.

Too Many Assignments. Another roadblock seen by one member of the Beta

Team was too many assignments coming from above which diminished the team's ability
to use PLC time to talk about things that would benefit them,

They're probably giving us too much to do. There is too much coming down going, 'do this in your PLC,' 'do this in your PLC.' You don't have that time to mold it to what would probably be best for your team because you've got these expectations coming down that 'we have to talk about this' and you feel like since you're sending the minutes, it's like oh it's bad if we talk about something else, so it's kind of like Big Brother.

One teacher said, "Lately, all we talk about [in PLCs] is writing tests and getting kids into reading groups for tutoring since Thanksgiving. I feel like we've beat it to death."

Another team member echoed the sentiment about too many assignments,

There's too much mess we have to do. It is hard. There's so much stuff. It's not just the stuff we've got to do in PLC — it's all the other e-mails, and the forms, and the phone calls, and you know people saying 'do it now,' 'do it now,' 'do it now.' It's difficult to just take a moment and say we have a PLC and we can only do this little thing right here in this PLC. That's hard.

When asked if the structure of a PLC supports their team's efforts to collaborate, this Beta Team member said,

Yes and no. You know this year has seemed like so much more stuff, so much more I want you to do it now, you know online courses, a new reading curriculum, there's so much more that I feel like I'm expected to do that it's almost like 'Oh my God are you serious', that's what I feel like saying. Last year it didn't seem like as much.

Improving Team Effectiveness. When asked about their ideas for improving the team's effectiveness, two teachers on the Beta Team suggested having another time to discuss things so they didn't have to use their PLC time. One said, "Sometimes it turns into other types of discussions, like the other day when we had one and it was we were being trained for the writing test, and I'm sorry, that's not a PLC, that's being trained for

the writing test." When asked if the structure of PLCs supported their efforts to collaborate, they said,

I definitely think what's intended for the PLCs to be is supporting how we're supposed to collaborate. What I see a lot of times though are other things that are like we need to meet because we need to talk about such and such and then that kind of gets in the way of what our PLC should really be. And different people have to show up for different reasons to talk to us and to me that should be a separate meeting. I don't know if I'm just being selfish, but to me that should be okay 'Can we have a meeting to discuss this?' Not 'Can I butt into your PLC so we can talk?' So it's not the way it's structured — I think that not everyone's on the same page, so they may not see that we really need this time together to do what we need to do.

Another teacher said,

I think it would be easier if we were just allowed to use the time to plan for things that are going on in the classroom, rather than, it seems like a lot of it is kind of busy work, and sometimes it would be nice if we could just go in there with our teacher editions and plan. So we could stay on track with each other better. As a new teacher, I'd like to know a little about what we have to teach.

One member of the Beta Team recommended pairing the newer team with a strong leader. "[The team] lacks a leader, bless their hearts, but I really do just feel bad. That may be a struggle in its own sense."

Impressions

Survey Data

When asked to describe how they feel about their Professional Learning Community experience, participants had different impressions. More than one-fourth of participants (28%) said that Professional Learning Communities were beneficial, valuable, or important. "I feel it has been beneficial and valuable." Six participants (17%) said that Professional Learning Communities were good. "Good, it has been helpful and enlightening to see how other teachers think. Planning together keeps me focused." Similarly, six participants (17%) said that PLCs were positive. "I like the idea, and I think

it is positive in helping one another. My team members are supportive and caring. What more could you ask for?" Five participants (14%) said that their work in Professional Learning Communities was helpful. "I feel it is a helpful time and look forward to meeting with my PLC to help me become a better teacher." Five participants (14%) thought that with more training or a different focus, their Professional Learning Community could be more effective. "I am hopeful that I will gradually learn more about the PLC and how to participate effectively." Some participants (11%) did not think that the Professional Learning Community model changed anything about the way that their team works together. "I think the makeup and attitudes of the group members will ultimately decide how well the PLC functions as a whole." "I'm indifferent. I think we would have met as a grade level regardless, but these force us to meet." Four participants (11%) said that being a Professional Learning Community team helped them build relationships with their co-workers. "It has given me the opportunity to get to know my colleagues better and understand how we help and encourage each other day to day." "I think that it has brought our team closer together."

CHAPTER V

DISCUSSION

Summary

This study explored the perceptions of 36 elementary classroom teachers, exceptional children's teachers, and support staff members. An open-ended survey, interviews, and observations were conducted to determine the participant's beliefs regarding the impact of the implementation of Professional Learning Communities on the collaborative culture at Berkshire Elementary School. Quantitative survey data were utilized to generally describe the opinions of the classroom teachers regarding the collaborative culture.

The goal of this study was to investigate the impact of the implementation of Professional Learning Communities on the roadblocks to collaboration identified in 2005 by the teachers at Berkshire Elementary and to determine how addressing these roadblocks impacted the collaborative culture at Berkshire Elementary (Lujan, 2005). The intended goal of this study is to contribute to the improvement of collaborative culture at Berkshire Elementary and at other schools that may be considering implementation of the Professional Learning Community Model.

Data obtained from surveys, interviews, and observations were analyzed against five inductive themes — time, isolation, disagreement, collaboration, and culture — and three deductive themes — benefits, roadblocks, and impressions — that aligned with the

original research questions. According to the majority of the participants, Professional Learning Communities are made up of groups of educators who collaborate or work together toward a shared goal.

Conclusions

The focus of study was to determine what the effect of the implementation of Professional Learning Communities was on roadblocks to collaboration among teachers. If roadblocks were addressed, how would that affect the collaborative culture? In particular, the study aimed to reveal how the implementation of Professional Learning Communities at Berkshire Elementary allows/disallows for sufficient time for teachers to collaborate, alters the isolated nature of the profession, and impacts conflicts that occur when divergent points of view were present.

First Hypothesis

The first hypothesis argued that the implementation of Professional Learning Communities would address time restraints as a roadblock to collaboration. DuFour and Eaker (1998) confirmed that time must be built into the school day and school year specifically for collaboration.

The findings in this study indicate that the teachers and certified staff members at Berkshire Elementary reported the implementation of Professional Learning Communities allowed for sufficient time for teachers to collaborate. All participants in the study indicated that their PLC team met on a regular basis, and the majority indicated that their team met more or that their meetings were more focused, structured, or effective than they were before PLCs were implemented. One interviewee echoed the

sentiments of the staff members in 2005 who said that when meetings were not required, they wouldn't keep happening.

Data Summary

All grade level PLCs reported that they met on a weekly basis, with all meeting as needed outside of the regular meeting time. The elective team met weekly and informally throughout the week. The Exceptional Teacher's team met monthly and was often in IEP meetings together. The support staff team met every one to two months and as needed outside of scheduled meetings. Almost half of the participants agreed that there was sufficient time to collaborate within teams. Twenty-two percent indicated that sometimes there was sufficient time and others times not. Twenty-eight percent indicated that more time was needed. One Alpha Team member indicated that the PLC system of mandatory meetings creates more time for collaboration, and the meetings were set up to focus more on curriculum instead of procedural items. On the quantitative survey, all of the classroom teachers responded that their PLC team met weekly. Most of the classroom teachers reported that their PLC meetings typically last 30 minutes to an hour.

Most of the participants indicated that their team met more or that their meetings were more focused, structured, or effective than they were before PLCs were implemented.

The Alpha and Beta team rarely experienced conflicts with their meeting times.

During observations, they never outright cancelled a meeting. They were always rescheduled (with the exception of a snow day). The participants responded that their teams would reschedule the meeting if there was something pressing to discuss. There

were occasions in which one or two members of the team were absent, but the team had been informed ahead of time.

Second Hypothesis

The second hypothesis argued that the implementation of Professional Learning Communities would address the issue of isolation among teachers as a roadblock to collaboration. DuFour and Eaker (1998) indicated that PLCs require teachers to develop a shared mission, vision, and goals and to commit to guiding principles that articulate school beliefs. It was also found that the implementation of Professional Learning Communities alleviated isolation by forcing teams to meet on a regular basis, promoting collaboration, and helping teachers build relationships. In addition, the majority of teachers reported that they felt that PLCs provide a more supportive environment for teachers.

Data Summary

In the open-ended survey, the majority of participants indicated that PLCs helped to alleviate isolation because they force teams to meet on a regular basis, promote collaboration, and help teachers build relationships.

One Alpha Team member described it as positive that team members sat down and got together every week, which they didn't think would keep on happening every week if team members had a choice. Another Alpha Team member said that it was positive that the team was on the same page in terms of pacing for math instruction. They said it was really helpful that they were all teaching the same thing at the same time when it came time to rearrange the classes for remediation and enrichment every other week.

One Beta Team member described the fact that sometimes s/he became "this person in these four walls and you find it difficult to see anyone outside of the walls."

They recalled their experience in a former school saying that every "teacher was its own entity and nobody helped anybody."

Responses from the classroom teachers on the quantitative survey distributed by the High Five Regional Partnership for High School Excellence that dealt with independence indicated that most teachers agreed or strongly agreed with the following statements: As a PLC, we use team-adopted common standards of success to evaluate student learning; as a PLC we have adopted SMART goals that we are working to achieve.

Third Hypothesis

The third hypothesis was that the implementation of Professional Learning Communities would address the roadblock of divergent views among teachers. DuFour and Eaker (1998) indicated that teams must establish norms by which they will operate, goals that they wish to accomplish, ways to assess the effectiveness of their team, and a process by which to resolve conflicts that occur. In addition, teachers must be willing to engage in discussions where conflict arises and must be able to come to a shared consensus.

It was also found that with the implementation of Professional Learning

Communities, the majority of teachers indicated that their PLC had developed a process
to effectively resolve conflict. In addition, the majority of teachers reported that their

PLCs had come to a consensus to identify essential learning outcomes, standards to

assess learning, SMART goals, and norms, and to develop common formative assessments.

Data Summary

When asked on the open-ended survey if divergent points of view occur amongst their PLC team, the majority of participants indicated that they did occur. In order to resolve those conflicts, participants said their team comes to a consensus, decides what is best for the children, agrees to disagree, takes a majority vote, or the leader or senior member of the team makes the final decision.

Responses from the classroom teachers on the quantitative survey distributed by the High Five Regional Partnership for High School Excellence that dealt with the disagreement indicated that most teachers agreed or strongly agreed with the following statements: As a PLC, we have a process to effectively resolve conflict; as a PLC we use sound, structured decision-making processes.

One member of the Beta Team indicated that whether or not one collaborates in one's team is dependent on the members of the team. S/he said that there were "unspoken things that are going on in the meeting" and "most people want to avoid [conflict by not saying when a norm is being broken]."

Overarching Hypothesis

The overarching research hypothesis was that if the roadblocks of time, the isolated nature of the profession, and divergent points of view were addressed, that the collaborative culture would improve. Through surveys, interviews, and observations, the researcher found that although the roadblocks to collaboration identified in 2005 had been addressed by the implementation of Professional Learning Communities,

collaboration among teams did not function in an ideal way. The Alpha and Beta Teams met regularly and had norms in place to handle conflict, but in their meetings they collaborated in a superficial way focusing on housekeeping items. It was only outside of team meetings, that two of the Alpha Team members reported that they would share teaching ideas with one another. On the other hand, the teachers on the Beta Team reported that they would share ideas regularly outside of their regular meeting time. Unfortunately since these collaborative interactions were held outside of the PLC meeting, the support staff member and the EC teacher did not benefit. After the implementation of an agenda, those discussions started to take place more during the PLC time and the support staff member and the EC teacher were able to participate.

Data Summary

The data summary on the overarching research question is organized into four areas: collaboration, culture, benefits, and impressions. The first two themes were inductive codes and the last two were deductive codes which emerged from the data.

Impact on Collaboration. In the open-ended survey, most of the participants indicated that they collaborated in their PLC and most recalled collaborating when asked to identify a positive experience they have had in their PLC team.

Responses from the classroom teachers on the quantitative survey distributed by the High Five Regional Partnership for High School Excellence that dealt with collaboration indicated that most teachers agreed or strongly agreed with the following statements: As a PLC, we document and monitor our PLC processes so that we can continue to improve; as a PLC, we systematically gather evidence about the impact of various instructional strategies on student learning; as a PLC, we have made a conscious

effort to align our instruction to achieve our essential learning outcomes; as a PLC, we are identifying and utilizing increasingly more effective instructional strategies; as a PLC, we require every student who has not yet mastered the essential learning outcomes to participate in additional learning opportunities every few weeks; as a PLC, we have developed a variety of common formative assessments using different approaches; as a PLC, we have aligned our common formative assessments to the essential learning outcomes; as a PLC, we examine the results of our common formative assessments to identify students who need additional learning opportunities; as a PLC, we examine the results of our common formative assessments to determine which instructional practices are most effective in achieving student mastery. The majority of teachers indicated that as a PLC, they administer team-developed common formative assessments once a quarter.

The Alpha Team's SMART (specific, measurable, attainable, results-oriented, and time-bound) goals were 1) to increase End of Grade math scores in math and reading and 2) to develop a common vocabulary list for the grade level. The reading goal was being addressed by tutors coming into the school. The team utilized a variety of assessments and a schedule of remediation and enrichment in order to work toward the math goal. They give a common assessment as a pre-test and post-test, and they give a mid-week check each week to determine how to group students for remediation and enrichment that they do every two weeks as a team. According to two of the teachers on the team, the third teacher is inconsistent in regard to the assessment tasks, in terms of completing them at all, completing them on time, or reporting the results. The teachers utilize the results of the pre-test to determine on what they need to focus their instruction. The teachers utilize the results of the post-test to determine student grades. The team does not

discuss the results of pre-tests and post-tests in their PLC. In terms of their vocabulary goal, some of the time for their PLC meetings is used for training from the vocabulary committee. Otherwise, one team member reports that the team does not discuss vocabulary at all, and it was decided at the beginning of the year that the discussion would be tabled until the end of the school year.

The Beta Team's SMART goal was to raise End of Grade test scores in math. To address the goal, the Beta Team discusses math instruction in three-week periods. They give common assessments at the beginning and end of every three-week period and remediate in their own classrooms. Pre-tests are utilized to help determine pacing for math instruction.

For both teams, collaborating was seen as an area where they could improve. A team member who serves on both teams described the meetings as times when the teams discussed what needed to be done for the week rather than a time for talking about specific interventions, strategies, or sharing. On the Alpha Team one member said that it feels like it is a waste of time to share since no one would implement the ideas, another said that most people won't willingly share because they had to "scratch and claw" to get there. On the Beta Team, one member said that even though their team shared ideas, they could collaborate at a higher level in the sense of talking about certain activities. Another said that it would be helpful if the team coordinated lessons in the way certain things were taught so they were all teaching similar concepts a similar way. The support staff and EC members of the teams indicated they are able to know more about what is going on with both grade levels in terms of what they're teaching because of their participation in the grade level PLCs.

According to both teams, sharing of teaching ideas happens between individuals on the team outside of the PLC meetings. Participants indicated that if one asks for assistance, materials, or ideas, every member is willing to share. In interviews, most team members indicated that they turn to their colleagues for ideas for instruction.

In meetings, the Alpha Team was observed participating in superficial collaboration. They spent their meetings dealing with tasks related to math, reading, writing, field trips and fundraising, responses to requests received via e-mail, End of Grade tests, tasks related to support staff members on their team, and work on their vocabulary goal. They discussed dates of assessments and topics for math instruction. They provided information to the reading tutor identifying students who needed to be served and their schedules. They mentioned training for writing. They discussed details of field trips and fundraisers. Other than one instance where the reading tutor asked another teacher for advice for how to prepare students for the End of Grade Reading test, the discussion about the End of Grade tests centered on which materials the school administration had purchased for test preparation. The team received training from the vocabulary committee during their meetings. In addition they were supposed to discuss chapters out of a handbook regarding to science notebook implementation, but one team member was not prepared so the discussion was dropped. The researcher did observe several instances of collaboration between individual classroom teachers on the team and the support staff member, i.e., they would discuss results of assessments for specific students or the support staff member would ask for the opinion of the teachers about aspects of planning for their groups.

In meetings, the Beta Team spent time going over the tutoring schedule with the reading tutor and discussing assessments they had to administer to identify students to be served and also to interpret the benchmarks administered by the reading tutor. They discussed how to fill out a spreadsheet for the other tutor. They also received training from the vocabulary committee during their meetings and from the associate principal on test administration. The support staff member shared a summary of an assigned reading they were supposed to do related to vocabulary implementation via science notebooks. They discussed the schedule for scoring writing assessments and were told they could score them during their PLC time in addition to time within the school day provided by the administration. In another meeting they decided to score tests individually instead of at an assigned time. During one meeting they were provided an explanation about the purpose and due dates of success plans.

The Beta Team developed common assessments during their meetings and discussed pacing of mathematics instruction. The teachers talked about the standard course of study and determined which topics needed to be presented during each unit.

During one meeting a teacher on the team shared a reading test-taking strategy and shared a packet that s/he had developed to use with his/her students to prepare them for the reading test.

During one meeting, the associate principal led a discussion about what should and should not go on in a PLC. The teachers commented that their PLC had been taken over by the writing test, other tasks, and with people coming in to talk with them or train them. The associate principal asked what the administration could do to help and the teachers responded that they could provide more time or fewer projects to do during their

PLC. The associate principal said that their team was already given more time than other schools in the district and that they would have to have an agenda so they could discuss planning in-depth so they could be on the same page. The associate principal recommended that they could appropriately handle certain issues in a memo when possible and limit the discussion about certain tasks to only the time that was necessary to complete them. In future meetings, the team had an agenda which they followed.

Impact on Culture. In the open-ended survey, participants indicated that they perceive members of their team as respectful, friendly, professional, or work well together. Almost half of the participants indicated that their team met outside of school socially. Participants think their teammates see them as helpful, flexible, task-oriented, sharing, or a team player. According to participants, team members respond receptively, acceptingly, positively, or by sharing their opinion.

Teams developed norms dealing with meeting time, respect, attendance, staying on task, everyone having input, being on time, having an agenda, and resolving conflicts. On the quantitative survey most teachers agreed or strongly agreed that their team had established norms and abided by the explicit norms they developed.

On the quantitative survey distributed by the High Five Regional Partnership for High School Excellence that dealt with the school culture, responses from the classroom teachers indicated that most teachers agreed or strongly agreed with the following statements: As a PLC, we have identified essential learning outcomes for our students; as a PLC, we believe that all of our students will master the essential learning outcomes; as a PLC, our SMART goals are aligned to our school's SMART goals; as a PLC, we utilize the school-wide intervention pyramid; as a PLC, we receive feedback and support from

leadership on our implementation of PLC concepts and practices; my school celebrates team progress toward SMART goals for student achievement.

On the quantitative survey, most teachers agreed or strongly agreed with the statement: As a PLC, we are able to be open and honest with each other about what we do well and not so well. On the Alpha Team the status of open communication was described in the following ways: one member will nod and pretend like s/he is taking my ideas into consideration and the other member is receptive; the other members of his/her team are seasoned teachers and they are not as open to suggestions from a less experienced teacher; if it's something that's been done a certain way in the past, this is how it's going to be; it's not always going to be taken positively and accepted or implemented. The team was described by members as strained. The dynamics of the personalities on the team were described as frustrating and the team energy was described as depressing by another member.

On the Beta Team, the status of open communication was described in the following ways: we're unsure of ourselves; we're pretty open, we get along really well; we do a good job taking into consideration everybody's ideas; we're really flexible. One team member said that s/he enjoyed coming to work because his/her team really gets along. S/he described his/her team as respectful. Another member described them as cooperative. Also, the three members can work together to get it done, instead of the responsibility lying with one person. One member described the team as less stressful than ones s/he had worked with in the past.

Emergent Themes

Other themes emerged from the data through the process of coding; these new categories were established when common terms were mentioned by four or more participants and were identified as emergent themes. Emerging themes included benefits, roadblocks, and impressions. The data represented by these three themes did not fit well with the original research questions but reflects the opinions of the participants on Professional Learning Communities and is used to provide recommendations for the improvement of the collaborative culture at Berkshire Elementary School.

Benefits

In the open-ended survey, the majority of participants saw the opportunity to share and collaborate as a benefit to PLCs. Participants also said that PLCs allowed them to improve their practice, build relationships, support one another, and benefit students.

Responses from the classroom teachers on the quantitative survey distributed by the High Five Regional Partnership for High School Excellence that dealt with benefits indicated that most teachers agreed or strongly agreed with the following statements: I am a better teacher because of my work with my PLC; my students are learning more because of my work with my PLC; the PLC process has the potential to provide a more supportive environment for teachers; time spent with my PLC will save me time overall. *Impressions*

When asked to describe their PLC experience, 28% said they were beneficial, valuable, or important; 17% said they were good; 17% said they were positive; 14% said they were helpful; 14% thought they could be more effective; and 11% thought they

helped them build relationships. Four participants (11%) said that PLCs hadn't changed anything about how their team worked together.

Thoughts of the Researcher on the PLC Model as Implemented by Berkshire

Comparing the collaborative culture in 2005 to the collaborative culture in 2009, there are definite improvements. In 2005, teams were meeting on an inconsistent basis and based on observations spent a significant amount of their meetings discussing superficial things such as field trips and fundraisers. In 2009, teams were meeting consistently, had norms in place to structure the meetings, had goals and assignments from the administration to accomplish during those meetings, and to some extent shared teaching strategies and to a greater extent discussed curriculum content and planned common assessments. Though the collaborative culture in 2009 was still not the idealized version dreamed about by the researcher as a newly hired teacher, it had improved by leaps and bounds in the four years that had passed between studies. Is PLC the answer for everyone? Maybe, maybe not, but it seemed to make a difference at Berkshire Elementary and the potential is there for continued improvement.

Demographic Information

When the data were analyzed against demographic information, no trends stuck out. There was not a significant difference in the opinions of the participants when data were filtered on the basis of gender, race, years of experience, or educational attainment. Demographics in this study served to describe the participants generally and provide information to readers who might want to compare the population in this study with their own.

Implications

The implications of this study are that the implementation of Professional Learning Communities has positively impacted the collaborative culture at Berkshire Elementary. Teachers have been provided with shared planning time which they have utilized to meet together on a regular basis and come to consensus on various aspects of curriculum and instruction. However, Berkshire Elementary School may be able to make changes to increase the effectiveness of their collaborative community even further based on the results of this study. In speaking with the participants and in analyzing the data, there are several recommendations to make that happen. These recommendations are not only applicable to the community established at Berkshire Elementary but also could be utilized by other schools exhibiting similar roadblocks.

A summary of the roadblocks identified by participants points out several roadblocks to the implementation of Professional Learning Communities at Berkshire Elementary. Those and others identified by the researcher are the basis for the recommendations which follow. In the open-ended survey, time was considered a roadblock by over half of the participants, specifically, finding a common time to meet for non-classroom teachers, time for individual planning within the school day and on early release days for classroom teachers due to PLC work, and having enough time to get things done within their PLC meeting.

On the Beta Team, the main roadblock was described by many members as an uncertainty of what they were supposed to be doing during PLC and understanding what PLC is about. They responded that this issue related to the fact that theirs was an inexperienced team with teachers in their first or second year at the school. Another issue

for the Beta Team was the amount of tasks that were being assigned to be completed. The members lamented that they wanted to be able to use their PLC time for planning as a grade level. In addition to tasks, they also had people showing up for different reasons to talk to them which used up their time.

On the Alpha Team, one member expressed his/her frustrations with the team, saying that other members were negative and complained. S/he also described the fact that the workload tended to fall on two members of the team. Another team member felt that one of the other team members didn't really want to be there, and even though it wasn't anyone's fault, s/he just didn't always participate since s/he didn't want to be there in the first place.

Recommendations

In interviews, observations, and surveys, one issue that kept surfacing was that individuals from outside of the PLC team would come into PLC meetings with their own agenda. PLC time needs to be kept sacred because it is the time when everyone on the team has committed to come together to work toward the shared goals they have established in their team. The sacred nature of PLC time needs to be communicated by the administration and needs to be included in the norms of all PLC teams. When someone asks to be included on the PLC agenda, the team needs to figure out first of all if what that person wants to discuss is relevant to their team goals. If not, then s/he should be asked to schedule a separate meeting time with the team. If so, s/he should be made aware of the teams norms for meetings, especially if a time limit will or should be assigned to him/her. It might be a good idea for the team to have a predetermined time that they will have available in case these requests come up, i.e., an open meeting time

the first Wednesday of the month when they know they will be meeting with people outside of their PLC to discuss matters that do not relate to their PLC goals. This would also be a time that could be utilized for things like test administration training.

Another recommendation has to do with the types of things that are discussed in PLC meetings. As recommended by the associate principal to the Beta Team, things that can be handled in a memo should be handled in a memo. Sometimes a task that needs to be completed by the team does not require that the team sit around a table and complete it. If something can be handled outside of the meeting via e-mail or a similar method, it increases the amount of time within the meeting that can be used for deep discussions about planning, instruction, and assessment.

In the Beta Team, it was a common concern that team members felt they did not know what was expected of them during their PLC time. One recommendation for this is to assign teams of limited experience with a more experienced leader and clearer goals. On that team for example, the support staff member had experience as a grade-level teacher in that same grade level and had been at the school for longer than the grade-level teachers on the team. A more experienced leader could help the team to make and stick to an agenda.

In the Alpha Team, it was a common concern that one of the members was not a team player and did not want to be there. In a school that is already using Professional Learning Communities, the hiring team or the administration needs to make sure that potential additions to the staff can buy into the process. In this particular instance, the newest team member was assigned to the school, but it is still important to make sure that new team members understand the norms established by the team and are willing to go

along with them or are able to work with existing members to refine the norms to something that all members can agree upon. Although no one can be forced to buy into PLCs, expectations for performance can be expressed and teachers can be held accountable to those expectations. Also, training for new staff members needs to be provided (even if they have already received PLC training in other schools) so that everyone is on the same page about how PLCs operate within the school.

On the Alpha Team there were issues with team members completing tasks in a timely manner. Teams should conduct a mid-year review or quarterly review where they discuss how their team is working, and if there are issues that need to be addressed, they need to revise the norms to reflect what needs to be added so that the team operates more effectively. During mid-year conferences between individual teachers and administrators, the teachers were asked to reflect on their PLC's strengths and weaknesses, and that information was utilized by the administration to address concerns and offer support. This needs to be done not only on the administrative level, but within the team as well. Both teams expressed that there could be improvement in the area of sharing teaching ideas. Part of the team norms could be that all members will share one teaching idea during each meeting, or something to that effect.

Among non-classroom teachers, it was found that participants wished they had shared planning time within the school day during which they could meet with other teams or with others on their team for the purpose of planning. Even if only on a monthly basis during the week where teams had their half-day planning, time needs to be reserved within non-classroom teachers' schedules where they can talk with classroom teachers during the school day.

One area that was lacking in the Alpha and Beta teams was discussion about the results of common assessment. Some additional training needs to be done on how to discuss the results of common assessments. Within the PLC model, teachers are supposed to record data from all common assessments and are supposed to discuss the results with one another as part of their PLC. Teachers should be identifying students who need interventions and teachers with strength in the areas where remediation is needed should be sharing with the other teammates what they do in their classroom to teach the material. Rather than just pairing students who have a weakness on an objective with a teacher who has a strength teaching that objective, all teachers should benefit from learning what the strong teacher did to be strong.

Misconceptions about "teaching too similarly to one another" also came up in survey data. In a PLC it is not the goal that all the teachers on the team will operate like robots teaching all the same things in the same ways on the same days. There is some need for similarities, but it is not expected that all teams will operate identically. It is important that all teachers in the grade level have identified the same goals for instruction, i.e., what they expect the students to learn; have common pacing such that the grade level is working on the same tested, remediated, and enriched topics at the same time; and teach a common set of strategies for those topics. Teams also need to utilize common assessments for the purpose of discussing results. But that does not mean that a teacher has to use all the same activities in his/her class that another teacher on his/her team uses.

In survey data, one comment was that teachers missed the opportunity to work with other teachers within the building. In the past at half-day trainings and staff

meetings, tables were often mixed and teachers got the opportunity to work with people outside of their teams. On occasion, teachers should be encouraged to sit with people who are not on their PLC. This would promote relationship building and also vertical articulation between grade levels.

Future Research

Further research might include an expanded participant base that includes additional schools or an alternate participant base. The survey could be redeveloped based on responses given by participants to create some closed-ended questions to replace some of the open-ended questions making data analysis a bit easier. Alternatively, the questions that made up the 2005 study could be replicated to determine if roadblocks to collaboration are still present, and if so, how those roadblocks differ from the ones identified before Professional Learning Communities were implemented. It would also be interesting to implement the recommendations of this study at Berkshire Elementary and then reassess after an extended period of time had passed to see if the recommendations helped alleviate some of the roadblocks present. In the survey, participants were asked to indicate how their teammates would describe them. It would be interesting also to ask each participant how they would describe their team members. While a great deal of data were collected on PLCs throughout the school, if different teams had been observed, the implications might have been different. It would be interesting to observe and interview other teams within the school. Also, it would be interesting to look at the results of the quantitative survey from other schools in the district and other schools in the High Five partnership.

Appendix A:

Demographics Survey

Name:
Gender: Race:
What is your highest level of education attained:
High School/GED
Associate's Degree
BA/BS Degree
Master's Degree
PhD
Other:
Are you a National Board Certified teacher?
How many years of experience in education do you have?
0-4 years
5-9 years
10-14 years
15-19 years
20⊥ vears

Appendix B:

Professional Learning Communities Survey (Pilot Study)

- 1. How do you define Professional Learning Communities?
- 2. What are the norms your Professional Learning Communities have established?
- 3. How does the structure of Professional Learning Communities allow/disallow for sufficient time for teachers to collaborate?
- 4. How does the institution of Professional Learning Communities impact the isolated nature of the profession?
- 5. How does the institution of Professional Learning Communities impact conflicts that occur when divergent points of view are present?
- 6. Describe a positive experience you have had in your Professional Learning Community:
- 7. Describe a negative experience you have had in your Professional Learning Community:
- 8. What are the benefits of Professional Learning Communities as you see them?
- 9. What roadblocks have you encountered with the implementation of Professional Learning Communities?
- 10. Describe how you feel about your Professional Learning Communities experience:

Appendix C:

Professional Learning Communities Survey

APPROVED - JRB. IINC-CH DEC 2 2 2008

Professional Learning Communities Survey	
Instructions: Do not write your name on this survey. Please write in complete sentences. Return the survey in the envelope provided in the locked box in the fro office labeled "Professional Learning Communities Survey" by February 10 th . The you for your participation in this survey.	nt ank
How would you define Professional Learning Communities to someone who is not familiar with the concept?	S
How would you describe the relationship you have with your Professional Learning Communities members?	
3. How do you think members of your Professional Learning Community would describe you?	
4. How often does your team meet for Professional Learning Communities?	

5.	Does your team meet outside of Professional Learning Communities? If so often? What is the purpose of these meetings?	, how
6.	Does your team meet outside of school socially? If so, what kinds of interado you have?	ections
7.	What are the norms your Professional Learning Communities have establish	hed?
0		
8.	Describe your team's effectiveness in following the norms you have estable	shed.
9.	How do your team members respond to your contributions?	

10. How wo	ould you describe y	our team's wor	king relationship	to others?	
	, , , , , , , , , , , , , , , , , , , ,	our tours a wor	ing relations	to others.	
	e structure of Profe hers to collaborate?				t time
the time	es the time you spe you spent with you onal Learning Com	ur grade level to	h your grade leve eam prior to the	el team now comp implementation of	are to
13. How do isolated	es the institution of nature of the profe	f Professional L ssion?	earning Commu	nities impact the	
			*		

14. When meeting in your Professional Learning Community, do you find that divergent points of view occur? If so, how do your norms affect your ability to solve these conflicts? If not, why do you think conflicts do not occur in your team?
15. Do you find that you collaborate in your Professional Learning Community? If so, in what ways? If not, why do you think this is the case?
16. Describe a positive experience you have had in your Professional Learning Community:
17. Describe a negative experience you have had in your Professional Learning Community:

 18. What are the benefits of Professional Learning Communities as you see them? 19. Have you encountered roadblocks with the implementation of Professional Learning Communities? If so, what were they? If not, why do you think this is so? 20. Describe how you feel about your Professional Learning Communities experience: 				
 19. Have you encountered roadblocks with the implementation of Professional Learning Communities? If so, what were they? If not, why do you think this is so? 20. Describe how you feel about your Professional Learning Communities experience: 				
 19. Have you encountered roadblocks with the implementation of Professional Learning Communities? If so, what were they? If not, why do you think this is so? 20. Describe how you feel about your Professional Learning Communities experience: 	18. What are the benefit	its of Professional Learnin	g Communities as vo	u see them?
Learning Communities? If so, what were they? If not, why do you think this is so? 20. Describe how you feel about your Professional Learning Communities experience:			8	
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Learning Communities? If so, what were they? If not, why do you think this is so? 20. Describe how you feel about your Professional Learning Communities experience:				
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Learning Communities? If so, what were they? If not, why do you think this is so? 20. Describe how you feel about your Professional Learning Communities experience:				
experience:	Learning Communi	red roadblocks with the in ities? If so, what were the	nplementation of Prop y? If not, why do yo	fessional u think this is
experience:				
	20. Describe how you is experience:	feel about your Profession	al Learning Commun	ities

Appendix D:

Interview Protocol

- 1. What is your teaching background?
- 2. How long have you been teaching at this school?
- 3. Have you always been in the same grade level at this school?
- 4. What professional development have you participated in related to Professional Learning Communities?
- 5. When does your Professional Learning Community Team meet?
- 6. What happens when there is a schedule conflict? Are meetings ever rescheduled?
- 7. How would you describe the status of open communication on your team? Do you feel that your suggestions will be given serious consideration by the group?
- 8. What are some goals that your team has developed? On a scale of 1 (low) to 10 (high) how would you rate your team's effectiveness for each and why?
- 9. What is one example of your team's exceeding an expectation or goal this year?
- 10. What is an example of your team's failing to meet an expectation or goal this year?
- 11. What is the most positive aspect of being a member of this team?
- 12. What is the most frustrating aspect of being a member of this team?
- 13. What are your ideas for improving the team's effectiveness in the future?
- 14. What do you discuss in your Professional Learning Community meetings?
- 15. Have you developed common assessments in your Professional Learning Community? If so, have you discussed the results of those assessments? If so, in what way?
- 16. Have you utilized the data from assessments in your meetings?
- 17. Do members of your team share ideas about what they teach in their classrooms?
- 18. Where do you turn for ideas for instruction?
- 19. How does remediation work in your team?
- 20. If you could give advice to another team about how to collaborate with one another effectively, what advice would you give?
- 21. How does this team compare to ones you have worked on in the past?
- 22. Do you feel as though your team's efforts to collaborate are supported by the structure of Professional Learning Communities?
- 23. Before Professional Learning Communities were established in your school, how did you feel about collaboration among your colleagues?
- 24. How much time did you spend meeting with your team before PLCs were established?
- 25. What kinds of things did you talk about in your meetings before PLCs were established?

Questions 7-14 come from DuFour & Eaker, 1998, p. 127-128

Appendix E:

IRB Approval



OFFICE OF HUMAN RESEARCH ETHICS
Medical School Building 52
Mason Farm Road
CB #7097
Chapel Hill, NC 27599-7097
(919) 966-3113
Web site: ohre.unc.edu
https://my.research.unc.edu for IRB status
Federalwide Assurance (FWA) #4801

To: Nan Lujan School of Education 378 Summerwalk Circle Chapel Hill NC 27517

From: Behavioral IRB

Authorized signature on behalf of IRB

Approval Date: 12/22/2008

Expiration Date of Approval: 12/21/2009

RE: Notice of IRB Approval by Expedited Review (under 45 CFR 46.110)

Submission Type: Initial

Expedited Category: 7. Surveys/interviews/focus groups, 6. Voice/image research recordings

Study #: 08-2115

Other #: School of Education : SOE 08-040

Study Title: Professional Learning Communities and their Impact on the Roadblocks that Inhibit

Collaboration among Teachers and Certified Staff at Space Age Elementary School

This submission has been approved by the above IRB for the period indicated. It has been determined that the risk involved in this research is no more than minimal.

Study Description:

Purpose: To examine the effectiveness of the implementation of Professional Learning Communities in addressing the obstacles teachers encounter when they collaborate with one another.

Participants: 43 K-5 teachers and staff at Space Age Elementary School.

Procedures: Administer survey, conduct interviews with 3-8 participants, and observe Professional learning Community Team meetings.

Investigator's Responsibilities:

Federal regulations require that all research be reviewed at least annually. It is the Principal Investigator's responsibility to submit for renewal and obtain approval before the expiration date. You may not continue any research activity beyond the expiration date without IRB approval. Failure to receive approval for continuation before the expiration date will result in automatic termination of the approval for this study on the expiration date.

When applicable, enclosed are stamped copies of approved consent documents and other recruitment materials. You must copy the stamped consent forms for use with subjects unless you

page 1 of 2

have approval to do otherwise.

You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented (use the modification form at ohre.unc.edu/forms). Should any adverse event or unanticipated problem involving risks to subjects or others occur it must be reported immediately to the IRB using the adverse event form at the same web site.

Researchers are reminded that additional approvals may be needed from relevant "gatekeepers" to access subjects (e.g., principals, facility directors, healthcare system).

This study was reviewed in accordance with federal regulations governing human subjects research, including those found at 45 CFR 46 (Common Rule), 45 CFR 164 (HIPAA), 21 CFR 50 & 56 (FDA), and 40 CFR 26 (EPA), where applicable.

CC:

Barbara Day, School Of Education Crystal Daniel, (School of Education), Non-IRB Review Contact

Appendix F:

Letter to the Principal

378 Summerwalk Circle Chapel Hill, NC 27517

December 9, 2008

As you know, I am pursuing my doctoral degree at the University of North Carolina at Chapel Hill in the area of curriculum and instruction. This school year, I am in the process of completing my dissertation research. The purpose of this letter is to request permission to invite teachers and staff at to participate in my research on Professional Learning Communities and teacher collaboration. I personally guarantee anonymity to the school and any teachers interviewed as part of my research. All names will be changed so that the school and its teachers will remain anonymous. I will be happy to share any findings that I have. I will be conducting research from January, 2009 to April, 2009 to allow me enough time to conduct any interviews and any observations that are necessary for my research. I would also like to have time during the monthly staff meeting in January or February to distribute my survey and allow teachers time to complete it. I plan to tape record the interviews and observations as part of my research and will destroy the tapes after I have transcribed them and changed the names of all of the participants. Thank you for considering my request.

Sincerely,

Nan Lujan Spanish Teacher

I, agree to allow Nan Lujan to conduct research at from January, 2009 to April, 2009 for her dissertation on Professional Learning Communities and teacher collaboration.

(Signature)

Appendix G:

Letter from District

Chief Academic Officer		E 1225
January 6, 2009		
Ms. Nan Lujan		
Dear Nan,		
I have reviewed your research ; Teacher Collaboration". Than approval by your school princi	nk you for providing me wit	Professional Learning Communities and hall of the pertinent information and
I am approving your request an doing your study. Please share hope to hear from your soon.	and hope that you will receive your results with me when	re some very positive responses while n you complete this study. Good luck and
Sincerely,		
Chief Academic Officer		
kd		
pe		

Appendix H:

Letter to Teachers

APPROVED - IRB, UNC-CH
DEC 2.2 2008

378 Summerwalk Circle Chapel Hill, NC 27517

December 19, 2008

Dear Teachers,

I am pursuing my doctoral degree at the University of North Carolina at Chapel Hill in the area of curriculum and instruction. This semester I am conducting the research for my dissertation on Professional Learning Communities and their impact on the roadblocks that inhibit collaboration among teachers. The purpose of this letter is to inform you that I will be conducting my research in the Winter and Spring of 2009 at and to invite you to participate in this research. As a thank you for participating, I will be providing each participant with a \$5 gift card for completing the survey. I have spoken with two teams who have agreed to participate in interviews and to be observed during their Professional Learning Community Meetings. They will be provided with an additional \$5 gift card. For those two teams, I would also like to request your consent to tape record you during my study. You do not have to consent to being tape recorded to participate in the study. I will be conducting interviews and will attend some grade-level meetings and/or planning sessions throughout my research time frame of January, 2009 to May, 2009. I personally guarantee anonymity to the school and any teachers interviewed as part of my research. All names will be changed so that the school and its teachers will remain anonymous. If you are willing to participate in my study please complete the attached form and return it to me. Thank you for considering my request.

Sincerely,

Nan Lujan Spanish Teacher

Appendix I:

Consent Form

University of North Carolina-Chapel Hill Consent to Participate in a Research Study Adult Participants Social Behavioral Form

IRB Study # 08-2115

Consent Form Version Date: 12/19/2008

Title of Study: Professional Learning Communities and their Impact on the Roadblocks That Inhibit Collaboration Among Teachers and Certified Staff at Space Age Elementary School

Principal Investigator: Nan Lujan

UNC-Chapel Hill Department: School of Education Faculty Advisor: Dr. Barbara Day Faculty Advisor telephone number: (919) 962-7739

Study Contact telephone number: (919) 969-9718 Study Contact email: nanscpa@yahoo.com

What are some general things you should know about research studies?

You are being asked to take part in a research study. To join the study is voluntary. You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study. You will be given a copy of this consent form. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

What is the purpose of this study?

The purpose of this research study is to learn about the impact of Professional Learning Communities on the roadblocks that inhibit collaboration among teachers, namely: time constraints, the isolated nature of the profession, and divergent points of view amongst teachers.

You are being asked to be in the study because you are a participant in a Professional Learning Community.

How many people will take part in this study?

If you decide to be in this study, you will be one of approximately 43 people in this research study.

Page 1 of 4

How long will your part in this study last?

Your participation will include the length of time it takes to complete an open ended survey on Professional Learning Communities and collaboration which is estimated to take no more than 45 minutes.

In addition, two teams have already come to consensus that they will participate in interviews and observations of their Professional Learning Community Meetings. If you are on one of those two teams you can expect the interview to take up to 1 hour of your time with up to 30 minutes allotted in a follow-up interview. Those team members can expect the Principal Investigator (Nan Lujan), to observe three months of your Professional Learning Community Meetings which will not require you to spend any additional time than you already do in those meetings.

What will happen if you take part in the study?

- You will complete this consent form
- · You will complete an open ended survey related to Professional Learning Communities
- 2 PLC teams have been invited to participate in a one on one interview made up of questions
 related to the responses on the open ended survey.
- There may be up to a 30 minute follow-up interview if necessary.
- 2 PLC teams will be observed during three months of PLC meetings

What are the possible benefits from being in this study?

You may not benefit from this study, but you might find the process interesting.

What are the possible risks or discomforts involved from being in this study?

There are minimal risks associated with this study. Names will not be written on the survey but the researcher will know who completed the surveys so the answers are confidential between participants but not between the participants and the researcher. Names will be changed to protect the anonymity of the participants and any tape recordings will be destroyed after analysis has taken place.

There may be uncommon or previously unknown risks. You should report any problems to the researcher.

How will your privacy be protected?

Participants will not be identified in any report or publication about this study. Audio recordings will be stored under lock and key during use; recordings will be transcribed and the tapes destroyed.

Will you receive anything for being in this study?

You will be receiving \$5 gift card for taking part in the survey. If you are on one of the two teams that agreed to participate in an interview and Professional Learning Community meeting observations, you will receive an additional \$5 gift card.

Will it cost you anything to be in this study?

There will be no costs for being in the study

What if you have questions about this study?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions, or concerns, you should contact the researchers listed on the first page of this form.

What if you have questions about your rights as a research participant?

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Title of Study: Professional Learning Communities	
and their Impact on the Roadblocks That Inhibit Col	
Among Teachers and Certified Staff at Space Age E	lementary School
Principal Investigator: Nan Lujan	
Participant's Agreement:	
I have read the information provided above. I have	
voluntarily agree to participate in this research study	•
Check the lines that reflect your choices:	
I will complete the survey.	
I am willing to complete interviews	duides recordings may be requested to b
OK to record me during interviews (Audio an turned off at any time.)	a video recordings may be requested to be
Not OK to record me during interviews	
I am willing to allow Nan Lujan to observe m	e during PLC meetings
OK to record me during PLC meetings (Audi	and video recordings may be requested to
be turned off at any time.)	o and video recordings may be requested
Not OK to record me during PLC meetings	
rior our to record me daring ribe meetings	
Signature of Research Participant	Date
Signature of Research Participant	Date
	Date
Printed Name of Research Participant	Date
	Date
Printed Name of Research Participant Gender: Race:	Date
Printed Name of Research Participant Gender: Race: What is your highest level of education attained:	Date
Printed Name of Research Participant Gender: Race: What is your highest level of education attained: BA/BS Degree	Date
Printed Name of Research Participant Gender: Race: What is your highest level of education attained:	Date
Printed Name of Research Participant Gender: Race: What is your highest level of education attained: BA/BS Degree Master's Degree	Date
Printed Name of Research Participant Gender: Race: What is your highest level of education attained: BA/BS Degree Master's Degree PhD Other:	
Printed Name of Research Participant Gender: Race: What is your highest level of education attained: BA/BS Degree Master's Degree PhD	
Printed Name of Research Participant Gender: Race: What is your highest level of education attained: BA/BS Degree Master's Degree PhD Other: Are you a National Board Certified teacher?	
Printed Name of Research Participant Gender: Race: What is your highest level of education attained: BA/BS Degree Master's Degree PhD Other: Are you a National Board Certified teacher? How many years of experience in education do you	
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Page 4 of 4

Appendix J:

High Five PLC Survey 2008-2009

* Required Information. High Five PLC Survey 2008-09 Introduction Our district, along with the other High Five districts, has determined that resear the development of Professional Learning Communities (PLCs) is likely to lead to student achievement and enhanced teacher satisfaction. This survey is designe the depth of implementation of PLCs. The summarized results of the survey, all level data, will be shared with individual teams, schools, districts and High Five, are all multiple-choice; the survey should take about 15-20 minutes of your time.	t research indicates o lead to higher designed to measure vey, along with team- gh Five. The items our time. o one for the purpose to teaching and hose focus in their
High Five PLC Survey 2008-09 Introduction Our district, along with the other High Five districts, has determined that resear the development of Professional Learning Communities (PLCs) is likely to lead to student achievement and enhanced teacher satisfaction. This survey is designed the depth of implementation of PLCs. The summarized results of the survey, alcount level data, will be shared with individual teams, schools, districts and High Five.	t research indicates o lead to higher designed to measure vey, along with team- gh Five. The items our time. o one for the purpose to teaching and hose focus in their
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	teaching and hose focus in their
If you participate in more than one PLC team, please choose the primary one for offering feedback on this survey. This year there are two surveys—the teaching survey designed to gather feedback from classroom teachers whose for plc includes definition and use of Essential Learnings and development and use formative assessments. The second survey is for staff whose primary role is to it.	
through prevention and intervention efforts or to help classroom teachers be me called the support survey. Both surveys have many common questions in areas. Collaborative Culture and Support/Resource allocation, the support survey asks prevention/intervention and support efforts, the teaching and learning survey a Essential Learning Outcomes and common assessment. If you are a support per assigned to an academic PLC like the first grade or Algebra I please reply to the learning survey.	rs be more effective— n areas like ey asks more about nurvey asks about nort person, but are

	irvey	Pa	ge 2 of 16
instru	ections		
thoos	e the survey that best fits the work done by your primary PLC tea	m.	
part Demo	e complete the <u>full</u> survey according to your experience in your m icipant in any PLC, respond to item 1 and 2, skipping next to com graphics section (items 13-17). Please answer honestly. Be sure you have finished.	plete the	
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stude effect like C about about but a teach	ents through prevention and intervention efforts or to help classed tive—called the support survey. Both surveys have many common collaborative Culture and Support/Resource allocation, the support prevention/intervention and support efforts, the teaching and let Essential Learning Outcomes and common assessment. If you are assigned to an academic PLC like the first grade or Algebra I paing and learning survey. See the survey that best fits the work done by your primary PLC test one option) Teaching and Learning Survey (K-12 Classroom Teachers)	om teachers be more questions in areas rt survey asks more sarning survey asks re a support person, lease reply to the Go to Question No. 2 Go to Question No. 18	
stude effect like C about about but a teach	ents through prevention and intervention efforts or to help classed to the called the support survey. Both surveys have many common collaborative Culture and Support/Resource allocation, the support prevention/intervention and support efforts, the teaching and let Essential Learning Outcomes and common assessment. If you are assigned to an academic PLC like the first grade or Algebra I puting and learning survey. See the survey that best fits the work done by your primary PLC test one option) Teaching and Learning Survey (K-12 Classroom Teachers) Support Survey (Support staff, le: Counselor, Social Worker, AIG Teacher, Technology Specialist, etc.)	om teachers be more questions in areas rt survey asks more sarning survey asks re a support person, lease reply to the Go to Question No. 2 Go to Question No. 18	

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3. Th	e number of my main PLC is:	
gener	e following questions, you will be asked to s ated from this data will not disaggregate do team reports will only be generated if at lea	own to the level of individuals—even the
	If Did Not Answer The	n Go to Question No. 3
0	No	Go to Question No. 14
0	Yes, a District-level PLC	Go to Question No. 3
0	Yes, a School-level PLC	Go to Question No. 3

	Strongly Agree	Agree	Disagree	Strongly Disagree	I do not understand
(a) As a PLC, we have identified essential learning outcomes for our students. (Essential learning outcomes, also called power standards, are the course and grade level critical knowledge, skills, and dispositions that students are expected to retain long after the assessment is completed, that are applicable to multiple academic disciplines, and that prepare the student for success in the next grade/course.) (Select one option)	0	0	0	0	0
(b) As a PLC, we believe that all of our students will master the essential learning outcomes. (Select one option)	0	0	0	0	0
(c) As a PLC, we use team-adopted common standards of success to evaluate student learning. (Select one option)	0	0	0	0	0
(d) As a PLC, we have adopted strategic and specific, measurable, attainable, results- oriented, and timebound (SMART) goals that we are working to achieve. (Select one option)	0	0	0	0	0
(e) As a PLC, our SMART goals are aligned to our school's SMART goals. (Select one option)	0	0	0	0	0

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	Strongly Agree	Agree	Disagree	Strongly Disagree	I do not understand
(a) As a PLC, we have established norms (e.g., ground rules for team meetings including holding each other accountable for student learning)to clarify how we will work together as a team. (Select one option)	0	0	0	0	0
 (b) As a PLC, we abide by the explicit team norms we developed. (Select one option) 	0	0	0	0	0
As a PLC, we use decision-making processes such as brain-storming, problem identification, consensus, and prioritization. (Select one option)	0	0	0	0	0
(d) As a PLC, we are able to be open and honest with each other about what we do well and not so well (e.g., in instruction, in teacher-student relationships, in teamsmanship). (Select one option)	0	0	0	0	0
(e) As a PLC, we have a process to effectively resolve conflict. (Select one option)	0	0	0	0	0
(f) As a PLC, we document and monitor our PLC processes so that we can continue to improve. (Select one option)	0	0	0	0	0
As a PLC, we systematically gather evidence about the impact of various instructional strategies on student learning. (Select one option)	0	0	0	0	0

	Strongly Agree	Agree	Disagree	Strongly Disagree	I do not understand
 (a) As a PLC, we have made a conscious effort to align our instruction to achieve our essential learning outcomes. (Select one option) 	0	0	0	0	0
(b) As a PLC, we are identifying increasingly more effective instructional strategies. (Select one option)	0	0	0	0	0

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that our team identifies. (Select one option)	0	0	0	0	0
(d) As a PLC, we utilize the school-wide intervention pyramid (sequence of required interventions). (Select one option)	0	0	0	0	0
(e) As a PLC, we require every student who has not yet mastered the essential learning outcomes to participate in additional learning opportunities every few weeks. (Select one option)	0	0	0	0	0

	Strongly Agree	Agree	Disagree	Strongly Disagree	I do not understand
(a) As a PLC, we have developed a variety of common formative assessments using different approaches (e.g., performance assessment, essays, tests, quizzes). (Select one option)	0	0	0	0	0
 (b) As a PLC, we have aligned our common formative assessments to the essential learning outcomes. (Select one option) 	0	0	0	0	0
(c) As a PLC, we examine the results of our common formative assessments to identify students who need additional learning opportunities (enrichment or re-teaching). (Select one option)	0	0	0	0	0
(d) As a PLC, we examine the results of our common formative assessments to determine which instructional practices are most effective in achieving student mastery. (Select one option)	0	0	0	0	0

8. Common Formative a				eam-developed	
	About once every 3 weeks	About once every 6 weeks	About once a quarter	About once a semester	Not at
(a) Team-developed (Select one option)	0	0	0	0	0

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	Strongly Agree	Agree	Disagree	Strongly Disagree	I do not understand
(a) I am a better teacher because of my work with my PLC. (Select one option)	0	0	0	0	0
(b) My students are learning more because of my work with my PLC. (Select one option)	0	0	0	0	0
(c) The PLC process has the potential to provide a more supportive environment for teachers. (Select one option)	0	0	0	0	0
(d) Time spent with my PLC will save me time overall. (Select one option)	0	0	0	0	0

	Strongly Agree	Agree	Disagree	Strongly Disagree	I do not understand.
 (a) As a PLC, we receive feedback and support from leadership on our implementation of PLC concepts and practices. (Select one option) 	0	0	0	0	0
(b) My school celebrates team progress toward the implementation of PLC concepts and practices. (Select one option)	0	0	0	0	0
(c) My school celebrates team progress toward SMART goals for student achievement. (Select one option)	0	0	0	0	0

	upport/Resource Allocation - My PLC typically meets with the following frequency: t one option)
0	None
0	Daily
0	Weekly
0	Two times a month
0	Monthly

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0	Quarterly	
12. S	upport/Resource Allocation - The length of my typical PLC meeting is: (Select one	
0	Less than 30 min	
0	Between 30 min and an hour	
0	More than an hour	
	apport/Resource Allocation - My PLC typically meets at the following time (Mark all pply):	
	Before school	
	After school	
	During lunch period	
	During a common planning period	
	On workdays	
	Other (please specify)	
gener PLC i	following questions, you will be asked to share information about you. The reported from this data will not disaggregate down to the level of individuals—even the earn reports will only be generated if at least three members completed the survey. Demographics - Years of teaching experience (including current year): (Select one)	he
0	1-2 years	
0	3-4 years	
0	5 -10 years	
0	11 - 20 years	
0	More than 20 years	
* 15.	Demographics - My main grade level assignment this year (select one):	
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Ок		
O 1		
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O 6		
0 7		
0 8		
O 9-1	2	
O Ele	nentary specialist	
O Mid	dle grade specialist	
O oth	er (please specify)	
	nographics - Which of the following best fits your primary job ility? (Select one):	
	illity? (Select one):	
responsit	ility? (Select one):	
responsit) Regular elementary classroom subjects	
responsit	Regular elementary classroom subjects Math Math and Science	
responsit	Regular elementary classroom subjects Math Math and Science Science	
responsit	Regular elementary classroom subjects Math Math and Science Science Language Arts / Reading / Writing / Literacy	
responsit	Regular elementary classroom subjects Math Math and Science Science Language Arts / Reading / Writing / Literacy Language Arts and Social Studies	
responsit	illity? (Select one): Regular elementary classroom subjects Math Math and Science Science Language Arts / Reading / Writing / Literacy Language Arts and Social Studies Social Studies / History Career Technical Education	
	illity? (Select one): Regular elementary classroom subjects Math Math and Science Science Language Arts / Reading / Writing / Literacy Language Arts and Social Studies Social Studies / History Career Technical Education Technology Education	
	Regular elementary classroom subjects Math Math and Science Science Language Arts / Reading / Writing / Literacy Language Arts and Social Studies Social Studies / History Career Technical Education Technology Education World Language / Foreign Language	
	Regular elementary classroom subjects Math Math and Science Science Language Arts / Reading / Writing / Literacy Language Arts and Social Studies Social Studies / History Career Technical Education Technology Education World Language / Foreign Language PE /Health	
	Regular elementary classroom subjects Math Math and Science Science Language Arts / Reading / Writing / Literacy Language Arts and Social Studies Social Studies / History Career Technical Education Technology Education World Language / Foreign Language PE /Health Arts / Arts Education /Exceptional Education	
	Regular elementary classroom subjects Math Math and Science Science Language Arts / Reading / Writing / Literacy Language Arts and Social Studies Social Studies / History Career Technical Education Technology Education World Language / Foreign Language PE /Health Arts / Arts Education /Exceptional Education AG / Gifted	
	Regular elementary classroom subjects Math Math and Science Science Language Arts / Reading / Writing / Literacy Language Arts and Social Studies Social Studies / History Career Technical Education Technology Education World Language / Foreign Language PE /Health Arts / Arts Education /Exceptional Education	

	Yes, a School-level PLC Yes, a District-level PLC No If Did Not Answer	Go to Question No. 19 Go to Question No. 29 Then Go to Question No. 19
cus	Yes, a District-level PLC	Go to Question No. 19 Go to Question No. 29
cus	Yes, a District-level PLC	Go to Question No. 19 Go to Question No. 29
cus	Yes, a District-level PLC	Go to Question No. 19
us		90-90 NO. 2014-01.00 NACES
cus	Yes, a School-level PLC	
18.		be more effective or helping students through
		Then Go to Question No. 33 t of a professional learning community (PLC)
O	EDMEANA WEST WES	Go to Question No. 33
0		Go to Question No. 33
0		Go to Question No. 33
0	The same of the sa	Go to Question No. 33
0	The second second	Go to Question No. 33
0	The second second	Go to Question No. 33
0	Marian Street, St.	Go to Question No. 33
0	Marine Street,	Go to Question No. 33
0	STREET, SQUARE,	Go to Question No. 33
0	Steel, I Steel Streets	Go to Question No. 33
0	Barri Casto Services	Go to Question No. 33
0	Service Services	Go to Question No. 33
0	person for the same.	Go to Question No. 33
17.	Demographics - Base school assignment	for this year:
	Other	
	O Pre-K	
	O ESL / English as a Second Language	

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	Strongly Agree	Agree	Disagree	Strongly Disagree	I do not understand.
(a) As a PLC, we believe that all of our students will master the essential learning outcomes. (Select one option)	0	0	0	0	0
(b) As a PLC, we support classroom teachers to be successful with all students. (Select one option)	0	0	0	0	0
(c) As a PLC, we focus on improving our support to classroom teachers so they can be successful with students who need classroom accommodations. (Select one option)	0	0	0	0	0
(d) As a PLC, we have adopted strategic and specific, measurable, attainable, results-oriented, and timebound (SMART) goals that we are working to achieve. (Select one option)	0	0	0	0	0
(e) As a PLC, our SMART goals are aligned to our district's/school's SMART goals. (Select one option)	0	0	0	0	0

	Strongly Agree	Agree	Disagree	Strongly Disagree	I do not understand
(a) As a PLC, we have established norms (e.g., ground rules for team meetings including holding each other accountable for student learning) to clarify how we will work together as a team. (Select one option)	0	0	0	0	0
 (b) As a PLC, we abide by the explicit team norms we developed. (Select one option) 	0	0	0	0	0
As a PLC, we use decision-making processes such as brain-storming, problem identification, consensus, and prioritization. (Select one option)	0	0	0	0	0
(d) As a PLC, we are able to be open and honest with each other about what we do well and not so well (e.g., in instruction, in teacher-student relationships, in teamsmanship). (Select one option)	0	0	0	0	0
 (e) As a PLC, we have a process to effectively resolve conflict. (Select one option) 	0	0	0	0	0
(f) As a PLC, we document and monitor our PLC processes so that we can continue	0	0	0	0	0

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to improve. (Select one option)	1	1 1	Ť	1	
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Prevention/Intervention					
	Strongly Agree	Agree	Disagree	Strongly Disagree	I do not understand
(a) As a PLC, we develop and execute strategies to prevent students from experiencing academic failure and to proactively provide support for student success. (Select one option)	0	0	0	0	0
(b) As a PLC, we use assessment and other data (absences, incident reports, etc.) to identify students who are in need of intervention. (Select one option)	0	0	0	0	0
(c) As a PLC, we are able quickly to identify students who are in need of intervention. (Select one option)	0	0	0	0	0
(d) As a PLC, we support classroom teachers to fully utilize the school-wide intervention pyramid (sequence of required interventions). (Select one option)	0	0	0	0	0
(e) As a PLC we have developed and use a system to monitor the performance of students involved in prevention/intervention efforts. (Select one option)	0	0	0	0	0
(f) As a PLC, we use data on student performance of students involved in prevention/intervention efforts to identify increasingly more effective interventions. (Select one option)	0	0	0	0	0
(g) As a PLC, we utilize those increasingly more effective interventions that our team identifies. (Select one option)	0	0	0	0	0

22. Provision of Support						
and the same of th	Strongly Agree	Agree	Disagree	Strongly Disagree	I do not understand	
 (a) As a PLC, we focus on learning more about research based strategies for our area of expertise. (Select one option) 	0	0	0	0	0	

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(b) As a PLC, we develop strategies for coaching and supporting teachers in their use of these research based strategies. (Select one option)	0	0	0	0	0
(c) As a PLC, we use observation of students in class and student performance data to examine the results of our collaborative efforts with teachers. (Select one option)	0	0	0	0	0
(d) As a PLC, we examine the results of our common formative assessments to determine which instructional practices are most effective in achieving student mastery. (Select one option)	0	0	0	0	0

	Strongly Agree	Agree	Disagree	Strongly Disagree	I do not understand
(a) I am better in my role because of my work with my PLC. (Select one option)	0	0	0	0	0
(b) The students in my school are learning more because of my work with my PLC. (Select one option)	0	0	0	0	0
(c) The PLC process has the potential to provide a more supportive environment for educators. (Select one option)	0	0	0	0	0
(d) There is evidence that teachers in my school are being more successful with students due to the support I have given them. (Select one option)	0	0	0	0	0
(e) Teachers in my school express appreciation for the support I have given them. (Select one option)	0	0	0	0	0
(f) Time spent with my PLC will save me time overall. (Select one option)	0	0	0	0	0

24. Support/Resource Allocation					
	Strongly Agree	Agree	Disagree	Strongly Disagree	I do not understand.
(a) As a PLC, we receive feedback and support from leadership on our				La seconda de la constante de	GISWE-MOU

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- 3	implementation of PLC concepts and practices. (Select one option)	0	0	0	0	
1	My school celebrates team progress toward the implementation of PLC concepts and practices. (Select one option)	0	0	0	0	0
t	My school celebrates team progress toward SMART goals for student achievement. (Select one option)	0	0	0	0	0
	E = 52 BA1 = BE	5 1011		STATE OF STATE	25 91 22	
	upport/Resource Allocation - My PL t one option)	C typicall	y meets 1	with the fo	ollowing free	quency:
0	None					
0	Daily					
0	Weekly					
0	Two times a month					
0	Monthly					
	Quarterly upport/Resource Allocation - The le	ength of n	ny typica	I PLC mee	ting is: (Sele	ct one
26. Supplied	upport/Resource Allocation - The le	ength of n	ny typica	I PLC mee	ting is: (Sele	ct one
	upport/Resource Allocation – The le	ength of n	ny typica	I PLC mee	ting is: (Sele	ct one
	upport/Resource Allocation - The le) Less than 30 min	ength of n	ny typica	I PLC mee	ting is: (Sele	ct one
O O	upport/Resource Allocation – The le) Less than 30 min Between 30 min and an hour	-(c1/21*b/5373				
O O	Less than 30 min Between 30 min and an hour More than an hour	-(c1/21*b/5373				
O O	Less than 30 min Between 30 min and an hour More than an hour upport/Resource Allocation - My PL upply):	-(c1/21*b/5373				
O O	Less than 30 min Between 30 min and an hour More than an hour upport/Resource Allocation - My PL upply): Before school	-(c1/21*b/5373				
O O	Less than 30 min Between 30 min and an hour More than an hour upport/Resource Allocation - My PL upply): Before school After school	-(c1/21*b/5373				
O O	Less than 30 min Between 30 min and an hour More than an hour upport/Resource Allocation - My PL upport/Resource Allocation - My PL pply): Before school After school During lunch period	-(c1/21*b/5373				

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In the following questions, you will be asked to share information about you. The reports generated from this data will not disaggregate down to the level of individuals—even the PLC team reports will only be generated if at least three members completed the survey.

	he number of my main PLC is:
* 29.	Demographics - Years of experience as an educator (including current year): (Select ption)
0	1-2 years
0	3-4 years
0	5 -10 years
0	11 – 20 years
0	More than 20 years
30.	Demographics - Primarily I serve (select one):
0	К
0	1
0	2
0	3
0	4
0	
	5
0	5 6
000	5 6
00000	5 6 7
00000	5 6 7 8
000000	5 6 7 8 9-12
0000000	5 6 7 8 9-12 Elementary specialist
0000000	5 6 7 8 9-12 Elementary specialist Middle grade specialist

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0	Counselor	
0	Social Worker/Family specialist	
0	English as a Second Language Teacher	
0	AIG (gifted) Teacher/Gifted Ed. Specialist	
0	Special Education/Exceptional Education Resource Teacher	
0	Literacy Coach/Reading Teacher	
0	Technology Specialist/Computer/IT support	
0	Media Specialist/Librarian	
0	School-based IRT/Curriculum Specialist	
0	Building admininistration	
0	Central office administration	
0		
0	Other graphics - Base school assignment for this year:	
* 32. Demo	graphics - Base school assignment for this year:	
32. Demo	graphics - Base school assignment for this year:	
32. Demo	graphics - Base school assignment for this year:	
32. Demoi	graphics - Base school assignment for this year:	
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32. Demoi	graphics - Base school assignment for this year:	
32. Demoi	graphics - Base school assignment for this year:	
32. Demoi	graphics - Base school assignment for this year:	

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33. Demographics - My hours of formal professional development that focused on PLC implementation (since September 2005):							
	None	1-4 hours	5-8 hours	9-12 hours	13-16 hours	Over 16 hours	
High Five sponsored (Select one (a) option)	0	0	0	0	0	0	
* School district sponsored (Select one (b) option)	0	0	0	0	0	0	

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Appendix K:

High Five PLC Survey 2008-2009 Survey Reliability Analyses

Survey Item	Raw Correlation with Total	Raw Alpha without Item
Identified essential learning outcomes	0.546873	0.9221
Believe our students can master these outcomes	0.370606	0.9242
Use team-adopted standards to assess learning	0.570247	0.9214
Adopted SMART goals that we are working to achieve	0.589108	0.9211
Our SMART goals are aligned to our school's SMART goals	0.556384	0.9216
Have established norm rules for working as a team	0.477493	0.9228
Abide by the explicit team norms we developed	0.518146	0.9222
Use sound, structured decision-making processes	0.510377	0.9225
Open and honest about strengths and weaknesses	0.489804	0.9225
Have a process to effectively resolve conflict	0.522392	0.9221
Document and monitor our processes so that we can improve	0.548642	0.9217
Systematically gather evidence concerning instructional strategies	0.63216	0.9204
Worked to align our instruction with learning outcomes	0.560461	0.9221
Are identifying more effective instructional strategies	0.593315	0.9214
Utilize increasingly more effective instructional strategies	0.625232	0.9209
Utilize the school-wide intervention pyramid of interventions	0.521185	0.922
Require students in need to participate in other learning opportunities	0.534568	0.9221
Developed common formative assessments using different approaches	0.574828	0.9212
Aligned our common formative assessments to learning outcomes	0.607179	0.9208
Examine results to identify students who in need	0.631077	0.9203
Examine results to evaluate instructional practices	0.669252	0.9196
I am a better teacher because of my work with my PLC	0.544188	0.9217
My students are learning more because of my work with my PLC	0.56013	0.9215
PLCs can provide a more supportive environment for teachers	0.355708	0.924
Time spent with my PLC will save me time overall	0.441326	0.9239
We receive feedback and support from our leadership	0.548088	0.9217
My school celebrates team progress toward implementing our PLCs	0.501341	0.9227

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