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PROFESSIONALIZING PRACTICE: HOW PLC DEVELOPMENT
ENHANCES TEACHING AND LEARNING

By

Kelly F. Roselle

Dissertation

Submitted to the Faculty of the

Graduate School of Rowan University

In partial fulfillment of the requirements

for the degree of

DOCTOR OF EDUCATION

in

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Glassboro, New Jersey

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DEDICATION

This work is dedicated to my parents, my husband, and the children I hope to have. Every minute I worked on this project, I was thinking of you.

Nothing I have accomplished would have been possible without the unconditional love and support of my mother and father. My father is as proud as any parent could be, and I work harder and push myself further as a result. My mother's work ethic and dedication to education have always been my inspiration. I only hope to one day be as accomplished as she. No two parents could be more understanding of exactly what sentiments I need and when. You consoled me when I felt defeated. You challenged me when I could no longer push myself. And you congratulated me on every success. I will never have sufficient words to express my love and gratitude.

I also want to thank my devoted husband who has endured hours of complaints and always said, "You're tough--you can do it." He never let me indulge in self-pity, but rather helped me to regain my focus and get back to work. I am inspired every day by your devotion to your own work and am proud to have you by my side.

Finally, I dedicate this to the children I hope to have. I wish to instill in you a thirst for knowledge that can never be quenched, and this work is my first attempt to lead by example.

ABSTRACT

Kelly F. Roselle

PROFESSIONALIZING PRACTICE: HOW PLC DEVELOPMENT

ENHANCES TEACHING AND LEARNING

2010/2011

Dr. Corine Cadle Meredith

Educational Leadership

Professional learning communities (PLCs) are groups of professionals who work collaboratively to meet expressly stated goals. The groups analyze data and make decisions based upon that analysis. All parties closely monitor student achievement. A true PLC is focused on a specific, measurable, attainable, results-oriented, time-bound (SMART) goal. In this study, the PLC is designed to increase teacher use of research-based best practices, which is referred to as “professionalizing practice”. This study focuses on a group of volunteer high school teachers who met regularly before and after school to discuss students, share ideas, collaboratively implement strategies, and gather and analyze data. The teachers were trained in PLCs, coached during meetings, and observed by the researcher. This study evaluates the effectiveness of the PLC as it relates to enhanced professional practice, in particular reflective practice and the use of data to drive instruction.

ACKNOWLEDGEMENTS

*Learning is not attained by chance;
it must be sought for with ardor and diligence.*
--Abigail Adams

This dissertation would not have been possible without the cooperation and encouragement of my colleagues in the Millersville School District, especially those who always said “yes” when I asked for an interview or one more observation. Those of you who volunteered your own time before and after school just so I could realize my dream of fulfilling the requirements of this program, I am eternally grateful for the sacrifices you made. I could not ask for a better group of colleagues and friends.

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Chapter I: Problem Statement

American schools are undergoing a profound number of changes, but few of them will ever have a major, positive impact upon student learning and achievement. Teachers are offered professional development each year, but it does not translate into higher rates of student success. Year after year, teachers “burn out” and leave the profession all together, but perhaps given the proper support and opportunities for professional growth, they would have been successful. It may have been those teachers who could have had a profound, positive impact upon students. America’s schools are not only failing teachers who have dedicated their careers to educating the country’s youth, but they are also failing students who need the proper education to compete in a global society. The education system needs a systemic change in order to keep teachers working toward success and helping students reach their potential. The answer is not one-shot professional development, a computer program, curriculum revision, or any other singular means. Reform must come in the form of collegial collaboration—Professional Learning Communities (PLCs) (DuFour & Eaker, 1998). Groups of teachers and administrators working and learning together, focused on specific, measurable, attainable, results-oriented, and time-bound (SMART) goals can have the positive impact that has eluded educators for so long.

Collaborative teams and group projects are nothing new to the business world where individuals come together to solve problems and plan for the future of the organization. Only now are we beginning to understand the power of such professional teamwork in education. PLCs in education are what project teams are in corporations.

Educators should use all available knowledge and skills to understand our problems, create viable solutions, and analyze data to ensure the effectiveness of the solutions (DuFour & Eaker, 1998). If the data indicates inefficiency, we must continue working until we find what does work. This cycle of continuous inquiry, known as action research, will give teachers the expertise to combat the challenges they face (Glanz, 2003). PLCs are one of the best ways to research whether teachers are supported by their colleagues as they actively seek to modify and improve instruction and learning.

PLCs are incredibly difficult to organize and establish in many schools because teachers have worked in isolation for decades. Many schools will need to undergo a paradigm shift in which teachers break away from the culture of isolation and embrace a culture of collaboration. Change is very difficult for the majority of individuals and in order for such a second-order change to occur, school leaders must show their colleagues the way. Teachers must be willing to share expertise, listen to, and sometimes debate with their peers. The ability to give and receive critical feedback and the willingness to open one's classroom door are necessary to the success of PLCs. All persons must be willing to engage in collaborative learning in order to produce results. Individual participants have the greatest impact upon the success or failure of change (Fullan, 2007). With a strong, dedicated leader and willing participants, PLCs can be the vehicle schools use to experience lasting improvement.

Research Design

This study constitutes action research, which is defined by Glanz (2003) as “a type of applied research...conducted by practitioners to improve practices in educational settings” (p. 18). Glanz (2003) says that like other types of research, action research uses

several methodologies, and while it is typically identified with qualitative research, it may incorporate both quantitative and qualitative approaches. The design of this project incorporates both qualitative and quantitative methodologies. Qualitative methods are used to understand how participants perceive and interpret various aspects of their environment through interviews, observations, focus groups, and document analysis (Glanz, 2003). Quantitative approaches to research seek to understand a particular topic through collecting and statistically analyzing numerical data (Glanz, 2003). This case study only uses descriptive statistics.

This project took place in a small suburban high school (grades 9-12) in Middlesex County. The school is part of a K-12 district with a C-D District Factor Group (DFG). With a population of approximately 600, the student body is racially and ethnically diverse, and there are several English Language Learners and special education students. The school has one principal and assistant principal, three guidance counselors, and 67 teachers. Most teachers in the school have between four and ten years experience, but there are a few novice and veteran teachers as well. The researcher's primary role in this school is a language arts literacy classroom teacher. As a teacher at Millersville High School for seven years, the researcher has worked as a professional development presenter and served on the district's professional development committee. While the school has consistently met AYP and was voted one of the top five "most improved" schools, there is concern among both teachers and administrators that students are not adequately challenged.

The development of a pilot PLC could not have come at a better time. In November of 2009, teachers took a professional development needs assessment. The

results indicated a desire for professional development in motivating students as well as opportunities to collaborate with other teachers. The group of teachers who volunteered for this study was enthusiastic about collaboratively developing practical strategies to improve student motivation and subsequent achievement. While developing a pilot PLC is the goal for this action research, the results of this study will lead to subsequent implementation in other schools and eventually in all schools in the district. In order for this to be accomplished a pilot PLC must first be developed.

Research Questions and Methods

The research questions are as follows:

- How do individual teacher behaviors affect the development and practice of a PLC?
- How does participation in a PLC affect teachers' willingness to modify practices?
- To what extent can PLCs professionalize practice?
- How does the researcher's leadership affect the PLC?

This research constitutes a case study; the research questions were answered through four action research cycles that employed a mixed methodology, utilizing descriptive statistics, but primarily qualitative, observational data. The participants were initially a group of six (then five for the second, third and fourth cycles) high school teachers. The group decreased to five teachers for the subsequent cycles, as one participant was no longer able to participate for personal reasons. Surveys determined teachers' initial attitudes toward collaboration and PLCs in order to establish which elements of

PLCs are already practiced and the necessary content for a professional development session. The researcher not only observed interactions among teachers in the PLC, but also their classroom to see what principles of the PLC were transferred to instruction and assessment. The researcher also conducted interviews with the teachers and carefully monitored changes teachers made to their practices. All of this was designed to determine the impact the PLC had on student motivation, learning, and achievement.

In order to strengthen the credibility of the data, analysis, and finding, this study collected multiple data sources, known as “triangulation” (Glanz, 2003, p. 330). Triangulation of data is purposefully designed to attain valid results, but there remain two major threats to validity in this study: (a) Teachers may not have spoken or acted as they typically would knowing they were involved in a study, and (b) Teacher participants were volunteers who were already interested in changing and collaborating with their peers. Events that occurred and conversations that took place when the researcher was not present could not be used for the study. The researcher analyzed data for trends in the ways an individual’s words, actions, and patterns in attitude and/or behavior affected the function of the PLC (positively or negatively). Data was coded, and patterns, trends, and themes that emerged were reported. This study is limited in two ways: (a) The findings apply only to the group studied and cannot be generalized (although the findings can be used to plan for future PLCs), and (b) The teachers participating in this study volunteered to do so, and therefore, may already be ahead of their peers in their ability to adapt to change and their willingness to not only discuss, but also modify their practice.

PLC Background

The purpose of this action research study is to understand how individuals function within a new PLC and how through collaboration, teachers can professionalize practice and improve student achievement. There is an alarming trend among public school teachers and administrators to underestimate the influence they have over students, thereby exonerating themselves from any liability for underachievement (DuFour & Burnette, 2002). Low socio-economic status, little value for education in the home, and the breakdown of the nuclear family have all been blamed, but DuFour and Burnette (2002) maintain that schools do have a great deal of power and must take back responsibility for student achievement.

While the teachers at Millersville High School are dedicated to their craft, with little collaboration among teachers and a lack of data driven instruction, they have not been adequately prepared to make a positive impact on student achievement. As Fullan (2007) asserts, “When schools establish PLCs, teachers constantly search for new ways of making improvements” (p.75). He goes on to say, “Many teachers are willing to adopt change at the individual classroom level and will do so under the right conditions” (2007, p.75). Through the implementation of a PLC, teachers will be more willing to adopt the necessary changes practices that will directly impact student achievement.

An individual’s background and experience profoundly influence their values and beliefs, and this is no different for teachers involved in PLCs. Each teacher’s individual experiences will influence how s/he functions within the team. Given that the development and practice of PLCs constitutes a second-order change, it will undoubtedly be met with some resistance. As Evans (1996) discusses, change challenges

professionals' competence and creates feelings of loss, confusion, and conflict. In order to facilitate the change, it is paramount that one understands the specific attitudes and behaviors that will either promote or damage the success of PLCs. Once those attitudes and behaviors are understood, change can take place. Kotter (1996) explains an eight-step approach to change that helps to ensure the change becomes embedded into the culture.

The steps include:

1) establishing a sense of urgency, 2) creating a guiding coalition, 3) developing a vision and strategy, 4) communicating the change vision, 5) empowering broad-based action, 6) generating short-term wins, 7) consolidating gains and producing more change, and 8) anchoring new approaches in the culture (p.21).

Teachers will not be able to achieve a positive impact upon student achievement until the PLC is able to openly and honestly communicate with one another, omitting any detrimental or non-productive discourse.

In addition to change theory, the role of group dynamics in the success or failure of a collaborative effort will guide this research. Patrick Lencioni's (2002) *The Five Dysfunctions of a Team* highlights the behaviors that contribute to counterproductive teams. As the pilot PLC is developed from a group of high school teachers, the readiness of the team must be examined to determine what characteristics of the team will promote its success and which will impede the development and sustainability of the PLC.

Lencioni's (2002) pyramid demonstrates that group dysfunction stems from an absence of trust since group members must trust one another and their capabilities in order to move forward. The next dysfunction is a fear of conflict, followed by a lack of commitment (Lencioni, 2002). In order for a team to be productive, they must be able to use conflict productively to arrive at a desired end. If no one disagrees, chances are no one is truly committed to the group's mission. Subsequently, when no one is willing to

hold themselves or their teammates accountable for a lack of results, a lack of commitment is present. The next dysfunction is an avoidance of accountability; no one is willing to hold themselves or their teammates accountable for a lack of results (Lencioni, 2002). Finally, as a result of the other dysfunctions, inattention to results runs rampant throughout the organization; either no one realizes, or they refuse to accept reality (Lencioni, 2002). In the case of Millersville High School, lower student achievement has been linked to low student motivation, but nothing has been done to remedy the problem. The school has consistently performed well on state standardized tests, but marking period grades and the quality of student work indicates an underlying problem. This research must determine which dysfunctions exist in the team before the PLC can expect to see results in the form of professional learning or increased student achievement.

PLCs have been linked to increased professional learning, teacher retention, and student achievement (Bezzina, 2006). Many schools implemented PLCs in order to reap the rewards, but few experience success because they have not embraced all the elements of PLCs (DuFour, 2004). In order for a group to transform itself into a professional learning community, the following must occur: (a) The group must create a shared mission, vision and values, (b) There must be a process for collective inquiry; learning communities are data driven, (c) Collaborative teams must exist, (d) Actions and experiments must be integrated, (e) Plans for continuous improvement must be established, and (f) The group must be focused on results (DuFour & Eaker, 1998). Understanding how individuals' attitudes and behaviors will affect any of the six aforementioned criteria, and in turn, the functioning of the PLC will help to cultivate

stronger teams. Without adherence to all the criteria, the risk of superficiality is high, and groups cannot expect improvements in instruction or achievement.

Action Research Cycles

The first cycle of this action research was conducted in February and March of 2010. The researcher met with the group of teachers to explain the project. At that time, they took a survey to provide insight into their backgrounds, experiences, and attitudes toward the various components of PLCs. Upon review of the surveys, the teachers and administrators took part in a one-day professional development session led by the researcher to introduce PLCs. The six major elements of PLCs and SMART goals were reviewed. The researcher then began interviewing and observing PLC meetings and classrooms in order to determine the role individual's behaviors play in creating PLCs as well as how willing participants were to modify practice.

The second cycle of action research took place in September of 2011 with five of the six original participants. The entire faculty of Millersville attended an in-district professional development workshop given by outside presenters. The workshop reiterated the same concepts briefly covered by the researcher in February. The pilot PLC then met every other week. Again, the PLC meetings and teacher classrooms were observed, and individual interviews were also conducted to determine the effect of an outside presenter on the PLC.

The third cycle of action research took place in October of 2011 and focused on reflective practice and its impact upon the PLC. Pilot PLC participants were given copies of Osterman and Kottcamp's *Reflective Practice for Educators* (2004) and asked to read the first two chapters, which were discussed during the subsequent PLC meeting.

Teachers were also provided with journals and asked to engage in reflective practice and submit entries for review. The goal of this cycle was to determine the impact conscious reflective practice would have on developing the PLC and modifying and professionalizing practices. To understand the impact of reflective practice on the PLC, the researcher observed PLC meetings, reviewed reflective journal entries, observed classrooms, and conducted individual interviews.

The fourth and final cycle of this project took place in November of 2011.

Teachers were asked to observe each other's classrooms to foster a shift from isolation to collaboration. One participant suggested that they should instead use a practice called "learning walks" where a small group of teachers observe one of their colleagues, followed by discussion. There were a total of three PLC meetings during this cycle: one to plan for the observations, and two meetings that focused on what participants learned from the learning walks. Observations of the learning walks, observations of PLC meetings, and individual interviews were used to understand the effect classroom observation had on the PLC.

Leadership

Few problems can be solved with individual effort only; most require some degree of collaboration. However, the very people who are preparing children and adolescents for the "real world" infrequently collaborate with each other or the school's administration. Schools should be places where teachers, administrators, parents, and community members come together and devise plans for the success of their students. This would constitute a major paradigm shift in order to see this type of change come to fruition. The researcher considers herself a visionary, what Burns (2003) would call a

transformation leader--one who works collaboratively with teachers to develop high goals and then carry them out. She is a facilitator in many ways and much like her teaching style, her leadership style is to scaffold others and help them develop the knowledge and skills they need to solve problems independently. The researcher advocates that leaders be in the trenches with their teachers to lead the way rather than tell them what to do. PLC development requires this type of transformational leadership.

In order for PLCs to become embedded in the culture of the school, situational and servant leadership must be used. A leader must employ servant leadership and ensure teachers have what they need to develop PLCs (Greenleaf, 1998). In most cases, this means that teachers should be freed up from unnecessary duties, relieved of superfluous paperwork, and given time for meaningful collaboration. One must know which type of leadership is required in a specific situation. Do teachers need a transformational leader who can articulate a vision and the goals? Do they need a transactional leader who knows how to manage their time? Perhaps it means that the leader provides guidance when necessary or sometimes remains silent in order to let members of the teamwork through their problems. Given the complexity of changes occurring when a school begins to develop and implement PLCs, servant and situational leadership are paramount.

One of the most underestimated skills is the ability to understand people and recognize their needs. While there are several leadership theories that guide the researcher's practice, the emotional intelligence theory of Goleman, Boyatzis, and McKee (2002) is most influential. Goleman, et al. (2002) refer to "resonance" in which a leader is able to master the four domains of emotional intelligence: Self-awareness, self-management, social awareness, and relationship management. A leader is a person to

whom others look for guidance and support. Additionally, followers should feel safe and secure, literally and figuratively, with their leaders. The researcher's own emotional intelligence has proven useful in developing, cultivating, and sustaining both personal and professional relationships in order to implement PLCs.

The most important part of the change process is acknowledging and accepting that people are naturally inclined to resist change. Change is often difficult, and it provides a level of discomfort that most would prefer to avoid. This discomfort leads to resistance, which can be toxic to any reform effort if the leader does not combat it. Understanding the feelings of incompetence and loss that change incites requires emotional intelligence. Leaders must demonstrate their understanding and sympathy and then guide followers toward change. The leader must know how to really listen to his or her followers and offer suggestions for using those feelings productively. Finally, the leader should use conflict in a manner that yields something positive. There is nothing wrong with disagreeing if at the conclusion of the process, the best possible solution is found. While the researcher was committed to bringing PLCs to the high school, she anticipated the myriad of mixed emotions the teachers would experience and empathized with them. This empathy was important if second-order change was to be realized.

The researcher gained several insights through this process. First, she became better acquainted with and confident in her ability to implement action research to improve student achievement. The researcher also developed her ability to work with people and guide them through the change process. It was challenging to motivate some people, but very rewarding when the changes yielded success. The researcher also learned to keep her bias in check and not allow her feelings toward individuals or beliefs

in the benefits of PLCs to affect her research. The researcher reflected often throughout this process by meeting with colleagues and professors to discuss research which helped the researcher to grow and explore other areas she may not have thought about. Most importantly, this research project helped the researcher to further develop her leadership skills, which she will continue to hone throughout her career.

The following chapters will discuss the PLC literature that guides this study, a detailed methodology that discusses how the study was conducted, and the findings of each cycle.

Chapter II: Literature Review

As we work in the age of accountability and try to meet demands for higher rates of student achievement from the federal and state governments, boards of education, and parents, PLCs have emerged as a way for teachers to engage in collective inquiry to help them better understand areas of weakness and plan for school-wide improvement. PLCs are viewed as the antithesis of the traditional one-shot professional development workshops. DuFour (2002a) asserts that when teachers can work collaboratively to identify areas of concern regarding student performance, develop strategies for addressing those concerns, and support one another as they implement strategies, they are more likely to feel the self-efficacy essential to responsibility. It is that responsibility for student learning that will lead to improvement.

A PLC is a form of on-the-job professional development; teachers work collaboratively to solve the unique problems plaguing their classrooms and schools. Even within a single school, different PLCs with shared values and norms can focus their energies on different problems. What makes PLCs different is that traditional professional development is the direct link to improvement in student achievement. Traditional workshops may introduce educators to different instructional methods or how to reach different types of learners, but without fidelity in implementation, there is no way of knowing if the workshop had any impact upon student achievement. The goal of PLCs is to identify specific areas of need, develop a course of action, gather data, analyze it, and plan for subsequent action. In this way, the cycle of continuous inquiry does not stop until student learning and achievement has improved.

A large body of literature exists on the topic of PLCs (PLCs). While some researchers seek to define them, others explore the elements necessary to make them work. Still, others try to explain how PLCs contribute to school culture and student achievement. Research studies indicate that teachers' professional practice and student performance are positively impacted through the development and practice of PLCs. Teachers in PLCs spend less time in isolation, share more responsibility for student achievement, increase content and pedagogical knowledge, and learn to adapt more quickly to change (Rasberry & Mahajan, 2008). Though many teachers continue to work in isolation, PLCs are considered best practices, and DuFour believes they should be integrated into all educational settings (2004). School improvement research indicates that, "the ability of school personnel to function as a 'learning community' is a critical factor in enhancing school effectiveness" (DuFour, 1997, p. 56). Many leaders view PLCs as the alternative to either supplement or supplant traditional one-shot professional development workshops. The ultimate goal of such practice is to improve teaching and learning through collegial learning and support. While there are PLC "best practices", the structure and function of PLCs may differ based upon a school's own structure, functions, and needs. The primary focus of this literature review is to explore the research on PLC structure, components of effective PLCs, and the roles and responsibilities of teachers and administrators in PLCs.

PLC Structure

It is important to first understand what a professional learning community is and what it should look like in a school setting. A PLC is not a program or a new initiative. If leaders approach the implementation of PLCs as such, they will likely incur resistance

from the onset because teachers have seen too many change initiatives come and go as part of school reform efforts. Therefore, it is essential for both teachers and leaders to understand what a PLC is and what it is not. One of the major concerns with PLCs is that the term is often applied to groups, teams, or committees that do not necessarily practice professional learning. Fullan (2006) asserts that one of the dangers of throwing out the term professional learning community is that there becomes a “danger and likelihood of superficiality” (p. 10). Practicing a true PLC focuses on “professional learning”, not just “community.” It is not enough to gather a group of educators together and talk about school; there must be meaning and purpose in the practice. Sagor (2009) believes “policy makers and school leaders should focus on how to support teachers as they engage in professional learning and provide opportunities where colleagues can benefit from each other’s insight” (p. 11). PLCs will be more likely to yield school improvement if professional learning is not only practiced, but also valued.

DuFour (2004), a leading researcher and writer on the topic of PLCs asserts, “People use this term to describe every imaginable combination of individuals with an interest in education,” but he narrows the term to encompass three big ideas: (a) a focus on ensuring student learning, (b) a culture of collaboration, and (c) a focus on results. About five years before DuFour and Eaker (1998) began their intense work in the area of PLCs, Kruse, Louis, and Bryk (1994) identified five critical elements of PLCs: (a) reflective dialogue; (b) de-privatization of practice; (c) a collective focus on student learning; (d) collaboration; and (e) shared norms and values. DuFour and Eaker (1998) amended the conclusions of Kruse et al. (1994) with six essential characteristics of PLCs: (a) shared mission, vision, values and goals; (b) collaborative teams focused on learning;

(c) collective inquiry; (d) action orientation and experimentation; (e) commitment to continuous improvement; and (f) results orientation. PLCs must possess all six characteristics in order to be authentic.

Roles and Responsibilities in PLC Development

While PLCs are recognized as best practice, efforts to develop them often fall flat. According to DuFour and Burnette (2002), there are several attitudes and behaviors that prove detrimental to the development and sustainability of PLCs. In order for PLCs to develop, the principal must eliminate negativity (DuFour & Burnette, 2004). Improving school culture is also discussed using a construction metaphor, where the foundation is created the building is built. There is an implication in this metaphor that school culture can be built, and is then self-sustaining. DuFour and Burnette (2002) liken developing school culture to cultivating a garden, because a garden not only needs careful planning and cultivation to grow, but also needs maintenance in order to flourish. Given the garden metaphor, DuFour and Burnette (2002) identify “weeds” that can ruin a garden. The most lethal “weed” in the garden of a positive school culture is the notion that teachers and administrators are not responsible for student learning and that “the premise that the causes of learning lie exclusively or predominately outside the sphere of influence of educators diminishes our profession” (DuFour & Burnette, 2002, p. 28). This belief is the result of an “immunity to change” in which individual and organizational beliefs, values, and norms inhibit any sort of change (Kegan & Lahey, 2009). It is necessary to build a culture of continuous improvement where change is viewed as a necessary means to improvement.

School leaders are responsible for demonstrating that what happens in schools makes a difference. This research can be a building block for discussion about what happens in the classroom and how it can be improved to meet student needs (DuFour & Burnette, 2002). Additionally, small victories and successes should be celebrated (DuFour & Burnette, 2002). Another challenge facing leaders is the tendency of many teachers to prefer to work in isolation; principals can work to resolve this by systematically engaging staff in ongoing, daily, job-embedded professional growth in an environment that is purposefully designed to ensure collaboration (DuFour & Burnette, 2002). Even in situations where the school has not yet been structured for PLCs, the leader must do everything in his or her power to incorporate characteristics of PLCs. This may mean devoting parts of department meetings or faculty meetings as “PLC Time” so teachers can work in small groups to analyze data and plan instruction and assessments. Schools must also provide time for collaboration and monitor the work of teams to ensure their efforts are aligned with the school’s vision and the mission and goals of the PLC (DuFour & Burnette, 2002).

While developing PLCs, DuFour and Burnette (2002) maintain the importance of educators reclaiming ownership over student achievement. Often administrators and teachers blame external forces such as poor socio-economic status, lack of parent involvement, and/or a lack of resources for poor student performance, thereby exonerating themselves of any wrongdoing. Unfortunately, while it is true there are powerful forces affecting student success that are beyond our control, students are in school for seven hours a day and for that time, teachers and leaders must take full advantage by insisting upon having high expectations and delivering the highest quality

instruction possible. The tendency to blame external forces is similar to Lencioni's (2002) avoidance of accountability dysfunction where one believes that without the necessary tools necessary to fix a problem, s/he denies a problem exists in the first place. It is essential for both individuals and the PLC as a whole to cease blaming other factors and instead to reaffirm their dedication to educating their students by accepting that student success and failure is their responsibility. (DuFour & Burnette, 2002). In order to do so, both teachers and school administrators must look earnestly at the program of studies, instruction, and data to make the most educationally-sound decisions possible.

The school principal is most often responsible for the development and sustainability of PLCs. The most crucial role a principal plays is that of instructional and educational leader. It is the responsibility of this individual to build and shape a culture that promotes collaboration and collegiality in order to improve student achievement. To this end, the leader is charged with working with the faculty to identify values, establish a vision, and develop school goals. Any organization in the midst of a shift in culture looks to its leader and takes cues on how to behave, and therefore, the behavior of school leaders is paramount to the success of PLCs. DuFour (1999) believes principals should lead through shared vision and values rather than rules and procedures. In order to build consensus, the principal should lead the staff in discussing where the school is and where it should go (DuFour, 1999). Once a shared vision and values are in place, it is much easier to determine the priorities of the organization.

Another important role of the principal is to be solution-oriented without imposing solutions. The principal should pose questions to the staff and work collaboratively with them to determine the answers (DuFour, 1999). This type of

behavior empowers teachers and promotes shared decision making, both of which are essential components of successful PLCs. Huffman (2003) states, “Changing the culture of an organization is a difficult and time-consuming process that must have at its center the development and working knowledge of a vision shared by all stake holders” (p. 22). Researchers have found that PLCs make greater gains when teachers and administrators truly agree with the vision and as a result, work together to set and achieve goals (DuFour, 2004). Huffman (2003) asserts that no vision will be carried out if a principal imposes his or her own agenda, but rather collects each member’s personal vision to shape a collective vision that will be embraced by all. Any school that wishes to become a PLC must ask itself if its fundamental purpose is high levels of learning and if it and its agents take responsibility for student learning (Mattos, 2008). In order for PLCs to be successful, schools must develop a collaborative climate and a vision focused on student achievement.

When all stakeholders are informed about the characteristics and goals of PLCs, they must then focus on the structural and human resource conditions essential to sustainability (Kruse et al., 1994). The human resource conditions (openness to improvement, trust and respect, cognitive and skill base, supportive leadership, and socialization) are more important than the structural conditions (time to meet and talk, physical proximity, interdependent teaching roles, communication structures, and teacher empowerment and school autonomy) (Kruse et al., 1994). Thus while the implementation of PLCs is a complex task, it can be done more easily without the structural components than it can without the trust, respect, knowledge, and skill any team needs. In order to begin the change process, the structural components of PLCs should be in place. As

visionary and transformational a principal may be, s/he must help to facilitate PLCs by being a good manager of a school's essential resources, of which time is the most valuable. Mullen and Hutingner (2008) suggest that principals look to the master schedule and build in time for weekly meetings.

In order to develop the necessary organizational structure for successful PLCs, it is also important that principals respect the necessity of collaborative time and avoid interrupting or delegating meeting time for purposes other than collaboration (Mullen & Hutingner, 2008). This accomplishes two goals. First, it resolves the conflict of teachers having to rearrange their own schedules and find times and places to meet; and second, it shows teachers that the leaders of the organization are dedicated to PLCs and the change process. It also demonstrates the administration has taken steps to make the practice more convenient. Once the structure of the organization promotes, rather than impedes, collaboration, the rest of the change process becomes somewhat easier. Despite the positive impact restructuring can have, Kruse et al. (1994) found that "if a school lacks the social and human resources to make use of those structural conditions, it's unlikely that a strong professional community can develop," (p. 2). To establish and sustain PLCs, the human resource component must be addressed. Because the development and facilitation of PLCs constitutes second-order change, multiple components of both the organization and the people who work within it must be taken into consideration if they are to be successful.

The PLC model is an example of second-order, systemic change in that PLCs change relationships, culture, roles, norms, communication, and practice (Huffman, 2003). It takes schools many years to build the foundation for successful PLCs, and there

must be an ongoing effort to strengthen and cultivate it (DuFour & Burnette, 2002). One of the most difficult tasks facing leaders is the daunting task of implementing second-order change. In order for second-order change to have a chance at success, it must be planned.

Leaders may take several approaches to achieve second-order change, but DuFour and Eaker (1998) specifically refer to Kotter's (1996) 8-Step Change Process and the mistakes many leaders make when attempting to implement change. Kotter (1996) explains that there is often complacency in an organization and the first step to approaching change must be to establish a sense of urgency—things cannot continue the way they are if we intend to succeed. Other mistakes include: Failing to create a powerful guiding coalition; underestimating or failing to establish a vision; lack of effective communication; allowing cultural and structural obstacles to impede the change process; failing to acknowledge and celebrate short-term wins; hastily declaring victory; and neglecting to imbed changes into the organization's culture (Kotter, 1996). Regardless of how research-based or data-driven a change is, unless there is a plan for proper implementation, second-order change will not be possible. The change process challenges individual competencies and requires significant deviation from former practices. True PLCs require teachers to take on new roles, question individual and school-wide practice, analyze and make sense of myriad data sources, and constantly reflect upon their practice. This is a radical change for many educators. Failure to plan for resistance and other opposing forces will ultimately lead to either a total failure to implement or implementation that compromises the integrity of a true PLC. Once there is

a process for change in place, the leader is responsible for choosing the right approaches while implementing change.

Understanding change means understanding how change affects the people within the organization. Leaders must possess emotional intelligence in order to guide people through the process and ensure the change becomes part of the culture (Goleman et al., 2002). As the leader works to implement PLCs, he or she must be self-aware and able to manage his or her emotions (including excitement and frustration), notice and be well equipped to deal with the group, and be able to build relationships as the learning communities continue to practice. Establishing PLCs “permanently de-privatizes teaching in order to build continuous improvement” (Fullan, 2006, p. 10). Teachers have traditionally worked in isolation and asking them to open their doors, invite peers into their classrooms, share not only best practices, but also shortcomings, and put aside favorite activities in favor of those developed within the PLC challenges their competence, creates confusion and causes conflict (Evans, 1996). More importantly, change requires the individual to learn entirely new ways of completing tasks they have done one way for a long time. It takes a leader with emotional intelligence to assuage fears, create understanding, and help to resolve conflict. Even if this can be done, though, once the PLCs are established, there is a greater issue of the communities working through their own problems as they begin to learn and function as a team.

Groups are only as strong as the individuals who comprise them. As indicated several times, implementing PLCs requires a great deal of change, which involves the way educators see themselves and allow others to perceive them. Professionals, such as doctors and lawyers, do not use the same books they were given in their undergraduate

course work to solve problems that arise twenty years into their careers, and neither should educators. Professionals regularly attend conferences and read literature germane to their practice, yet the majority of teachers do not engage in similar on-going professional learning (DuFour & Eaker, 1998). Part of this problem stems from the fragmented and ineffective professional development that has plagued educators for years, but another problem is that teachers are skeptical to try new things because they have seen so many fads come and go (DuFour & Eaker, 1998). In order to ameliorate this situation and build the foundation for successful PLCs, principals must work to ensure teachers are on the paths to becoming life-long learners by providing professional development and literature that is accessible, relevant, and meaningful (DuFour & Eaker, 1998). In a 2003 study focused on the factors affecting teachers' participating in professional development, Kwakman (2003) writes, "Teachers must be supported to acquire this new knowledge and beliefs, whereas specific attention has to be paid to support for changing their existing knowledge and beliefs in different domains" (p. 3). Principals are paramount in promoting the success of PLCs.

Components of Effective PLCs

Professionalizing teaching is not only the role of teachers themselves, but also principals who can bring educators together and begin deep, meaningful conversations about curriculum, instruction, and learning. Sagor (2009) defines a professional "as an individual who is 'expected to attack non-routine problems and to do so creatively...consider a variety of perspectives when making decisions...and play a significant role in producing the knowledge and insight needed to move [his or her] profession forward,'" (p.8). Sagor (2009) discusses the tendency to treat teachers as blue-

collar workers when they ought to be treated as professionals; this practice leads teachers to act like blue-collar workers and blame “management” when a model or program fails to meet expectations. By treating teachers like professionals, they feel respected and will, in turn, take ownership of the challenges in the classroom and seek to find feasible solutions. When teachers better understand their role, they are more ready and willing to face the challenges posed by modern schools (Sagor, 2009).

As teachers accept their professional roles, it also becomes important for school leaders to ensure sustainable gains in professional development. One-shot workshops do not have lasting effects on teaching or student achievement, and leaders and their designees can work to make professional development more meaningful. When professional development is embedded collaboratively, student learning is positively impacted (Graham, 2007). Principals should provide training and coaching to teachers to master skills that make them effective in the classrooms and in their collaborative teams (DuFour, 1999). School leaders are also responsible for professional development in the areas of discussion and decision-making (Hord & Hirsh, 2009). Gaps in content or instructional knowledge may become apparent during the course of PLC work, and as such, teachers and administrators must recognize these plans to provide the necessary coaching so that PLC practices are implemented in the classroom to achieve student success. Without competent and knowledgeable teachers and administrators, PLC efforts will fall flat.

One of the greatest changes schools must make is the conscious effort to be data-driven. PLC members must learn to use data to assess and evaluate not only students, but their own practice. Data analysis allows teachers to recognize an area of weakness and

accept the need for change, which typically leads to a desire for improvement (Roy, 2009). Within a PLC, teachers can collectively analyze student data in order to recognize where their energies should be focused. While teachers may already be able to recognize areas of concern, they may not be able to realize the cause of the problem. By working collaboratively in a PLC, teachers can explore underlying causes of problems, which then “pushes participants to go deeper in their understanding and often challenges some of their underlying beliefs and attitudes about student learning” (Richardson, 2002, p. 75). This type of inquiry also reinforces the need for reflection. Purposeful and skillful data analysis refocuses efforts on student learning and makes all efforts for school improvement more possible (Roy, 2009).

Teachers who work in PLCs alongside other professionals must be dedicated to new ways of thinking about teaching and learning. First, the emphasis must shift from teaching to learning. Teachers must shift from merely identifying problems to solving problems (DuFour & Eaker, 1998). Teachers who participate in PLCs have highly organized classrooms that function effectively to serve students. Class time is used for learning and non-educational tasks are kept to a minimum. Additionally, there are smooth and efficient classroom routines and standards for student behavior are clear. Instruction is guided by a pre-planned curriculum developed in the PLC and based upon state standards. Students are carefully oriented into new lessons and concepts, and they are abreast of the objectives and expectations. The pace is brisk, and students are encouraged to pace themselves and use out of class time to complete tasks. Instruction is always clear and focused, key points are emphasized and repeated, and the teacher is constantly monitoring student understanding. Learning is closely monitored both formally and

informally, and grading scales are set high to promote excellence. When students demonstrate that they have not understood or are unable to apply new knowledge through assessments, teachers revisit concepts until mastery is achieved. In the interim, teachers discuss the matter with their peers in the PLC, and the group collaboratively develops new strategies and assessments (DuFour & Eaker, 1998).

For teachers who work in a PLC, learning must be measurable and measured often to ensure student success. The focus becomes depth over breadth and skills over knowledge. Traditional assessments are cast aside in favor of authentic assessments. The focus of the PLC teacher is student performance and achievement, relying on exhibitions, presentations, demonstrations, and projects to illustrate mastery of concepts. Teachers seek to actively engage their students through a variety of activities and instructional methods, focusing on the most essential content—there are no trivial tasks (DuFour & Eaker, 1998). Students' tasks should always have clear expectations that are provided in written and oral forms as well as rubrics (teacher or teacher-student generated). The members of the PLC should test all work through critical questioning and critique of practice (DuFour & Eaker, 1998). Teachers share ideas about practice and recognize their collective obligation to school-wide success. In schools with well-developed, high functioning PLCs, teachers are leaders who have a sense of their own knowledge, skills, attitudes, and behaviors as well as those they want students to demonstrate in their classes; these teacher leaders constantly model what they expect their students to demonstrate. These professionals are effective communicators who are focused on results and work diligently with members of their PLC to ensure high levels of student achievement.

Learning communities require a great deal of communication and collaboration. PLCs require teachers to share their experiences, which can sometimes cause conflict. However, this conflict should be used as an opportunity for dialogue, research, and ultimately, problem solving, yet teachers typically work arduously to avoid conflict by either diffusing or ignoring it (Hargreaves, 2002). Teachers fear their relationships with colleagues will suffer if there is disagreement or dissent, thus they do not risk engaging in any type of conflict, regardless of whether that conflict could be beneficial to the individual learning community and/or the school as a whole (Hargreaves, 2002). Perhaps the only way to assuage teachers' fears and make conflict a worthwhile risk is to establish deep trust between them (Hargreaves, 2002). As Hargreaves (2002) discusses, individuals are more likely to engage in conflict with close friends or family members because they know the relationship will withstand the temporary disagreement. Teachers will permit conflict when there is underlying trust; therefore, trust is an essential ingredient in successful PLCs (Hargreaves, 2002). Furthermore, Graham (2007) argues that teacher practice can only improve when they are able to build a sense of community. Although no one can force teachers to trust each other, leaders must find a way since teacher performance and student success are dependent upon how well individuals work with one another. PLCs require individuals to come together in teams and groups and without trust, the PLC will not achieve its goals.

While there are often "teams" or "groups" in most professional settings, rarely do the members think about their effectiveness. As DuFour (2004) asserts, the characteristics of PLCs are: (a) shared mission, vision, values and goals; (b) collaborative teams are focused on learning; (c) collective inquiry; (d) action orientation and experimentation; (e)

commitment to continuous improvement; and (f) results orientation. Much of this will cause initial, unavoidable discomfort, and therefore, the participants must decide how they will manage the problems within their team (DuFour, 2007). Patrick Lencioni's (2002) *The Five Dysfunctions of a Team* highlights the behaviors that contribute to counterproductive teams. As PLCs are developed, the readiness of the team must be examined to determine which characteristics of this team will promote its success and which will impede the development and sustainability of the PLC. Lencioni's (2002) pyramid has an absence of trust as the foundation of all dysfunctions since group members must trust one another and their capabilities in order to move forward. The next dysfunction is a fear of conflict, followed by a lack of commitment (2002). In order for a team to be productive, they must be able to use conflict productively to arrive at a desired end. It is partly the responsibility of the leader to ensure members of the team utilize conflict in a manner that resolves issues and opens the lines of communication. If no one disagrees, chances are no one is truly committed to the group's mission. Subsequently, the next dysfunction is an avoidance of accountability; no one is willing to hold themselves or their teammates accountable for a lack of results (2002). Finally, as a result of the other dysfunctions, inattention to results runs rampant throughout the organization; either no one realizes, or they refuse to accept that goals are not being met (2002). There is always room for improvement, even in schools with the highest achieving students, thus the team must honestly look at the data and realize the areas that can be improved. It must be determined which dysfunctions exist in the team before the PLC can expect to see results in the form of professional learning or increased student achievement.

Although individuals and the team may be higher functioning than they previously were, building trust and improving communication will remain constant as the PLC evolves. Once the dysfunctions have been addressed, the PLC can begin to practice the cycle of continuous inquiry and improvement. For the PLC to be successful and positively impact student achievement, it must embody all six of DuFour's criteria, which cannot be done without strong, supportive leadership (Kruse et al., 1994). Hargreaves (2002) explains that in previous societies, trust grew from family loyalty, religious obligations, and village ties. Today's society is more complex; trust is not taken for granted or given freely, but is rather built and earned (Hargreaves, 2002). "Active trust" as Hargreaves (2002) refers to it, is not unconditional, nor is it blind; it is frequently tested, reaffirmed or violated. Trust is even more evasive in modern education because of the constant restructuring and systemic changes that leave individuals feeling insecure (Hargreaves, 2002). Despite the importance of trust, most teachers are unaware of its absence or presence until unforeseen conflict surfaces. Since open dialogue--a vital component of PLCs--can often result in some level of conflict, trust is paramount in any organization wishing to become a PLC. Sagor (2009) notes, "there are dysfunctional communities where biases are shared and problematic behavior is reinforced," however he continues, "the rationale for investing in such a community is to improve each member's professional work through collegial support," (p.58), and therefore, collegial trust is paramount in the success and effectiveness of a PLC.

The data to support teacher collaboration makes the use of PLCs a best practice. Teachers who collaborate are able to use data to identify student learning deficiencies and work together to develop the means by which they will remedy them. Teachers who

collaborate are more equipped to handle the myriad problems they face. However, successful and sustainable collaboration cannot exist without effective leaders and dedicated teachers working together to make it possible. Trust must exist between all members of a school before any effort is made to implement PLCs. Principals need to learn alongside teachers to model expected behavior and scaffold them as the PLC is established. They must also work to allocate the time and resources needed for successful collaboration. Once teachers have the necessary tools, principals should allow them to work without micromanaging. Although many factors can diminish efforts toward building PLCs, the collective interest and passion for school improvement can counteract negativity and contribute to developing a school culture that is conducive to collaboration, and ultimately yielding higher rates of student success.

The following chapter discusses the methodology used in this research project. The setting as well as the specific research methods and data collection tools will be explained.

Chapter III: Methodology

In the wake of rallying cries for education reform, many professions have looked to PLCs to help remedy the myriad problems facing the nation's schools (Fullan, 2006). Proponents of PLCs have claimed they not only positively impact teaching and learning, but also help to develop cultures that embrace the cycle of continuous improvement. Traditional professional development requires schools to hire presenters who speak for a few hours about a topic then leave teachers to implement whatever program or initiative had been discussed. Even with follow-up sessions, or job-embedded coaching sessions, teachers often feel under supported. This leaves teachers confused and frustrated and has no significant impact on student achievement as evidenced by the number of students who still do not meet minimal levels of proficiency on standardized tests.

PLCs are groups of teachers and other school leaders who work collaboratively to understand student needs through data analysis and research, followed by discussion of ways to ameliorate problems and then implement solutions (DuFour et al., 1998). The process does not end, but rather is cyclical; new data will be analyzed to determine how students performed and improvements will continue until all students reach an acceptable level of achievement. Though this is not an easy process, it seems to have many advantages for teachers, administrators, students, and parents. The school begins to work as a whole, rather than fragmented parts, and everyone is focused on a school-wide vision for student achievement.

Millersville High School is located in suburban Middlesex County, New Jersey. The town has a population of approximately 15,600 people, many of whom are first or second generation immigrant-Americans. The high school houses grades 9-12 with a total

student population of approximately 600. The school has one principal and assistant principal, three guidance counselors, and 67 full-time faculty members. For 60.3% of the students, English is the first language spoken at home, followed by Portuguese (17%), Spanish (13.1%), Ukrainian (2.4%), Polish (2%), and “Other” (5.2%). 13.5% of students have an IEP, and 3.7% are “Limited English Proficient.” The racial breakdown of the school is: 348 White, 99 Hispanic, 57 Black, and 23 Asian students. Nearly 27% of the students are classified as “economically disadvantaged.” The school has consistently met AYP, but there is an achievement gap that needs to be narrowed, if not closed all together.

In order to reduce the number of students who score “partially proficient” and increase the number of “advanced proficient scores” the school has eliminated “tracking” and all students are enrolled in either college preparatory, honors, or advanced placement classes. While this practice seems to have reduced the number of students who score “partially proficient,” there are too few students scoring “advanced proficient.” In addition, there is concern among many staff members that there is low student motivation as evidenced by a low percentage of students who submit well-prepared assignments in a timely manner, and a low number of students who are consistently prepared with materials. In order to better understand student achievement, teachers have begun conversing about their classroom practices, including instruction and assessment, but no formal collegial collaboration has been established. There is also a tendency for some teachers to blame outside factors, such as a low value for education in the home, as a reason for poor student achievement, thus exonerating them of responsibility. In order to professionalize practice, increase collaboration, and enhance student achievement, a

group of volunteer teachers will establish a professional learning community in the high school. This action research study is an observational case study employing a mixed methodology.

Research Design

Glanz (2003) defines action research as a collaborative endeavor in which practitioners (teachers and administrators) seek to improve practices in the school setting. While action research can be limited so that the findings cannot be generalized and applied to other schools, it does serve as a means by which educators can identify and remedy problems in their own organization. In order to obtain the most valid results, data will be triangulated where “multiple approaches, data sources, data collection procedures, and analytic procedures that strengthen the reliability of data collection and analysis as well as findings” (Glanz, 2003, p. 330). Glanz (2003) argues that the extent to which one triangulates will make more effective decisions. Glanz (2003) offers other benefits to action research, including the development of a system-wide mindset for improvement, enhanced decision making, a greater sense of efficacy, and increased reflective practice.

A case study design was selected for this study in order to work closely with one group of individuals whose behaviors would be monitored in order to understand the impact, if any, engaging in a PLC has on their practice. Glanz (2003) explains that case studies are in-depth investigations of an individual or small group using observations and interviews and that the findings of case studies are stated verbally, not numerically. Case studies are a type of qualitative research, which unlike quantitative that uses statistics to analyze numerical data, describes how participants in a study perceive, interpret and behave in a particular setting (Glanz, 2003). This study, in addition to qualitative

methods, will also use some quantitative techniques to collect data, primarily through descriptive statistics.

The group of teachers who volunteered for this study includes two English teachers, two math teachers, and two science teachers; the group was selected based upon their willingness to volunteer. All six individuals taught eleventh-grade students during the 2009-2010 school year, but some were reassigned for the 2010-2011 school year. GD is a sixteen-year veteran (age 47); SP is a ten-year veteran (age 33); MM and VA (both age 32) have seven years of experience; KR has five years of experience (age 27); and TK has eight years of experience (age 29). There were two male teachers and four female teachers. GD only participated in the first cycle; thus, the remaining cycles only had five participants. Teachers have all levels of students from academic support instruction (ASI) to advanced placement (AP). Each member of this group volunteered to participate in the PLC by responding to a school-wide e-mail that was sent asking for participants. This study will attempt to answer the following research questions: (a) How do individual teacher behaviors affect the development and practice of a PLC? (b) How does participation in a PLC affect teachers' willingness to modify practices? (c) To what extent can PLCs professionalize practice? (d) How does the researcher's leadership affect the PLC?

The first step in the action research was to determine teachers' familiarity with the PLC framework in order to plan for the first action, a professional development session introducing teachers to the concept of PLCs. The participants filled out a brief and anonymous survey assessing their familiarity with and attitudes toward PLCs and collaboration. (See Appendix A). This survey was given during an after-school meeting

and took approximately five minutes to complete. Participants were encouraged to be candid in order for the content of the professional development session to be relevant and meaningful. This needs assessment played an integral role in developing the content of the professional development session, which served as the first action for this study.

Cycles of Action Research

The first action research cycle, from February 2010 to mid March 2010, focused on the development of a PLC. The researcher organized the group of volunteer teachers and hosted 6 weekly, after-school PLC meetings in her classroom. She encouraged teachers to bring questions and concerns to the meetings that served as talking points or discussion topics. Teachers were also encouraged to ask colleagues for their opinions regarding instruction, assessment, classroom management, materials, and other aspects of professional practice. The group was observed during weekly PLC meetings, in their classrooms, and during department and school-wide meetings. The researcher worked to understand, through an analysis of field notes and documents, to what extent teachers had begun to adopt the concepts of PLCs and professionalize their practice. The researcher also interviewed teachers to determine which concepts of PLCs they were comfortable with, which were still eluding them, and the benefits they perceived. The researcher conducted classroom observations to better understand the extent to which modifications to instructional practice had been made. At the end of the first cycle, the researcher determined the need for more professional learning experiences in order to better understand PLCs.

The second action cycle focused on teaching PLC members about the specific components of DuFour and Eaker's (1998) PLCs. The researcher planned and observed a

PLC-specific professional development session given by an outside presenter in September 2010. The workshop highlighted the big ideas: (a) a focus on ensuring student learning; (b) a culture of collaboration; and (c) a focus on results. The workshop also reviewed the following essential characteristics: (a) shared mission, vision, values, and goals; (b) collaborative teams focused on learning; (c) collective inquiry; (d) action orientation and experimentation; (e) commitment to continuous improvement; and (f) results orientation (DuFour & Eaker, 1998). In addition to the observations, the researcher also observed PLC meetings, observed classes and school-wide meetings, and interviewed teachers.

The third action research cycle was conducted during October 2010 and focused on reflective practice. The PLC members participated in a book club and read the first two chapters of Osterman and Kottcamp's (2004) *Reflective Practice for Educators*. The PLC discussed what they read and how it applied to their practice. Additionally, teachers were asked to engage in daily reflection. The focus could have been anything of interest: Their instruction, a means of assessment, a classroom management issue, a conflict with a student or parent, or even an issue with a supervisor or administrator. Each teacher was asked to submit reflections, although some did not. Participants also shared their reflections during PLC meetings. Throughout this cycle, the researcher observed the PLC meetings, especially the perceived level of comfort teachers had in engaging in critical feedback. Classroom observations shed light on the role reflective practice played in modifying practice. Individual interviews determined how the reflective practice and critical feedback have affected practice.

The fourth and final cycle of this research project aimed to facilitate the shift from a culture of isolation to one of collaboration. The previous cycles revealed that there was not much discussion of instructional best practices, thus classroom observations would be used to initiate dialogue about practice. Two learning walks (small groups of teachers and/or administrators visit a classroom then meet afterward to discuss what was observed, what went well and ideas they have for improvement) were conducted. After each learning walk, the PLC met to discuss what they saw and what could be improved. Observations of the learning walks, PLC meetings, and individual interviews were used to determine the effectiveness of classroom observation on enhancing the PLC, modifying, and professionalizing practice.

Coding and Analysis of Data

Once the PLC is established, the researcher took field notes during observations group and individual PLCs. The researcher always kept a notebook with her and would take notes after an informal conversation or any other event that helped to answer the research questions. Field notes were analyzed and coded to better understand trends and themes. Saldaña (2009) defines a code as “a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (p. 3). A code can be assigned to a single word, sentence or an entire page of text, depending upon content of that data (Saldaña, 2009). Saldaña (2009) uses an analogy to describe qualitative data coding: “Just as a title represent and captures a book or film or a poem’s primary content and essence, so does a code represent and capture a datum’s primary content and essence” (p.3). As data are coded, categories will begin to emerge. Codes allow groups of similarly coded data to fit

into categories of shared characteristics, and classification reasoning, tacit, and intuitive senses are used to categorize data (Saldaña, 2009). During the analysis process, data were recoded and recategorized several times before themes emerged (Saldaña, 2009). Themes are the “outcome of coding, categorization, and analytic reflection, not something that is, in itself, coded” (Saldaña, 2009, p. 113). Understanding the themes that emerge helped the researcher to understand the impact of PLCs.

Interviews were conducted with individual participants. These interviews were audio recorded and transcribed. The data gathered from both interviews was coded similar to the observation field notes. The researcher attempted to understand how the codes fit into categories and analyze the emerging themes, allowing the researcher to answer the research questions. Reporting of the findings attempted to identify the factors that both impede and promote the success of PLCs.

In order maintain confidentiality, teachers’ names were not used. The initial needs assessment surveys were anonymous. Each teacher was assigned initials and was identified only through those initials in field notes. Only the researcher will know the identity of subjects mentioned in the field notes. Interviews were coded in a similar manner when transcribed from audio recordings. At no time was information gathered during the research shared with other parties with regard to specific individuals. The only conversations that have or will occur pertain exclusively to the improvement of the PLC.

Limitations

This study will be limited by the small population: One group of five teachers. While the findings may apply to other groups attempting to develop PLCs, they cannot be generalized due to the size. There are a few threats to validity that must be monitored

during both the data collection process and the analysis of the data. The first is researcher bias. The researcher recognized her focus on negative responses and was sure to record and report everything observed, even if it seemed contradictory to her own observations. Another threat to validity is the tendency for participants to say and do what they think is "right" and not behave as they typically would, thus affecting the findings of the research. All bias and threats to validity were carefully considered when reporting findings.

The next chapters discuss each action research cycle in detail. Background information, each cycle, data collection method and a discussion are included.

Chapter IV: Cycle I

Overview

The primary goal of Cycle I was to determine the effectiveness of after-school PLC meetings in professionalizing practice. During the first week of February in 2010, the group of six volunteer teachers began meeting in the researcher's classroom after school from 2:30 to 3:15. The data sources for this first cycle included field notes taken during PLC meetings, faculty meetings, department meetings, and professional development sessions. Other data sources were interviews and classroom observations. The triangulation of this data would hopefully give insight into the effectiveness an informal, after-school PLC had on teacher's professional practice.

The first meeting used information gathered from survey analysis to provide a brief professional development session that introduced the concept and guiding principles of PLCs (see Appendix A). During the first after-school session, teachers were given an informational packet titled, "Introduction to PLCs (PLCs)" (see Appendix B). The information provided in the packet sought to establish a common understanding of what a PLC is, its characteristics, the expectations for teachers, as well as defining terms. Teachers were invited to ask questions during this session to clarify their understanding of PLCs. Participants were also informed that if questions regarding the structure of PLCs emerged, they should pose them during the after school meetings. After school meetings were conducted each Thursday afternoon from 2:30 to 3:15 for a total of six weeks.

Professional Development Session

The first meeting of the PLC after school ran longer than other meetings. The volunteer faculty participants gathered in a classroom. The desks were arranged in a circle in order to promote conversation rather than lecture. On each desk was a packet titled, "Introduction to Professional Learning Communities." When all teachers had arrived, the researchers began by thanking teachers for their time and willingness to participate. The teachers were informed that the nature of today's meeting would be to introduce the concept of PLCs, but that future meetings would be more conversational and purposeful. The discussion first outlined the multiple structures for PLCs, but paid specific attention to the work of DuFour and Eaker (1998). The focus is on a cyclical approach to improving student achievement. Teachers were asked to share their initial thoughts or ask any questions. One teacher asked, "Schools that do this, when do they [the teachers] meet?" In response, the research informed her that any time can be used, but ideally there is a consistent time set aside for PLC work. It could be before school, during a common planning time, after school, during department meeting time or professional development time, but that PLCs in larger schools will look very different than in those smaller schools.

Teachers were also informed about the role "best practice" plays in a PLC. "Best practices" are those instructional methods that are found to be among the best ways of teaching students, as measured by their ability to master the concept. Each teacher was asked to write down as many "best practices" as they could think of. Teachers were then asked to share. The first teacher, a math teacher, said "manipulatives." Another teacher responded, "projects," while a third answered "rubrics." The teachers then thought about

practices they believed could be viewed as “worst practices” or at the very least, less effective practices. Three teachers immediately answered “lecture” while another added “reading from PowerPoint.” Another teacher said, “Book work.” when asked to elaborate he said, “I guess I mean busy work, like ‘Read pages 320 – 344 and take notes’.” When asked why they believed these practices were detrimental to student learning, they all answered that those practices bored students and did not “teach for mastery”. When asked to what extent they believed they used best practices, two out of six said they use multiple best practices each day. Three said they do their best to vary their instructional strategies, but they could do better. A third admitted that she was very “teacher-centered”, but that her content area (math) required that.

The meeting came to a close and teachers were informed that the researcher would be visiting their classrooms and conducting interviews the following week. The next PLC meeting was scheduled for the following week, same time and place.

PLC Meetings

After the initial meeting to establish common understandings, teachers met for five more weeks for approximately 45 minutes each session. During the second meeting, teachers used the time to brainstorm problems that needed to be addressed within the school community in order to promote higher levels of student achievement. This second meeting also coincided with the end of the second marking period and the preparation of “D and F” reports was about to commence. The “D and F” reports require teachers to reflect upon the attempts they made to assist students who were not meeting minimally acceptable academic performance (identified by the school principal to be a grade of C- or higher). Teachers are required to complete the form and explicate the means by which

they provided additional assistance to the student, the dates and results of parent/guardian contacts, and the action plan for promoting success in the upcoming marking periods. During the second PLC meeting, teachers used the “D and F” reports as a conversation starter.

One teacher questioned the merit of the reports by asking, “How will all these pieces of paper help kids?” Two other teachers concurred citing “no homework,” “[student] apathy,” “low grades,” “low expectations,” and “not showing up” as the reasons that students earn D’s and F’s. When asked the root of these problems, teachers offered the following list of contributing factors: Parents; school culture; no need for good grades to graduate; grading policy (grade inflation); students earn no lower than a 45 each of the first two marking periods; a 60 or higher is a passing grade; parents do know the material; and there is low student accountability. None of the participants cited teacher behavior as a contributing factor. As the meeting continued, teachers continued making statements that were identified as either statements of blame or statements of frustration. Through the initial meeting, teachers aired a great deal of frustration. One teacher noted, “There is no support for the kids. They cannot come in before 7:30 and get in trouble if they’re here after 2:30.” Teachers continued to lament for nearly forty minutes. These frustrations hindered the development of a SMART goal, which was the intended purpose of the second meeting. At the end of the meeting one teacher joked, “What was it we were supposed to be doing?”

During the third meeting of the PLC, teachers were reminded of the purpose of the PLC. One of the teachers who had been taking a few notes during the previous meeting reminded teachers of their discussion. Two teachers rolled their eyes, while

another commented, “So maybe this time we try to come up with some solutions.” During this session, while no SMART goal was yet established, teachers began to brainstorm ways in which student achievement could be improved. The following suggestions were made: Work on changing the grading policy as a committee; align our policies; greater consistency; reinstate study halls; establish incentives; and begin a homework club. During the brainstorming discussion, one of the teachers had the following comments: “I don’t do projects; I don’t have time,” and “I wouldn’t change anything, the kids need to take it seriously first.” The other five teachers did not question the teacher, nor did they comment on her input; rather, she was simply ignored. The group decided that beginning the following week they would begin conducting a homework club at least once per week after school for their students. During these sessions, students could work on missing assignments, get additional help, or simply complete upcoming tasks.

During the fourth meeting of the PLC, only three teachers were present. These teachers initially began to discuss their experiences during their first homework club session with their students, but their attention was soon diverted to talking about one of their colleagues who was not present at the meeting. They referred to her comments as “pointless” and one of the teachers remarked “her kids hate her because they know she hates them.” This discussion did not promote collegial collaboration required for PLCs, and the conversation was redirected toward formally establishing a SMART goal. The teachers used the planning sheets given to them but decided that the planning would be more effectively done when all members were present. The group briefly exchanged some stories about students who had been previously identified as “lacking motivation.”

One of the teachers commented, “He just needs to know someone cares.” The group dispersed earlier than usual.

The fifth PLC meeting began with some teachers commenting on the practices of some of their colleagues, but this ended when the researcher noted that it would be a good time to establish norms and values for the group. This process should have been completed earlier, but due to focus of previous sessions, it was held off until this meeting. The researcher asked each participant to write down his or her values with regard to his or her work, classroom, and expectations. One member was asked to share the first item on his list. He indicated that the first word that came to mind was “trust.” Other group members were asked to put a hash mark next to the word “trust” if they had listed it as well, regardless of where on the list it was. The next participant was asked to share the first item on her list. She said, “helpfulness.” Participants who had listed “helpfulness” or a similar quality were asked to place a hash mark next to their word. This practice continued until each member had shared the word at the top of his or her list (or the second or third word if someone had previously stated the first word). The other words added to the “values” list were “kindness,” “openness,” “reality,” and “learning.” These words were written on the white board in the room by the researcher and participants were then asked to review the purpose of PLCs and rank the values they identified. The established the following ranking: (a) trust, (b) learning, (c) kindness, (d) honesty (participants changed from “openness” to “honesty”), and (e) reality (clarified by the contributor to mean “what can actually be applied in my classroom”). The researcher asked participants if they were amenable to the values established by the group and if

they felt any should be added, deleted, or moved. The group was in unanimous agreement on the established values and rankings.

The next part of the session asked participants to establish a set of norms for meetings. This had not been done previously because the group filled its time by discussing their perceptions of problems and potentially viable solutions in an open forum. However, given that mutually agreed upon norms are part of the PLC model being used, the group now needed to decide the norms for their meetings. Participants were asked to write down what they felt were important norms for the PLC (including behaviors). The participants listed the following: No talking, texting, or grading papers while a PLC member is talking or sharing ideas; listen to everything that is said without passing judgment; be honest (about both your thoughts, feelings and practices); and don't criticize without a viable alternative or solution. Participants had more difficulty establishing norms than they did values. Several examples of norms were given by the researcher to facilitate the process.

During the sixth and final meeting of the pilot PLC, teachers were asked to reflect upon their experiences and what they will take away. Throughout the conversation, teachers were asked about their perceptions of the PLC paradigm and what impact they believe it had or did not have on their classroom instruction and collegial relationships. The first question asked was, "What were your expectations for these meetings? What did you hope to get out of them?" A science teacher offered the first response. The teacher said, "I was just hoping to learn more about the kids I teach that you guys have too. I did not think I would come here and learn about how to teach science better, it was more focused on the kids." The researcher followed up with, "Were your expectations met?"

The teacher responded that while he did learn more about a few students, he did not get anything out of the past six weeks that he could not have gotten from having a conversation with one of us during lunch or a prep period. He added, "But the fact is, I did not have those conversations, so this process did still benefit me." When other participants were asked to give their feedback, they echoed some of the science teacher's sentiments, but one of the English teachers added, "In talking to MM, I got an idea of how to approach my students differently, but from TK, I got a better idea of how to deliver my content in a better way." The researcher asked SP which would be more beneficial, a grade-level, interdisciplinary PLC, or a content area based PLC. She paused for a moment while another teacher shared her input:

It all depends on what they want, what the goal is. If the goal is student motivation, we're probably better off working like this, but if they want me to get new ideas for the classroom, I need to be with other math teachers. Plus, I know I've said it before, but just because one of you can get Johnny to do work in science or math doesn't mean he's going to do the same for me; it's so different.

When the math teacher finished, SP responded, "I guess I don't really see the point yet." She apologized because she felt she had been offensive, but she was assured her candidness was most important. She went on, "What are we doing? We're here at 3:00 in the afternoon and everyone else is gone. We can change a little bit, and I have taken stuff we talked about, the homework club, and I'm using it, but does it matter?" At this point other teachers expanded upon her reactions, "I don't know that it matters what we do if what is on paper is right." One English teacher succinctly said, "We aren't ready for it." When asked to elaborate upon her comment, she said, "We cannot work together like this because we don't ever work together as a school. Sitting in the same room isn't working together and we're all over the place most of the time, but our wheels are in and the D's

and F's went down so people believe everything is fine." The researcher probed, "Is everything fine?" She responded, "Yeah, it's fine." The researcher asked a follow up question, hoping to get deeper into her perceptions of the school, "Can it be better?" She laughed and responded, "Of course it can." The final question was, "What needs to be done to make it better?" She said, "We all have to work together."

Classroom Observations

Observation of GD. To determine the extent to which the practices and principles discussed during the PLC meetings were being introduced into classroom practice, the researcher conducted observations. Two teachers were selected for observations based upon the ability to coordinate the researcher's prep period with one of their teaching periods. The first teacher observed was GD during her fourth period basic skills math class. The researcher was sitting in the back of the room as students arrived. GD was standing at her desk looking through sets of papers that were clipped together. On the front white board was written a "do now" activity as well as the evening's homework. Students entered the room and were talking to one another. When the bell rang, there were a couple students still in the hall, and GD walked to the doorway to ensure they entered the room. She then reminded them of their "do now" activity. Some students took out paper while others asked their friends for materials. Some students used calculators while others did not. While students worked, GD checked her e-mail and took attendance. About five minutes into class, GD asked a student to put the answer to the do now problem on the board. The student wrote her answer, but did not show her work, and GD asked her to remain at the board and explain how she arrived at the answer. The student wrote out the mathematical equation on the board, but GD insisted the student

verbally explain how she arrived at the answer. The student said she could not. GD rolled her eyes, erased the student's work and said, "On the HSPA you have to explain. If you cannot explain, then you will not pass."

GD walked back to her desk and took a teacher's edition text book from out of her drawer and instructed students seated in the left three rows to open up to page 94. She told the students on the other side of the room to log on to computers that were arranged around the perimeter of the room and complete practice problems. GD then began a lesson on linear equations. She wrote out three problems on the board and using an overhead projector and a graph-paper transparency, demonstrated how to solve the first problem. She did not stop to ask for questions, nor did she connect the new concept to existing knowledge. GD took a small stack of graph paper and handed one to each student. She scolded one student for using pen as she distributed the paper. The teacher then asked students to do the problem she had just completed. In about a minute, she asked for the answer, and a student volunteered. He did not give the same answer the teacher had already given. The other kids laughed at him while GD said, "Maybe one day you'll pay attention when I'm standing up here. Every day it's something else." Another student volunteered the answer. Students were then asked to finish the other problems.

GD then walked over to the researcher and asked if there were any questions or needed copies of any handouts, but she did not. She walked around the perimeter of the room and asked two students to get on task because they were surfing the Internet rather than working on the remediation site. GD then walked back to the front of the room and asked students to plot their answers on the graph paper. She checked that the answers were correct and asked students to change their answers if they had a different answer

than the one provided. She then instructed the students who were on the computers to log off and those who had the lesson to log on and begin their math drills. The same lesson was repeated for the other students. At the culmination of the lesson the homework was assigned and students packed their bags with about two minutes remaining in the period.

Observation of TK. TK's observation took place during the fourth week of the first cycle during his language arts class in the morning during fourth period. The researcher arrived for the observation about thirty seconds into the class, and students were all seated and writing. The researcher looked at white board and noticed a quote that was written, "One must first fail in order to succeed." From previous discussions and knowledge of this teacher's classroom procedures, the researcher knew students were responding to the quote in their journals. While students wrote, the teacher walked up and down the aisles. He then went to his computer, scanned the room, and entered the attendance. When he was finished, he asked if there was any student who wished to share his or her response to the quote. One student raised her hand and said, "If you always did everything right then nothing would get better." TK asked if the student could elaborate upon her idea, but she shook her head. So he added, "She's right. Imagine that every piece of work you turned into me earned A's. What would you learn from that?" A couple of students giggled and one offered, "Let's try it." He said, "Seriously though, when I give you back your papers or a quiz there is writing all over it. I know not all of you look at it, but I make comments and try to help you improve. Some of you actually use it. But what if all you did was get A's and we moved on?" Students processed the concept for a moment. One responded "We wouldn't care. If we got an A, we're done." TK asked, "So an A is the goal?" The student answered, "Yeah." TK then asked "Well

what if you failed?" A student answered, "Then we would have to do something different or try better." TK said, "So how does that apply to the quote?" Another student answered, "That if you're going to do something good you need to do it bad first." TK added, "Well, at least learn from what you did and do better next time."

The class then shifted into a different topic. Students were asked to take out textbooks and open up to a set of poems by Walt Whitman. Students were asked to follow along as background information about the poet was read aloud to them. Then students were asked to count off in order to be broken into groups of three. A few minutes were given for students to meet with their group members and arrange the desks so as to produce a more collaborative set up. Students were each asked to take out a sheet of paper and write the following down: "What does the poem mean? Who is the speaker? What are the literary devices?" These criteria were first stated orally, then written on the board. TK then said, "This will be a quiz grade. You have the rest of the period to work with your group. You will present tomorrow. I will give you about ten minutes to get started and I will visit each group to make sure you're on the right track."

While the groups began to work, TK asked the researcher if she needed anything, but she did not. He went back to his desk, took out a legal pad and made note of each student's group and poem assignment. He then began circulating from group to group. When he got to the first group, he asked them what they noticed about the poem. The students gave an answer, to which TK responded, "You're too vague, be specific. What specifically is the speaker trying to say about the nature?" The students continued to provide answers, to which TK continued to respond, "Still vague." This went on for nearly two minutes before a student asserted, "He is saying that when someone needs to

feel better, if they're upset, they can go to nature and they'll feel more relaxed and it will help them deal with the problem." TK gave the student a high-five and said, "Now, how do you know?" The students smiled and groaned and TK pointed to the text and asked them to pick out specific lines, or even just words that helped to support their ideas.

TK then visited the next group and asked them what literary devices they noticed. None of the students were able to provide a response, so TK asked, "What literary devices have we talked about? Flip to your notes from last week." One student whose binder was already opened to her notes began to list literary devices that she had written down, "Symbolism, irony, metaphor, simile, conceit, imagery, rhyme scheme..." TK interrupted to tell her that rhyme scheme was a poetic device and to focus more on the other others. TK picked up one student's book and scanned the poem. He said, "I will tell you that there are three major literary devices contained in this poem, but you need to figure it out. Look back at the definitions and help each other. What do you see?" TK then walked away from the group and to the white board where he listed the literary devices the student had spouted off. He then looked at his cell phone and asked students to put the desks back in rows because the bell would be ringing soon. Students spent about three minutes packing up their belongings and replacing the desks the way they had been arranged. TK then told students they would have time tomorrow to continue working in their groups. The bell rang, and students left as TK told them to have a good day.

Interviews

Interview with GD. The purpose of Cycle I interviews was to ascertain teachers' attitudes toward the PLC in general and determine whether or not teachers perceived an

impact upon their practice as a result participation in the PLC. Participants selected for classroom visits were the same participants interviewed. The purpose of this was to attempt to compare participation in meetings with classroom practice and perceptions of the PLC. The first interview was conducted with GD who had participated in five out of six meetings. This participant was unable to attend the fourth meeting, and it was her opinions and comments other participants referred to as “pointless.” The researcher was interested to understand her position at a deeper level through the one-on-one interview process.

The interview with GD was conducted during our mutual lunch period for approximately twenty-five minutes. The first question the researcher asked was why she chose to volunteer for participation in the after-school PLC. She smiled as she responded. She said she had a couple reasons, the first being, “I wanted to help you.” The second reason she gave was, “Sometimes I don’t know what else to do with those [basic skills] kids. First I’m frustrated, then I get mad because I don’t know if they really don’t know what’s going on or, like, if they just really don’t care.” She continued, “I know they’re kids, but when they say things like, ‘We don’t need this’ or ‘This is stupid’ I react badly to it.” The researcher asked her what she meant by this, and she said that she would respond sarcastically, but she did not give any specific example. At this point, the researcher brought up the classroom observation. The researcher asked her if she remembered the specific class and she said that she remembered the lesson, but could not recall any specifics. The researcher reminded her of the do now activity and what happened when a student was unable to explain her answer. GD rolled her eyes and said, “That’s what I mean, they cannot do anything.” The researcher asked GD if she could go

back and do it over again would she react the same. She admitted, “I know, looking back what I did was of no help to the student, but if you put me in the same situation again today I might react the same way. It’s my reaction.”

The next question for GD, which was prompted by the previous discussion, was, “Did you gain any useful tools or skills as a result of participation in the PLC?” She thought for a moment and said that she learned how other teachers deal with the same students differently than she does and seem to have different results. She added, “I get that TK has the same student and he is passing his class and never has any issues, but I don’t teach English, and I am not TK.” The researcher asked GD if she thought the strategies TK used with the student could be used in her classroom. She answered, “I guess.” The researcher asked her if she had tried any of the strategies mentioned by other PLC participants in her classroom, and she said that she already did the homework club, but did not have time to try everything. My follow up question was, “Do you think your participation in the PLC was of any benefit to you?” She said, “It was and it wasn’t.” She elaborated, “I have to be honest and say that nothing really changed with regard to students because we sat around and talked after school. But, I think I was forced to think a little more about the problems I’m having and maybe how I could approach certain students differently. Um, for example, I saw how much patience SP has with her students. It’s not that I am going to change overnight because that won’t happen, and I am never going to be fluffy, but sometimes, I guess I thought that what others did worked and I could try it. I don’t know if that makes sense.” The researcher asked her if she was trying to say that listening to others helped her to reflect more on her own practice. She nodded.

The next question the researcher had for GD was, “What do you think you need to learn more about?” GD said, “I know the content, and I know I can manage a room but some of my kids don’t care. I need someone to come in and teach my kids how to care.” The researcher asked her, “So you need help motivating your students?” She answered, “I don’t think it is something I need to learn. They need to learn to care, to see it’s important. I cannot make them care and I keep saying it. Other teachers say it too.” The researcher asked GD how she tries to motivate her students, and she answered, “Grades, I guess.” The researcher asked her if there were incentives for performing well in her class or for demonstrating improvement. She said, “They should want to do well.” The researcher decided that this topic was not going to yield further information and moved on to the final question.

GD was asked, “Would you continue to participate in the PLC?” She said she would because she felt like it gave her an outlet for her frustrations and even if other teachers were not quite as vocal, she thinks they feel the same way she does. My final question was, “What would you change about the PLC meetings?” She said, “A couple things. The first is if they really want to do this, it needs to be during school because people cannot, or won’t, always stay after school. More than that I think I, and other people, would need to see the point. Please don’t misunderstand, it’s not you, but when we do this stuff a lot of us think ‘something new’ and nobody gets what the goal is. Also, and again, don’t get offended, but where’s the principal or the supervisors? You can only do so much.” The researcher felt it was important to ask a question to gain a better understanding about the perceived role of the leader, “Would you want administration to be involved in the PLC?” She answered that she would not because she did not believe

people would speak freely. Then the researcher asked, “Then what role should the administration play?” She said that they should know what is going on and let teachers know the point of the meetings and how they are supposed to help. The researcher asked, “Couldn’t a teacher convey that message?” She said, “I don’t think anyone would care or really put effort into something unless they know it is coming from administration, again, no offense.” The researcher thanked GD for her time and asked her if she had any questions; she said she did not, and the interview was concluded.

Interview with TK. The researcher met with TK at the local pizzeria two class periods after the observations during our mutual lunch period. The interview protocol was the same for TK as it had been for GD, but as TK’s responses were different from GD’s, the follow-up questions were also different. The researcher first asked TK to share why he had volunteered for the after school PLC. He answered, “Because you asked me to.” We both laughed and TK shrugged his shoulders. The researcher asked, “Were there any other reasons?” At first he said there were not, but then he said, “Actually, even though I really did not think of it at the time, I feel like I learn a lot about what I can do with my kids from you and SP. You guys make me feel like I’m awful.” After laughing together, the researcher said, “I think we both know that’s not true.” The researcher also agreed with TK that we can learn a lot from each other and explained that theory is the driving force behind much of the PLC research and the shift from traditional professional development to the implementation of PLCs in many schools. My next question was, “What do you think has been the most important, or some of the most important things you’ve learned from other teachers? It does not necessarily have to be from the meetings.” TK responded, “I’m not even trying to be diplomatic when I say this, but, um,

we all bring something to the table. When we talk about kids and materials, we all have a little bit of a different, um, I guess spin to it and when we talk like that it helps me to come up with new ideas. Or just steal them from you guys.” The researcher asked if he could give a specific example. He thought for a moment and said, “SP started collecting drafts from her honors kids. Neither of us did it before because we thought, ‘They’re honors, they need to edit their own work.’ But she collected drafts for some paper, I don’t remember, and she kept saying that it was a lot of work to go through them but that the final product was so much better. So I tried it and found the same thing. I guess I could have come up with that myself, but because someone else had a good result, it made me more willing to try it. I don’t know if that is a good example or not.” The researcher assured him it was.

The researcher then refocused the questions to his specific participation in the PLC. The researcher asked, “Did you learn anything from your participation in the PLC?” He laughed and said, “I feel sorry for GD’s kids.” The researcher said, “I know you were kidding, but can you elaborate on what you meant?” He said, “I wasn’t kidding, she is so down on everything and blames the kids. Her attitude causes her problems, and no offense, but why did you want her? She doesn’t contribute anything positive.” The researcher asked him if positive contributions were important to a PLC. He responded, “I still don’t think I know exactly what an, um, don’t get mad, what a PLC should be, but I don’t think that anything she says makes anything better.” The researcher asked him to focus specifically on positive comments, not on one particular person’s contributions. He said, “I don’t think everything has to be positive, but it, well...I think it has to help. I cannot think of the word, oh, uh productive. What people say needs to at least help

something.” The researcher asked if negative comments, whoever contributes them, are detrimental to the PLC. He said, “Again, I don’t know exactly what has to happen with the PLC, sorry, but if people are negative about everything it turns people off and nothing will come of it. I shut down when it turns into a bitch session. It’s why I don’t go into the faculty room.” He added, “If the PLC is supposed to solve problems, and I think it’s coming back to me that it is, then people need to do that, not just describe how bad the problem is. What good does that do?” The researcher was forced to agree with him.

We began to run a little short on time, and the interview continued in the car on the way back to school from lunch. The researcher asked TK what he would change about the PLC meetings. He said that he hadn’t thought about it and wasn’t sure. The researcher rephrased the question and asked, “If the entire faculty were to participate in PLCs next school year, how would they need to be different from the one you just participated in?” He said, “Don’t take this the wrong way, but it would need to have a point. I know you have a purpose, and I’m sure you told it to me and I was texting or not paying attention when you said it, but if we are really going to do this then someone needs to tell us why.” The researcher asked him if he could elaborate. He continued, “You’re doing this because you think it is important. You learn from other people. I am not saying I don’t, I really do, but if we have to do something then someone has to tell me why it’s important.” The researcher asked if someone explaining the relevance or importance would change his level of dedication, and he thought for a second and said, “Probably not. I hate meetings. I really hate professional development because it’s a waste of time.” TK continued to apologize for his candor, and the researcher continued to explain that honest thoughts and opinions were most desirable. The researcher asked, “Is

there any way that you would become committed to PLC work?” He answered, “Honestly, no. I will, I mean I think I need to do it, always talk to you guys, but not after school and not serious when we have to write it down. I will come to you and say that I have no idea what to do for a writing assignment and you or someone else will give me ideas.” The researcher asked TK, “So how do you continue to learn?” He answered, “When things aren’t going right, I know. A good teacher knows they have to do something different. We don’t need to sit around and talk about it to know it. If it’s broke, fix it.” The researcher asked him, “What about the teachers who do not realize it is broken?” He shrugged his shoulders and said they shouldn’t have gotten tenure. While in agreement with TK, the researcher said, “But they have it and they are responsible for students, so how do we help them?” He said that that it is not a teacher’s job to help others (“weak links” is how he referred to those teachers who struggle), but rather administration’s problem to deal with. Our interview ended as we arrived back to school. The researcher asked TK if he would continue to participate in the PLC given his opinions and he said, “If you need me to.”

Discussion

There were several discoveries made during this cycle. Through observation of PLC meetings, classrooms, and individual interviews it was determined that the teachers who volunteered to participate in the after school PLC seemed dedicated to improving academic achievement. During the first meeting of the PLC, all volunteers stated in some way that they believed their participation in this research could give them deeper insight into their students and help to improve their students’ academic achievement. DuFour and Eaker (1998) as well as Kruse et al. (1994) assert that a dedication to and focus on

student learning is paramount in a successful PLC. Teachers further displayed their dedication to student achievement through their development of the “homework club”, which aimed to help students get their work done and/or provide a time for students to complete and submit missing assignments for partial credit.

While teachers demonstrated a dedication to student learning, they did not display the ownership of student success that DuFour (1998, 2001, 2004), Kruse et al. (1994), Fullan (2006) and Sagor (2009) believe is necessary to PLCs. During the second meeting of the PLC, the topic of “D and F” reports was brought up, and teachers brainstormed a list of contributing factors to students’ underperformance. Teachers cited factors such as lack of motivation, low expectations, and school culture as contributing to lower student performance. None of the participants indicated teacher behavior as having any correlation to student performance. DuFour and Burnette (2002) assert that “the premise that the causes of learning lie exclusively or predominately outside the sphere of influence of educators diminishes our profession” (p.28). Thus, while teachers are able to identify several factors hindering student success, they are not displaying ownership of student success (and, in turn, failure) that is required in a PLC. DuFour and Burnette (2002) assert that the success of a PLC is contingent upon certain elements of school culture, and teachers who do not take ownership of student learning often prove toxic to PLCs. For this PLC to function in a way that promotes higher levels of instruction and student achievement, all participants should take responsibility for student success and failure.

Another important finding is the high level of frustration exhibited by most of the participants. During the PLC meeting when teachers discussed the “D and F” reports,

they appeared frustrated, and one teacher noted that the school did not provide adequate supports for struggling students. Teachers identified the rule that prohibited students in the building before 7:30 or after 2:30 unless they were with a teacher contributed to the poor learning environment. One participant said, “This is the place kids should always feel welcomed, even if they don’t at home or anywhere else. If we send the message they aren’t welcomed here, then why would they want to be here?” The comments of frustration were not only directed toward the school, but also towards students and parents. One teacher said, “They just don’t care” when discussing the issue of failing students. She was lamenting that she arrives to school early and stays late to offer help, but that so few students take advantage of the opportunity. She demonstrated that she takes this personally and that the frustration she has toward students who do not take initiative hinders her own performance. During the interview with GD, she noted that when students make comments that allude to their apathy, she “reacts badly.” This frustration may be palpable in the classroom and could be a contributing factor to students’ lack of motivation. Indeed, the frustration was most certainly present during the PLC meetings and hindered development of a SMART goal. Furthermore, the frustration expressed by teachers often took control of PLC meetings, and it was difficult for important conversations to take place.

Participants’ reactions to questions and contributions to conversations during PLC time suggest that the teachers who participated in this study have a distaste for professional development in general and do not often see the connection between professional development and professional growth, let alone student achievement. During the sixth and final meeting of the PLC during the first research cycle, participants were

asked to reflect upon their experiences during the previous weeks. When asked to share what they hoped they would learn, there was little expectation for learning about their own practice. As one participant noted, "...I did not think I would come here and learn about how to teach science better, it was more focused on the kids." This statement indicates a disconnect between learning more about instructional practices and enhancing one's own teaching and student achievement. The participant also noted that he "did not get anything out of it that conversations with colleagues would have given me." One of the most important statements made about teacher's perceptions of the PLC came from SP who stated that she did not really see the merit in what we were doing. TK echoed SP's sentiments when he said near the end of his interview, "...I really hate professional development because it's a waste of time." Given the negative attitudes toward professional development in general, it is difficult to help teachers, even those who were willing to volunteer to participate, to see the merit in PLC work. TK explained that if the faculty would be required to participate in PLCs, then the relevance and importance of PLC work would need to be explained to him.

While the teachers in this study expressed lack of commitment to professional development, they said they learned from their colleagues, and most of the participants expressed a willingness to continue to do so. During the interview with GD, she noted "I guess I thought that what others did worked, and I could try it." She was referring to SP's approach to the students they both taught and how SP's demeanor and patience with students seemed to allow her to develop more positive rapport with them. GD also said that while her practices did not change as a result of participation in the PLC, she began to focus more on the problems she was having, the possible causes of the problems, and

how she could handle situations differently. TK also noted that his professional learning comes almost exclusively from conversations he has with the colleagues in his department. His teaching methodologies and the assessments he gives to students are often the products of conversations he has with peers. He also noted that when one of his peers experiences success with a particular practice, he too will try to implement it in hopes of achieving the same level of success. Despite teachers within departments learning from one another, there was little exchange of practice between teachers of different content areas. For example, there was no exchange of suggestions for instructional practices between members of the science and English departments. Teachers expressed the belief that instructional practices varied by content area, and what worked in one content area did not necessarily work in another. Teachers also did not express a willingness to visit each other's classrooms to learn more about practices, but rather believed that informal conversations about instruction, assessment, and student performance would provide sufficient information.

One of the key elements of PLCs according to DuFour and Eaker (1998) and Kruse et al. (1994) is the de-privatization of practice. In order for teachers to not only learn more about instruction, but also engage in critical dialogue about practice, they must be willing to allow others into their classrooms and to visit their colleagues' classrooms. Teachers participating in this PLC did not express an interest in doing so, but did not cite specific reasons. Thus, while teachers are making some changes to their own practice, they are missing important components of PLC work, which is hindering enhanced professional practice.

Although participants stated their desire to continue learning from their colleagues, they did not develop a thorough understanding of PLCs, their purpose, or their function. During the first meeting of the PLC, the researcher provided an overview of the history of PLCs, its merits, and pertinent research. Despite this professional development session and five other PLC meetings, participants expressed confusion and a general lack of understanding surrounding PLCs. Teacher comments were the most significant pieces of evidence to support a lack of understanding. More than anyone else, TK openly stated that he was unsure of the purpose of a PLC. In conversations with other participants, they used the word “group” and “conversation” frequently, which were not wrong in the context they were being used, but none of DuFour’s and Eaker’s (1998) big ideas were as present. Furthermore, the critical elements of PLCs as enumerated by Kruse et al. (1994) were mostly absent from the meetings.

DuFour’s (1998) assertion that PLCs must possess (a) shared mission, vision, values and goals; (b) collaborative teams focused on learning; (c) collective inquiry; (d) action orientation and experimentation; (e) commitment to continuous improvement; and (f) results orientation confirms that this PLC is not functioning at its highest capacity and is not likely to experience the benefits higher functioning PLCs offer. It must be noted that while the PLC does not display all of the criteria listed above, there was some reflective dialogue, an expressed commitment to helping students, and an action established for the purpose of promoting student achievement. Despite the lack of PLC characteristics exhibited by this group during this cycle and the expressed confusion about PLC work, it is believed that potential exists for the group to develop into a higher functioning PLC.

Despite the apparent lack of understanding of the structure, purpose, and function of the PLC, participants were able to identify problems in the school, especially within their own classrooms, and work collaboratively to develop an agreed upon solution. As a result of the mandatory “D and F” reports, teachers are forced to reflect upon their students’ performance and the means by which they can help them to improve. Although teachers lament the reports, if the goal of the reports is to get teachers to reflect on their practice, they are a useful tool. As teachers discussed the problems present in the school as a whole and in their own classrooms, they were able to cite lack of student motivation as the root of many problems. In order to increase student motivation, teachers brainstormed plans of action that if followed, could result in higher levels of student achievement. The group decided to establish “homework clubs” before and/or after school. Each participant agreed to establish a set day and time for their homework club. However, the group did not establish a plan for studying the action in order to determine its effectiveness. Without this plan in place, the group was unable to gather data and assess the impact it had on solving the problem of low student motivation. As noted by DuFour and Eaker (1998), PLC participants must be dedicated to a cycle of continuous improvement, and without this few if any changes will be seen.

The goal of the PLC is to professionalize practice through increased use of best practice as a result of purposeful reflection and collegial collaboration. Through an analysis of classroom observations and interviews, classroom practice did not appear to be impacted by participation in the PLC during this cycle. The practices discussed by the PLC, which were determined to be “best” practices included manipulatives (tactile activities), project-based tasks, and rubrics. During classroom observations, it was noted

that none of these practices was being used, despite the potential to do so. It was determined that while teachers are very comfortable discussing their practices and can cite best practices, the transfer of ideas into practice is not always made.

Conclusion

The analysis of Cycle I data suggest that teacher participants are not only willing to learn from one another, but also believe it is the way in which they learn best. Most participants specifically said they way in which they learn new instructional strategies is through conversations with colleagues. Despite this sentiment, there was no evidence found to support that a teacher's participation in the after school PLC had any impact on the classroom practices. Therefore, while participation in the PLC may have given teachers new ideas for their own practice, there was no evidence that these strategies were incorporated into one's own practice.

An important finding of this cycle is that teacher participants lacked sufficient knowledge and understanding of PLC structure and purpose. Despite the introduction given during the first meeting, teachers expressed confusion about the practice, which may have contributed to the lack of transfer from PLC discussion into classroom practice. This finding will play a significant role in planning for Cycle II. In order to address this concern, a presenter will be procured to provide a more in-depth professional development session on the topic of PLCs in September.

Until it is determined that teachers have a better understanding of the purpose and function of PLCs, little is known about the likelihood of teacher's attitudes or willingness to change their practice affecting the PLC. All teachers were willing to initiate a homework club in order to address the problem of low student motivation, which

suggests the participants are willing to modify their practices. In addition, a couple participants commented on another's negative attitude, one citing that he "shuts down" when the conversation turns negative, which may have affected the development and practice of the PLC.

The results of this cycle suggest that participants were not given adequate professional development in the area of PLCs. In some ways, the researcher's bias contributed to the impediments in PLC development. The researcher's knowledge and familiarity with the concept should have been useful in teaching the participants, but this did not seem to occur. Given her own experience with PLCs, the researcher assumed a certain level of familiarity with the concept on the part of all teachers, but this was not the case. The researcher rarely took the time to remind teachers of the practices and procedures, and instead allowed the PLC function somewhat autonomously, when more facilitation could have been beneficial in this stage of PLC development. While it is not known whether this was a help or hindrance, it is possible that this created confusion in participants about their individual roles, as well as the purpose of the PLC. In order to provide participants with more solid knowledge base, Cycle II will commence with a half-day professional development session conducted by an outside presenter.

Chapter V: Cycle II

Overview

Cycle II commenced in early September. The goal of this cycle was to provide teachers with a deeper understanding of both the structure and function of PLCs so they would be better equipped to transfer what is discussed in PLC meetings into their own classrooms to try and enhance their practice. Using the information from the analysis of Cycle I data, an outside presenter was procured to deliver an “Introduction to PLCs” workshop to the entire faculty of Millersville High School. While the professional development was provided for the entire faculty in a large group setting, the pilot PLC from February and March was seated together and worked with each other when activities were given to promote their group dynamic as well as their individual competencies. Observation of PLC participants during the professional development session, observation of PLC meetings, classroom observations and individual interviews were used to collect data during this cycle.

This group of teachers consisted of the same volunteer participants, save for one. GD told the researcher that she would no longer be able to participate due to personal issues regarding her schedule outside of school. The Cycle II the group consisted of one math teacher, PR, two English teachers, SP and TK, and two science teachers, VA and MM. All participants were present at the professional development session and agreed to participate in bi-monthly meetings to be held on Thursday mornings at 7:00 a.m. in the researcher’s classroom for a total of two meetings during this cycle. In addition to the PLC meetings, teachers’ participation in faculty and department meetings as well as subsequent professional development sessions would also be observed. Classroom

observations and individual interviews were also conducted in order for the researcher to determine the extent to which the values of the PLC transferred into teacher's classroom practice.

PLC Workshop

The professional development workshop was conducted in the high school library from 8:30 a.m. until 1:00 p.m. in early September. Faculty members were seated in groups of six to eight around tables in the room. All pilot PLC participants were seated at one table with the researcher. The presenters began the session with an icebreaker, asking teachers to write down the craziest thing they did during the summer. Small slips of paper were quickly disseminated, teachers wrote down their adventures, and then the papers were collected and put into a hat. As each slip was pulled, teachers were asked to guess which colleague had written it. Teachers laughed and within a few minutes, the workshop portion was underway.

On the first PowerPoint slide appeared the following acronym "TWWADI." Teachers were asked to guess what it meant. After a few incorrect guesses and suggestions from the presenters, one teacher arrived at the answer, "The way we've always done it." The presenters asked teachers the problems with doing things the same way. Several hands rose, and one of the science teachers from the pilot PLC contributed, "It creates stagnation. So much changes that if we keep doing the things the way we did, we're not going to make any changes. Think about technology—we're not still using abacuses." A few heads nodded, but near the rear of the room a group of faculty member sat, two with the cell phones out, one with a textbook, legal pad and pen. The group did not appear to be paying attention.

The next question posed by the presenters asked teachers to think about the changes they have witnessed in education in the last five, ten, fifteen, twenty, and twenty-five years. A couple of hands rose, and the first answer given was “testing.” The presenters agreed that the emphasis placed on testing by schools, districts, states and the federal government have rapidly changed the face of education. Another teacher contributed “the kids.” While a couple heads seemed to nod in agreement, the vast majority of others disagreed, one teacher commenting, “They are the one thing that hasn’t changed.” This incited a debate. Several teachers argued that while technologies and fashions are different, teenagers are still teenagers. Other teachers disagreed, stating that while some elements of the teenage experience remain intact, the family dynamics, drugs, alcohol, technology, and media have dramatically changed what teachers face in trying to educate young adults. The conversation continued briefly, no side emerging victorious, before the presenters asked, “How can teachers work together to better understand and deal with the changes that have taken place?” There were no volunteers; which was fine because the question was intended to be a segue into the next part of the presentation.

Through a PowerPoint presentation, the presenters provided background information, which noted the work of Richard DuFour, as had the researcher during Cycle I. The three big ideas, which serve as the foundation of DuFour’s PLCs (1998, 2002, 2004), (a) a focus on student learning, (b) a culture of collaboration, and (c) a focus on results were listed on the PowerPoint. The presenters asked teachers to think of each big idea and rate on a scale of one to five the extent to which each is present in the school. Once teachers had done this, they were asked to share their findings with their colleagues seated at their table. The pilot PLC spent about two minutes rating each of the

characteristics before SP began the discussion. She said, “I gave the focus on learning a two. If they are talking about teachers collaborating I gave it a four, but if they mean teachers and administrators, it’s a two. And I gave the focus on results a five because that’s all that is ever talked about.” The other PLC members had similar ratings, but the greatest disagreement was over the focus on results because TK felt that the results demanded in this school did not have to be based on actual student learning, but rather the perception of learning. He said, “No one seems to care if the kids really learn as long as they don’t get D’s and F’s and pass the HSPA, no one asks questions.” The researcher asked TK what he rated “focus on learning” and he replied, “Same as SP, a two.” His rationale was:

Like I said, we are so afraid of a kid failing that we don’t always challenge them to learn, even if it’s learning from their mistakes. Instead we give them chance after chance and dumb everything down until everyone has A’s. I’m sure that looks great on paper, but our students are learning less now than they did when grades were lower because they know we will just pass them through.

The other PLC members agreed with TK who was now laughing at himself saying, “I did not realize that bothered me so much!” VA noted, “It is the same with everything, like our plans even. If we have them up and name on them with the right date then our walk through is fine. It doesn’t even matter what the kids are doing or what I’m teaching.” The researcher asked participants to explain whether their perceptions regarding the focus on student learning was a result of teacher’s attitudes and behavior. Participants all agreed that from their perspective, teachers were more focused on student learning, but administration was more concerned with what appears on paper. The researcher asked, “Do you believe that can be fixed?” SP rolled her eyes and said, “How? They aren’t even here.” VA said, “They don’t ever come.” The research decided to focus participants’

attention and asked, “If you only took teachers into account, how would you rate each of the characteristics.” Participants decided that as a group they gave “focus on student learning” a four, “culture of collaboration” a four, and “a focus on results” a four.

After polling the entire faculty and facilitating a brief conversation about the current state of affairs and what teachers can do to improve it, the presenters listed the six essential characteristics of PLCs. Instead of asking participants to rate the essential characteristics, the presenters asked participants how they currently identify and solve problems. One teacher joked, “What do you mean solve them?” Another teacher initiated the discussion and said that student problems are what we focus on, whether it is their class performance, motivation, or behavior. The presenters asked how the problems get solved, and the teacher replied that she sometimes goes to other colleagues or the assistant principal or calls home when necessary. The presenters then said that those actions are the foundation of PLCs because they pull people together to solve problems.

The presenters then explained to the staff that the PLCs that originate in this school will look different than those other schools have because different schools have different constraints when it comes to staffing and scheduling. She said that regardless of the frequency in meetings or problems in need of solutions, all PLCs must follow the same cycle: Identify a problem that is rooted in data, brainstorm a solution, select a solution all are willing to try, implement the solution, monitor its progress by gathering data, analyze and evaluate the solution’s effectiveness, and plan for future actions. The presenter went on to say that PLC participants are researchers who are always looking at their environment and trying to make it better.

The workshop continued with a skit that depicted four different types of teachers. Then the presenters asked each table to look through packets of data that had been placed on their tables and using the data try to ascertain some of the problems that exist in the fictional school. At this time, the pilot PLC was pulled into the library conference room and asked questions about what they had learned from the workshop. MM said, "I think I'm a lot more clear on what is supposed to happen. We're not just supposed to sit and talk." PR added, "When we did this we did not look at anything. We sat together and thought about our problems, but who knows if what we thought were our big problems actually were." The researcher commented that PLCs should use data as the driving force behind the decisions it makes. SP asked, "Should TX and XT be a part of this?" The researcher redirected the question to the group and asked, "Do you think TX and XT should be part of the PLC?" MM answered, "It wouldn't matter to me if they were, but I don't think that it would help." TK said, "It would turn into more paperwork and nothing would get done." SP said, "Not if it had anything to do with the classroom and teaching." Each PLC participant indicated that administrative presence in PLCs would either make no positive contribution or would have a negative effect. The question concerning the researcher was to what extent buy-in for PLCs could be established without administrative participation.

The professional development session concluded with teachers being asked to make a list of data sources they believed would prove useful when identifying problems that exist within the school. Teachers indicated that grade books, student work, class participation, attendance, behavior data (disciplinary referrals, detentions, class cuts, and suspensions), and standardized test data. The presenters asked teachers if they knew how

to obtain such data and what they would do when they had it. One teacher said the data would be easily obtained and as a group of teachers they could identify solutions, but he did not believe that there would be any follow through. The presenters indicated that follow through would need to begin with the teachers and that “success always has a way of attracting people to join in.” They reminded the staff that although administrative support is key to any endeavor, teachers can make the changes they would like to see made.

Findings

PLC meetings. The focus of the next two PLC meetings was to bring together the original pilot PLC participants and have them work together as a learning community. The professional development workshop provided by outside presenters was an attempt by the researcher to better educate the entire faculty, but especially pilot PLC participants about the components, structure, and purpose of PLCs. During the two meetings that took place during this cycle, through observation and careful field notes, the researcher hoped to better understand whether or not the participants in the pilot PLC will professionalize practice through participation in the PLC with a better understanding.

The first PLC meeting took place at 7:00 a.m. on a Thursday morning in the researcher’s classroom during the second week of school. Participants began arriving for the meeting at 6:45 a.m. and the researcher provided bagels and coffee. Once all participants arrived, the meeting began by the researcher asking what participants learned from the outside presenters’ workshop that they had not learned during the initial introduction to PLCs in February of the previous school year. TK began by saying, “I learned more about the formality.” He continued, “That’s not the right word, I guess I

mean structure. I have a better idea of it I think.” He was asked to elaborate and said, “It is more purposeful than what we did last year. There should be more of a specific goal and we’re working toward it.” The researcher asked how last year’s PLC differed from his new understanding and TK said:

We sat around and talked a lot, but we did not have a goal. We talked about kids and I think we talked about motivation, but it was real loosey-goosey and we did not have much follow through. From what I get now, we need to have a real plan.

The researcher asked others to share their thoughts. MM said, “Even though TK took it back, what he said about it being formal is right. There is data and paperwork, but we have to show something.” SP added, “I think knowing this we would be different. I almost wish GD was still here because if we do it the right way now she wouldn’t be able to carry on like she did. No place for it.” The researcher asked if anyone else had anything to add about what they have learned about PLCs and PR added, “I don’t mean to be the next GD, but from what I heard, the administration is a big part of starting this and making it work. I don’t see that happening.” The researcher made note of the comment, and said, “Remember that the presenters also told you guys how much power you can have in starting changes that you want to see.” This may have stifled a conversation, but the researcher made note to follow up with PR during an interview.

The next question posed to the pilot PLC was “What steps are you going to take now that you did not take before?” VA said, “We never talked about goals or vision or that stuff before. I don’t remember it if we did.” The researcher affirmed that this was a good place to begin and asked someone to initiate the discussion on the group’s norms and values, which would set the tone for the remaining five meetings. SP volunteered to do so and began listing the ideas for values that were mentioned by other participants.

Some of the values stated were: High expectations, learning, autonomy, motivation, curiosity, wisdom, experience, literacy, risk-taking, knowledge, and openness. Each word was then listed on the white board, and SP asked which could be lumped together or which might not fit. The group narrowed down its core values to learning and curiosity. The researcher interjected and asked if the values discussed were for the group or those they held about their profession and for their students. All participants looked at the researcher, seemingly looking for further clarification. The researcher said, “The values you decide on are what you as a group value and what you’ll continue to hold as important through the decisions you make regarding student learning.” SP and TK both confirmed that they were listing values for students more so than for the group. SP said, “Let’s try it again,” and this time went to the white board immediately to compile the list. She asked the researcher, “So we list what we as a group value within the group, or what?” The researcher responded, “It can be similar to what you said before, but you may want to add something like ‘honesty’ because you need your colleagues’ honesty to learn and grow professionally.” SP and TK laughed and rolled their eyes, but indicated they knew what to do.

The new list of values included the following: Honesty, sense of humor, willingness to be wrong, positive attitude, learning, high expectations, curiosity, and creativity. SP then asked the group to narrow it down to three or fewer values that could easily be recalled when making decisions. The group identified their values in the following order: (a) Positive attitude, (b) high expectations, and (c) learning (which was clarified to mean student learning, not professional learning). These identified values would be looked at by the researcher carefully during subsequent PLC meetings as well

as during classroom and school-wide observations, (department meetings, faculty meetings and professional development sessions).

After about 20 minutes into the meeting, the researcher informed participants they only had about ten minutes remaining and should try to identify norms for their meetings. In an effort to facilitate this process, the researcher reminded the group of the norms they had identified seven months ago during Cycle I. The researcher quoted the following from her notes: “no talking, texting, or grading papers while a PLC member is talking or sharing ideas, listen to everything that is said without passing judgment, be honest, and don’t criticize without a viable alternative or solution.” The researcher then asked the group if they would like to amend any of the norms they identified. VA said, “I think we said some of that because of GD. She was the one who was negative and she was the one who did all those things.” TK added, “I don’t think we need so many.” SP handed the dry erase marker to MM and said, “Your turn buddy,” and he went to the white board. SP then said, “Be respectful of each other. I feel like that covers it.” VA added, “I think we should keep the one about listening and not judging.” SP said “Fine, but the other stuff is what we would say to our kids, do we really need all of it?” TK nodded his head seeming to agree with SP. The others also seemed to agree and the group identified its norms as “respectfulness and open listening.” The researcher sensed a tension or hostility between VA and SP and made note to ask if either of them perceived it to have any impact on their participation in the PLC.

The researcher brought the meeting to a close by restating what the group had accomplished. She then asked the group what they believed were the next steps that should be taken. MM said that the group would need to look through the data it had to try

to identify an area of concern. The researcher concurred with MM's assertion and asked each participant to select a data source--either their grade books (from the current or previous year), High School Proficiency Assessment (HSPA) data, disciplinary referrals, and/or guidance referrals and try to come to the next meeting with a list of areas for concern that are supported by the data. The researcher also informed MM and PR they would be observed and interviewed during this cycle and a schedule of each would be forthcoming. The researcher thanked participants for their time and the meeting concluded at 7:32 a.m.

The second and final PLC meeting for Cycle II took place two weeks later at 7:00 a.m. on a Thursday morning in the researcher's classroom. All participants were present. In order to promote more open dialogue, the research arranged the desks in the room in a circle so each participant could see and hear the others when they spoke and shared ideas. Once all participants arrived, the meeting began with the researcher reviewing the values and norms that had been established at the previous meeting. The researcher then informed participants that the goal for the day's meeting was to identify problems they believe exist after their review of data. The participants were asked to take out the data they brought to the meeting and briefly share their findings. SP volunteered to record the participants' discussion.

The first person to begin was PR. She said she selected disciplinary referrals and attendance because she had attendance office duty and it was easy for her to obtain the data. She shared that there were various disciplinary referrals for infractions, but she began to see that it was really a core group of 10-15 students who made up the majority of referrals. She said that when she went into Genesis©, the school's web-based student

data program, and searched student's grades they were mostly C's, D's, and F's and that several were taking courses for the second time. She hypothesized that these students' lack of success in the classroom could be the root cause of their discipline problems. TK and SP concurred. She said that she thought student behavior was important, but that it was not the problem in her mind. Rather, she suggested that students' low self-esteem as a result of the inability to achieve success in the classroom could be the root of other problems.

MM offered his findings next. He said that he looked at his grades from the previous school year, with close attention to those who either failed the course for the year, or earned only D's. He said that each of those students had more than seven missing assignments each marking period. He did not know if the root cause was their inability to complete the work, or "laziness." He felt the amount of missing work in his classes was and is continuing to be a serious problem. He lamented, "If they don't do the homework or really get into the labs, when the quizzes or tests are given they don't do well and it's like they don't understand why." PR shared his frustration. She said that from her perspective, of greatest concern is missing work. She added, "I know that was the focus last time, so if something else is needed I understand, but this is huge for me. It's the difference a lot of times between a kid passing and failing, or learning or not." All other participants were nodding or writing notes, so they would be able to share once MM had finished speaking; while all seemed to want to say something, they did not interrupt.

When MM had finished speaking, VA said she had the same problem and she had "tried everything" to get her students to turn in work. "At first I did not take late work, then I did, now I don't because the kids who would have done the work if I did not take it

late started handing it in late.” She continued, “I tried MM’s detention so the kids have to make up the work with me, but only one or two came, not the ones who really needed to be there.” She was visibly frustrated when discussing this issue. She went on to say, “I feel like there is nothing I can do, that they just don’t care.” She put down her pen and cracked her knuckles, and SP asked, “Do you give homework every night? How long does it take?” VA answered that she did give some kind of homework almost every night because she taught a block period and did not see her students every day. She believed that it was beneficial in helping students to develop their skills and understanding for them to have homework. SP said, “Well, to play devil’s advocate, what if you did not give homework?” VA rolled her eyes and SP, although she seemed a little frustrated with the gesture, asked her to think about it. VA responded, “But they’re in college prep. They will have homework in college that no one will check, they just need to do it because if they don’t they will fail the midterm or final or whatever.” SP responded, “I don’t disagree with you. I was just asking if you had thought about it.” The conversation began to stall, and the researcher asked someone else to share.

TK said he had the same issue as MM with the work. He said in one class his students did everything inside class, but he knew it kept them from developing any sense of autonomy. “My students in that class need me for everything. ‘Should I put a period here?’ ‘Does my name go here?’ I feel like they really learn nothing from it because they don’t learn to think on their own, but if I gave them work outside of class I’d never see it.” The researcher saw this as an opportunity to turn the discussion from complaint to action. She asked teachers if from what they had just discussed if they felt they should focus on student missing work. They all agreed it was an area of great concern. She then

asked them to focus on why they needed students to do their work. She asked them to recall their personal values as well as the common values established at the previous meeting. The participants were given about two minutes to jot down their thoughts before sharing.

VA was the first to share. She said, “The first thing I wrote was ‘to pass’ but then when I thought about it the point is learning. I need them to do their homework so they can learn.” TK joked, “Nah, I just need them to pass.” SP shot him a look, and he shrugged his shoulders and said, “You know I’m joking.” SP laughed. The researcher asked what other participants said about why they need students to do their homework. PR and MM both agreed with VA that they needed to learn something from it. PR added that in math, students need to practice and that is what homework is for. The researcher added, “Are there ways to achieve the same goal without homework or without as much homework?” SP said, “I got in trouble for asking that.” VA said, “I still think homework is important for more reasons than just what the one assignment is. Time management and learning to figure something out when there is no one there to ask. You need homework for that.” The researcher rephrased her question, “Is there a different way you can approach homework so more of your students, hopefully all, will do it?” Each participant appeared to be thinking about the question that was posed.

PR said, “In my one class the professor talks about an assignment’s value to students. They want to see connections and feel like they get something out of it so it’s not busy work.” She added, “But I don’t know how to make quadratic equations valuable.” SP said, “I don’t give a lot of homework, only like once or twice a week.” She continued to explain that she used to give homework almost every night, especially

reading assignments, but found that it was not getting done. She said, “I first got mad and would make quizzes so they would read because they knew they would have a quiz. Either they did not care or they just read Spark Notes®.” Then at the workshop at the end of last year, KR (the researcher) said that she wanted work done and that was her goal. SP went on, “So I took what I was assigning and brought it back into the classroom and at least now I know they’re doing the important stuff.” The researcher asked, “Isn’t it all important?” SP said, “Some of it more than other stuff.” The researcher asked, “Well what if we only kept what was important?” The participants began to think about what the researcher was suggesting. She then asked them to begin discussing possible actions that could be taken to increase the frequency with which homework is completed and turned in.

SP shared first and said, “I think I can look at what I assign and think ‘do I really need to do that?’ or ‘is this really going to help them learn?’ I’m sure there are things that can be cut.” PR was a little hesitant and said, “I need to give homework every night. It has to be.” SP asked, “How many problems do you give?” PR said “It’s always different. Sometimes ten, sometimes 30.” SP asked, “Do you think you could cap it? Do they learn more because they do more?” PR seemed to agree with SP’s opinion and said that while she could not eliminate homework, or even cut down on the frequency in which it is given, she would be willing to cap the number of problems.” The researcher then asked the others to share their thoughts. TK said, “I have almost everything in the classroom already except for with the honors. But they do what I give them so it’s not really an issue.” SP asked him, “And the other kids do everything?” TK said, “Not everything, but we do spend so much time in class on it that if they did not do, I wouldn’t know what else

to do.” SP rolled her eyes and said, “That’s great.” TK did not seem to notice or did not care.

MM was the next to share, and while he said homework was very important to him, he thought he could make it more meaningful instead of “book work.” He said, “Now that I am thinking about it, maybe instead of having them read and outline a chapter I can give them a concept to research and report on or something.” The researcher asked for him to elaborate, and he said, “I guess the book work is kind of boring, and if they aren’t doing it anyway they aren’t learning anything, so I can try something different.” VA rolled her eyes. MM saw her do so and said, “What?” She said, “They have to do homework.” He replied, “I did not say they wouldn’t I am just thinking of changing it a little.” The researcher asked VA to share her concerns. She said:

I just feel like we keep dumbing it down for them until we’re spoon-feeding them. Who is doing this for them in college? They will fail out and then that will be our fault too. I wasn’t in high school that long ago and we did our homework; I don’t get it. I don’t understand when it happened that we have to constantly change everything because these kids don’t feel like doing work. I would help any kid any day who asked for it and was willing to work, but all we’re doing is giving them what they want. So stupid!

VA was visibly frustrated at the idea of having to change her homework practices to meet the needs of those students who, for whatever reason, were not turning in the work. The researcher asked her if she ever made changes to the way she teaches. VA indicated that when she felt her students were not comprehending a concept or developing the necessary skills, she tried different ways of re-teaching or gave a different type of assignment. SP interrupted, “It’s the same thing! If you make changes for the kids who aren’t getting it you’re still changing.” VA argued that she made those changes for students who did not understand, not who were “lazy.” SP asked her how she knew that a

student who did not turn in work failed to do so because he did not understand it and was embarrassed about it. VA admitted that she could not. SP added, “So I get the whole ‘this is them winning thing,’ but if you change something and they learn more, it’s better for everyone.” VA sat silently for a moment and then said, “I guess you can look at it that way. I did not say I wouldn’t do something, I just said that the idea of it frustrated me. I feel...kind of attacked because I said what I thought.” The researcher asked the other participants if they could see how VA would feel this way and SP said that she was just trying to illustrate her point, “Sorry, that’s how I get when I get frustrated.” Her comment seemed somewhat sarcastic, and it appeared VA took it that way as well. In an effort to bring back more productivity to the meeting, the researcher asked what action the group would be willing to take to help the problem they identified.

SP said, “I think it’s homework.” The researcher said, “You will need to clarify a bit. What about homework? How will you monitor the effectiveness of the action?” SP asked, “Does it have to be the same for all of us? I don’t know if that’s going to happen.” VA said, “I’ll do whatever we decide.” The researcher responded that it did and that each teacher would need to monitor the action’s effectiveness. MM said, “Why don’t we all say that we will give homework, but that it will take no longer than a certain amount of time and we tie it directly to what we’re doing and try to make it something they want to do.” SP asked, “How do we make that an action?” The question was directed at the researcher, but the researcher posed it to the group. TK said, “Okay, homework is no longer than twenty minutes and it connects. What about our policies though? We all have a different one.” SP said, “That will take forever.” TK said, “What about taking MM’s idea: homework is due the day it’s due, but if not turned in it must be made up after

school?” SP said she was fine with it, as did PR and VA. The researcher asked, “Can you all devote the twenty minutes each day after school?” They all indicated they could. The researcher also asked, “Do you want to add that you’ll call parents if they don’t come?” None of the participants thought that procedure necessary.

The meeting ended at 7:39, one minute before the beginning of first period. The researcher reviewed what was discussed and indicated she would send an e-mail to everyone for their records so they would know how to study the action and determine whether or not it works. The participants rearranged the desks and as this was done, SP said to VA, “I’m sorry if you took it the wrong way. It’s early.” VA replied, “It’s fine.” The participants were reminded they would receive information about the next cycle and that the observations and interviews would continue on schedule.

Teacher interactions at meetings. During the first cycle, teacher participants in the pilot PLC were observed during faculty meetings and professional development sessions in order to ascertain the extent to which the elements of PLCs were affecting their professional practice. The goal of these observations was to ascertain the types of contributions, if any, that were made and to try and determine if the espoused beliefs discussed in the PLC were transferred to other professional settings. The first faculty meeting took place on September 14th in the school auditorium. Most staff members tended to sit toward the middle and arranged themselves by department. The first item of business was to discuss the new daily lesson plan requirement. TK demonstrated a feasible solution for submission that he felt would benefit teachers. He spoke in front of the faculty and explained the idea. The staff listened, and when they asked questions, TK was able to respond in ways that fostered further discussion. The issue at hand pertained

to technology, which is one of TK's areas of strength. The staff ultimately dismissed his idea, but he was undeterred, simply stating, "I thought it might help, so I wanted to share." TK typically does not speak at meetings, and in his seven years teaching, had never spoken in front of the faculty. The researcher made note of this and to ask him whether or not he felt the PLC had in any way spurred this behavior.

The next item on the agenda required each content area or department to take a copy of the school's program of studies, find a mutually agreed upon meeting location and determine which changes could be made with regard to teaching assignments and/or course offerings. During this time, the researcher visited each group for about five minutes to discern pilot PLC member's participation in the breakout sessions. The math department was first, and PR was taking notes and asking questions of the group. She said, "I am not comfortable teaching Calculus or Pre-Calc, which I've said before." She continued, "Do you think we're pretty good with the assignments we have this year or is anyone unhappy or need a change?" One of her department members added, "I'm not teaching this course if I have to do the daily plans because it's too much." PR offered, "Well, we all have to do the daily plans, and we really have not seen how they're going to play in yet, so let's wait and see." From the researcher's observations PR demonstrated the ability to lead the group of teachers toward more positive dialogue, despite the number of veteran teachers with whom she was conversing. The other teachers responded to her productively and offered suggestions. When a statement identified by the researcher as a "complaint" was issued by a member of the department, PR asked a follow up question or did her best to rephrase the statement so the contribution would

yield a more productive result. The researcher made note to question PR about this in her interview.

The next department visited was the English department, of which SP and TK are members. The department was discussing teaching assignments when the researcher arrived. Each department member asserted they were content to continue teaching their current assignments. TK and another teacher did add that fewer preps would help, but they did not see a way for that to be possible. The next item that was addressed was the department's budget. At this point TK said, "We're won't get anything." SP said, "We have to ask though. Look at the purple books. They're falling apart and we cannot say next October we need books." TK took out his cell phone, sent a text message and continued to sit in the meeting and offer no further contributions. SP asked another member of the department to count the number of purple textbooks in the other room while she counted the number in the room they were in to get a total number on hand. She then took out paper and began to compile a list of the texts that were needed from each teacher. When she asked TK he said, "I think I'm good." She rolled her eyes and continued to the last person. She was able to produce a list of desired materials, but it did not appear that she was demonstrating the characteristics of a colleague as established during the PLC meetings. She did not engage in a discussion with TK, but was rather dismissive. However, TK did not contribute to the group either, because when the issue of budgeting and materials was brought up, instead of offering suggestions, he too dismissed the issue saying, "We won't get anything." TK and SP appeared to be the leaders in the department and kept the conversation focused on the matter at hand.

Science was the final department to visit. MM and VA were sitting in the classroom with their fellow science teachers. VA was speaking when the researcher entered. She was discussing her concerns with the way students were placed into classes. She said she did not believe the distributions were helpful to either teacher or student. She added that she had one class with about 15 students and one that had over 30. VA went on to say that the class of 30 was taught collaboratively with a special education teacher and between the large class size and class composition (presumably a disproportionate number of historically lower achieving students) she did not know what to do with them. No one in the group, including MM, offered suggestions. VA did not discuss strategies she has tried, but rather gave the impression that she did not believe she would have success with that particular class. VA's sentiments were contradictory to the values espoused by the PLC. MM, who had an opportunity to offer suggestions, did not. The researcher made note of VA's complaint and MM's lack of engagement in order to follow up on it later in the research.

At about 3:15, the departments were called back to the auditorium to reconvene as a whole group. The principal asked if there were any issues for "the good of the cause." TK was the first to raise his hand and asked, "It said on the master schedule that all standard-level classes were going to be eliminated next year. I thought the idea was tabled last year and we were going to discuss it before making a decision." The principal, who will be referred to henceforth as TX, responded, "No." A math teacher continued to probe the issue and said, "We have data that shows the students were scoring higher before the standard and CP were lumped together." TX said, "I've seen no data." SP then interjected, "Can we talk about it though because we have an issue and some of these

kids will struggle.” TX responded, “I’m telling you now, standard is going away.” SP said to TK, who was sitting next to her, “There is no point in talking about anything because he doesn’t care.” TK said, “We cannot talk about anything. Those faculty meetings are over. He doesn’t want to talk.” The issue was not discussed. The researcher wondered whether seeming lack of communication between TX and the teachers had any impact on the teachers and made note to ask the question during interviews.

The question posed was by TK who wanted to know when the first set of daily plans were due. TX said they would not be due until the second week of October. One of the math teachers asked if he could provide a sample plan, and he agreed to, but said he would only do one for social studies. SP said to another English teacher sitting behind her, “Because that’s all he knows. But it’s not tested.” SP’s tone of voice seemed frustrated and the researcher made note to follow up with her on her thoughts and feelings about the daily plans, principal or other contributing factor to the frustration. The researcher was curious as to what role that frustration played in her own classroom and/or her interactions with colleagues.

The meeting ended at about 4:10, which was 40 minutes past teachers’ contracted time. Their willingness to stay late and try to discuss concerns indicated a level of concern for the new requirement of daily lesson plans and the role the plans would play in evaluations. The teachers also seemed concerned that the time spent on daily plans would take away from other responsibilities they had, which would ultimately negatively impact instruction. The researcher made a final note to discuss this issue at the next PLC meeting.

Classroom observation of MM. The first classroom observation conducted during this cycle took place the third week of school. MM's college-prep level biology class was observed in the morning. The room was dark, save for the light from the LCD projector. The title of the PowerPoint was "Kaibab Deer." There were 18 students in the room and as they entered, MM directed a few of them to hand out papers. When the bell rang, the students who were still standing or talking began to pay attention as MM began to introduce the day's lesson and activity. MM is very casual in his approach with students, sitting on the desk as he talks to them. There is a mutual respect that exists between teacher and students. MM provided students with background information about the species of deer and the population concerns.

This lesson was connected with a real issue, thus MM used problem-based learning to assess his students' understanding of a particular concept. As MM continued giving background information, he informed students that this particular issue was taken to the Supreme Court because the citizens of the region in which the deer were found believed they had a right to hunt the deer in order to control the population. MM made a clear interdisciplinary connection. MM then alluded to a significant problem that resulted from human intervention in population control, which segued into the activity students were expected to complete in groups. MM asked students to propose their own management plan to control the deer population. Students were then asked to review the directions for the activity. MM gave students a couple of minutes to do so then asked if there were questions. When there were none, he instructed each group to find a lab table and begin their work.

As students began to meet with their group members, MM moved from group to group to clarify the directions one more time. He modified the directions for some groups and posed questions to other groups. In the packet students were to use, there were graphs, charts, maps and narratives that explained the problem. Students of all learning styles were given an opportunity to gain the necessary information. The researcher did wonder why different groups were not given different task in order to differentiate instruction. This question would be raised during the interview.

For the remainder of the class period, students worked collaboratively to develop their population management plans. Some groups were working more quickly than others, but MM continuously circulated the room to ensure groups were on task and devising feasible plans. When he got to a group who seemed to be going in the wrong direction, he asked probing questions to help the students focus on the information they needed in order to develop a plan that was supported by the evidence provided. At only one point was there a minor behavior issue with a student, and MM took the student aside and asked him if there was anything he needed to complete the work better. This approach seemed to disarm the student who immediately apologized and rejoined his group. When MM realized he was being asked the same question by multiple groups, he would stop the lesson to clarify for the entire group, which was helpful, but did disrupt a couple groups. Overall, the lesson demonstrated several best practices and engaged students. The work sought to assess students in a way that would require their mastery of concepts. The researcher was curious as to the role the PLC played in MM incorporating such practices into his classroom or if this type of instruction is characteristic of MM,

meaning the PLC had little if any impact. As the lesson concluded, the researcher established a meeting date and time for the follow up interview.

Classroom observation of PR. The second classroom observation was in PR's Algebra class. Prior to the beginning of class, students were entering the room and PR instructed them to hand in their homework and begin their "Do Now" activity. The class consisted of about 30 students. It was a special education collaborative class, meaning that a special education teacher was also present in the room, assisting students as needed. One special education student also had a personal aide. The class was comprised of mostly freshmen, but also a few retained sophomores. The class was a blocked period (two consecutive periods) that coupled Algebra instruction with math remediation. All of the students in the class scored "partially proficient" on the NJASK8 test and have been identified as being in need of remediation.

Students were instructed to complete the "Do Now" activity, which required them to graph linear equations. Some students were completing the task, while others were talking to other students or simply not working. PR took attendance and did her best to work her way around to each student to monitor their progress. She stopped frequently to correct behavior. The special education teacher tried to get one student to begin doing his work; he refused. PR glared at the student and he picked up his pencil and began to work. It was evident she had a better rapport with the student than the special education teacher. PR stopped a few more times to tell the entire class to lower the noise level or remind them to complete the tasks. PR was visibly frustrated.

About five minutes into class, a student who was not working asked PR for a pencil and she reminded him where they were kept. She did not ask him why he did not

have a pencil, nor did she stop to lecture him about the importance of bringing a pencil to class. This classroom procedure clearly helped her to focus her attention on helping students. PR raised her voice above the noise level to get her students' attention. When she spoke, the students who were talking stopped. She went to the white board in the front of the room and called on a student volunteer to solve the problem. She walked around to ensure students were paying attention. She then went back to the board and quietly corrected an error the student made, then asked the student if she could explain her answer. She helped the student to do so, connected the problem to the homework assignment, and then asked students to take out a blank sheet of graph paper. She put another problem on the board and asked students to work it out.

PR walked over to one student who did not appear to be working, but was rather distracting the student in front of him, wrote on his paper, and the student left the room. If the student was sent out of class, it was handled very discreetly without disruption to other students. The researcher made note to discuss this with PR during the interview. Once the student left the room, PR called on a student who did not have her hand raised to come up to the board and solve the problem. The student was reluctant to do so, but PR assured her she would help.. Together they worked through the problem. At this point in the class, about 15 minutes in, the group had settled down and was ready to work.

PR asked students to recall the quiz they had taken the previous day. There were a few shouts. One student said, "Oh I failed that." PR looked at the student and said, "That's ok, I gave it to you to see if you could do it and if you failed it then I just need to give you more practice." The student did not respond, but PR's statement revealed that quizzes appear to be used by her as formative assessments and she uses the data gathered

to plan for instruction. The researcher was curious as to whether this had always been her practice, or if there was a contributing factor to the adoption of the practice. A note was made to discuss this further during the interview.

The remainder of the class period consisted of whole group instruction during which PR would place one of the quiz questions on the board and review the proper steps for answering the question, as well as the correct answer. Students were instructed to correct their answers. The corrections would be given a class work grade. This was interesting because it provided an incentive for students to correct their work, despite the fact they were likely frustrated with their poor performance. When there was just over five minutes left in the period, a new problem was placed on the board. Students were asked to solve the problem, showing all of their work and turn it in with their quiz corrections on the way out. This “exit pass” appeared to serve as another formative assessment PR would use. The researcher was curious as to whether or not there were students who performed well on the quiz. Additionally, PR seemed to use whole group, direct instruction most often and the researcher wondered whether or not varying instructional methods would positively impact students. The researcher was most interested in the extent to which the best practices discussed during PLC meetings were incorporated into the classroom. The researcher made note to ask PR whether or not her participation in the PLC had in any way affected her professional practice.

Interview with MM. The interview with MM took place during his lunch period for approximately twenty minutes. The interview began with a review of the lesson that took place. The researcher was impressed with the incorporation of problem-based learning and that the activity was student-centered. The researcher asked MM, “Did you

develop this activity on your own, did it come from a text, the internet, or somewhere else?” MM said he had gotten the idea from another biology teacher a couple years ago and has modified it along the way to fit his needs and the needs of his students. Given the indication that he had worked collaboratively with a colleague, the researcher asked, “Do you frequently share ideas with your peers?” MM said that he spoke almost daily with the other members of his department and is always willing to share his own ideas and he often finds that in talking with them he gets “ideas that are so much better” than he could have developed on his own. The researcher then transitioned into discussing the PLC and the work that has been completed thus far. “Do you find participation in the PLC helpful?” MM thought for a moment and said, “Um, yeah, I mean I always like to talk to other teachers, that’s just my style, but I, um, I...it’s a little different with our group because we all teach different things.” The researcher asked MM to elaborate and he indicated that while he values the conversations he has with his colleagues from other departments, there is not much he feels he could incorporate into his own classroom, with regard to lessons and how particular topics are approached.

The researcher was curious as to whether or not any PLC practices were perceived as relevant to a mixed group of teachers and asked, “Is there anything you’ve gotten out of the PLC? Anything that has affected your teaching?” MM thought for a moment and responded that he feels as if he gives “more thought” to his practice, but that he does not attribute anything specific regarding his practice to participation in the PLC. He added, “I’m not saying that I don’t like it or that it isn’t useful, I just don’t...I, um, don’t know the...that it’s changed me or made me better.” MM went on to say that he does feel that discussions with the members of his department have improved his

practice. The researcher asked what content area PLCs might be able to achieve and MM responded:

I think if you tell people they have to do something they are going to fight it. Every year or month or whatever we're doing something else and no one has answers. Then something goes away and we get something else. I don't think people would care about PLCs if they have a name and all that. But that doesn't mean people...don't learn from each other. Teachers I mean learn, I mean, I guess I can only speak for myself, but I learn a lot more from talking to someone about a lesson or whatever than I do from a workshop or meeting.

MM's response indicated a sense of frustration on his part, and possibly on the part of other faculty members, with regard to their professional development experience. The researcher asked, "Are your only resources other teachers? Do administrators or supervisors every help you with aspects of your teaching?" MM quickly responded that administrators and supervisors have offered little in the area of professional development or useful constructive criticism regarding his pedagogy or the lessons and activities he uses in class. The researcher then asked MM if he would object to other teachers coming in to his room to observe and/or critique. MM said that he would not, but that it does disrupt the normal "flow" of class. He did say that he thought he could learn more that way than from traditional professional development workshops or administrative observations. He added, "I would value what you or someone else said." The researcher asked him if he would like any feedback or to see the notes from the lesson, and he said he would. The researcher briefly discussed the opportunity to differentiate instruction using the activity and MM replied that he appreciated the feedback because he had not thought of it, but was actively seeking ways to incorporate more differentiated activities into his teaching. The researcher asked MM if he had any final questions or comments and he said he did not.

Interview with PR. The interview with PR commenced two class periods after the observation. The researcher met PR in a small conference room off of the school library. The researcher reviewed what she had observed and what she had been looking for. When the researcher indicated that she was trying to determine the extent to which practices discussed during the PLC are incorporated into teachers' classroom practice, PR indicated that she did not recall much discussion of practice. The researcher asked her how she defined "practice" and she said "what we do in the classroom." This eliminated the possibility of a miscommunication, thus the researcher wondered whether or not classroom practices had been discussed as much as she thought they had. At this time the researcher briefly stopped the interview to review notes taken during the PLC meetings (she could not review the audio tapes because the recorder was currently being used for the interview). The researcher found notes referring to homework practices, but did not find any notes regarding "best practice." She made note to bring up the issue during the next PLC meeting. Of concern was the possibility that the PLC did not appear to be having much impact upon teachers' instructional practice because instructional practices were not discussed very much during the meetings.

In order to learn more about PR's experience with the PLC and what she may have learned from the experience, the interview continued with many of the same questions the researcher had originally intended to ask. The next question was originally part of the interview protocol, but was also relevant to PR's observation that little practice was discussed in the PLCs. The researcher asked, "What do effective teachers do and what do they refrain from doing?" PR responded that she believed effective teachers had to be in tune with their students' strengths, weaknesses and needs and be ready to

give them the help and confidence they need. She added that raising one's voice or using ridicule are counterproductive, but that some of the school's "effective" teachers did just that. The researcher made note that similar to PR's observation of the PLC meetings, she too did not discuss specific practices when asked about effective teaching, but rather teacher's intuition about students. When asked how she developed her lessons, PR said that she often uses lessons similar to those she remembers from her high school math classes, because "if they stand out that much, there must have been something good about them." She added that she also uses the internet and the texts. When asked if she collaborated with other members of her department, PR indicated that while she has tried to, different personalities and teaching styles precluded that from happening. She said, "I just stay to myself. I won't ignore anyone or anything, but if I really have a question about something, there's really only one or two people I'd go to." The researcher asked her to elaborate on why that was, and she said:

There is one teacher who teaches the same level as me and it's like every time I talk to her or ask her something or she asks me something she is judging the way I do things. I have not been teaching that long, but it's been about six years and my students seem to respond to me, so I don't like when she acts like the way I do things hurts them. I just avoid that. I like, shut down, like one of the kids when people act like that.

The researcher asked PR if she ever sought assistance or ideas from teachers outside her department and she said she did not because she felt that the activities in one content area do not transfer to math. The researcher asked PR if she felt she had changed any aspect of her teaching since participating in the PLC and she said, "I feel like I consider things from different perspectives more. Like instead of just writing off a kid who did not turn in their work, not that I really did that before, but I take a minute to think about the situation, then act." The researcher followed up, "So you're more thoughtful or reflective

since participating in the PLC?" PR confirmed that she was. The researcher noted that MM had given a similar response when asked about the effect of participating in the PLC had on his teaching.

The interview concluded with the researcher asking PR if she felt PLCs were a worthwhile professional development endeavor. PR indicated that she had mixed feelings:

I think it is good for different teachers to work together and talk about students, but like I said, I don't know if working with you guys will help me teach algebra. But I cannot really work with most of my department because they cannot work together well. I think I'm trying to say that the idea is good, but I don't know if it would really work.

The researcher asked PR if she knew of any conditions that would need to exist for the PLCs to work and she said that all group members would need to actually want to work together and be willing to listen to one another. She also believed that content area PLCs would be more effective than interdisciplinary PLCs if the goal is to improve practice. The researcher made note of PR's suggestion.

Discussion

The goal of Cycle II was to determine whether or not an outside presenter providing deeper, more extensive coverage of PLCs would not only build participants' understanding of the practice, but also enhance their own professional practice. There were several findings that both aided the researcher's understanding of PLCs and teachers' participation within them. Some other findings revealed other areas for concern that could be hindering the transfer between PLC work and classroom practice. Perhaps most important was the revelation that there exists within the organization a great deal of frustration coupled with lack of confidence and trust in the administration.

Company XYZ was well received by the pilot PLC group; they indicated on the professional development reflection form that they agreed the presentation was relevant and helpful to their practice. The pilot PLC's report on the session was more favorable than that of most other faculty members, suggesting that the group's work has given them insight into the benefits of PLCs and how PLC work is relevant to instruction and learning. Participants all noted they had a better technical understanding of PLCs after the workshop. Despite their reports of a better understanding, there was little change during the PLC meetings. While a PLC does exist, there seems to have been little transfer from the PLC into the classroom; Fullan (2006) asserts that when practices are not aligned with the PLC model, there is no fidelity in implementation and one cannot hope to see positive results.

Several of the important characteristics of PLCs as identified by DuFour and Eaker (1998) are present in the classroom. For example, in both classroom observations conducted during this cycle PR and MM incorporated several best practices. However, the researcher noted that there was never a discussion regarding instructional best practices during any PLC meeting. Therefore, while discussion of best practice is not part of the PLC meetings, utilization of the practices is present in the classrooms. This was the opposite of what was found during Cycle I. During that cycle, teachers were able to discuss best practices, but there were few if any observed during classroom observations. This suggests that the PLC does not play a significant role in affecting teachers' instructional practice. Furthermore, participants demonstrated a willingness to take action and modify or change their practice in order to better serve students. All teachers reported they had modified their homework practices as was discussed in the PLC meeting; during

the next cycle, teachers will work to reflect upon their work and determine the level of success.

One of the most significant findings was teachers' willingness to collaborate with one another. Both MM and PR indicated they did get ideas from other teachers. This echoes TK's sentiments during the first cycle that he learns most from his colleagues. MM indicated that most of his professional learning is the result of collegial dialogue regarding practice. While teachers demonstrated willingness to collaborate, they also shared that they did not feel teachers from other content areas could offer much in the area of instructional strategies. The participants seemed to believe that instructional practices are unique to content areas. One obstacle in the upcoming cycles is to de-privatize practice (Kruse, Louis, & Bryk, 1994) in a way that allows teachers to see that many best practices can be used across the curriculum. When teachers are engaged in not only dialogue, but actually observing and critiquing one another's practice, they may realize this.

The core values identified by the group during this cycle were manifested in the classroom observations as well as during faculty meetings during which pilot PLC members interacted with other colleagues. For example, during the faculty meeting breakout sessions, each pilot PLC member seemed to assume a leadership role in their group, and from what the researcher observed, PR and SP did a very good job of trying to maintain positive attitudes, even while facilitating difficult conversations. All group members' high expectations and value for learning were demonstrated during their discussions concerning student motivation. During individual interviews, the core values were also present.

One of the most important findings during this cycle was that an individual teacher's behavior does not seem to have a profound impact upon the group. This idea began to emerge during the first cycle when GD's negative comments were often dismissed by the group, but during this cycle, the group seemed to demonstrate the ability to take someone who was not contributing positively and engage them in a manner that resulted in more positive dialogue and action. VA was often frustrated, but the other PLC members channeled her frustration and appeared to use it to create their action plan. Even more interesting was that the group's ability to focus on remaining positive and taking action seemed to be transferred to their interactions with colleagues outside of the PLC. During the faculty meeting breakout sessions, it was the pilot PLC members who took initiative and facilitated their department meeting. Participants appeared to be more willing to take on leadership roles than they had prior to their participation in the PLC.

Some of the more disheartening findings during this cycle included the revelation that all members of the pilot PLC were frustrated to some extent with the organization. During the professional development workshop, the pilot PLC indicated that the school does not focus on student learning to the extent the teachers feel it should. Instead, PLC members felt the school was focused only on results. There also seems to be some degree of frustration with the students regarding their motivation to complete work in a timely fashion. VA was visibly frustrated during the PLC meeting and during the faculty meeting, and that frustration sometimes appeared to hinder her participation. Teachers' frustration with professional development was palpable. There were several negative comments made regarding the fleeting nature of most professional development endeavors aimed at change. There appeared to be a lack of confidence in the process by

which professional learning is approached, as well as the associated practices. This frustration with the organization and professional development proved detrimental in initiating conversations regarding change. Trust and confidence will likely need to be built, as Lencioni (2002) suggests, before the organization can change.

Conclusion

The most interesting finding during this cycle was that while participation in the PLC has not yet been found to impact instructional practices, whereas other professional practice, such as collegial collaboration was positively impacted by participation in the PLC. Teachers who had not previously taken leadership positions did so and informally reported they had done so because they were more comfortable doing so after having participated in the PLC. Their level of comfort in discussing critical issues and ability to challenge colleagues in a productive way was identified as a positive outcome of participation in the PLC. To some extent, the PLC has impacted elements of professional practice.

It appears as though members of the pilot PLC have the capacity to change, but before PLCs could be implemented successfully, the organization must regain teachers' confidence. The team demonstrated that elements of PLCs are manifested within their practice, but that is not a result of participation in the PLC as reported by MM and PR, but rather the characteristics of effective teaching. It was not determined that participation in the PLC was able to enhance practice, but teachers' willingness to collaborate with one another and modify their practices positively impacts the function of the PLC.

The researcher played an integral role in the facilitation of the PLC. Without the researcher, little, if anything, would be accomplished. It is believed the researcher's active role stifled the development of the PLC because it has become dependent upon her leadership to function. The leadership style that the researcher adopted during this process was contradictory to her espoused styles. The researcher believed she was a transformational leader who sought to build the competencies of those around her. While it could be the nature of the research or the researcher's position as teacher that affected her behavior, it is also possible that PLCs can reveal a leader's true style and can afford him or her the opportunity to reflect and change as needed.

Chapter VI: Cycle III

Overview

Cycle III followed immediately after Cycle II in October of 2010 and focused on a study of reflective practice. Armed with information gained from participants during the second cycle, the researcher attempted to harness the potential for participants to professionalize their practice by deepening their understanding of a practice in use. Each participant had indicated during one or both of the first two cycles that reflection was to some extent part of their professional practice and helped them to make decisions about teaching and learning. Reflective practice is said to play an integral role in the successful development of PLCs (DuFour, 1998; Kruse et al. 1994). The purpose of this cycle was to better understand the role reflection plays in a PLC. Review of teachers' reflective journal entries, observations of PLC meetings, classroom observations and individual interviews were used to collect data during this cycle.

Copies of Osterman and Kottkamp's (1993) *Reflective Practice for Educators: Improving Schooling through Professional Development* were provided to each PLC participant by the researcher. While participants were welcomed to read the entire text, the researcher asked they focus on the first and second chapters, which discussed the role of reflection in educational change and professional development, respectively. Copies of the books were provided to each participant the week prior to the first PLC meeting of the second cycle. The researcher gave teachers spiral notebooks in which they were asked to write their reflections. Participants were asked to reflect on any topic or issue that came to mind, including, but not limited to, successes, failures, conflict, needs, wants, or concerns. The researcher asked participants to anonymously place reflections in her

school mailbox at least twice during the course of the cycle. Participants typed up the reflections that were submitted to try and maintain a sense of confidentiality as the researcher believed more honest reflections would be produced if there was some level of anonymity. Those participants who were observed during this cycle were also asked to prepare a reflection of the lesson that was observed, as it might be used during the interview.

The researcher was particularly curious the extent to which participants' reflection would affect their behavior in the PLC and/or willingness to modify their practices. Furthermore, the researcher questioned whether reflection could professionalize practice. Reflective practice was an important component of the PLC because during this cycle the researcher would ask participants to reflect upon their implementation of the modified homework policy and after school make up session. Teachers would be asked to consider the extent to which practices were modified and the level of fidelity in implementation. To promote more honest and accurate reflection, Cycle III focused on reflective practice.

Findings

PLC meetings. The first PLC meeting of this cycle began at 7:05 a.m. on the first Thursday in October. All participants arrived a couple minutes later than normal. Each participant brought both their book and their journal, as was requested by the researcher. The researcher began the meeting by asking someone to share his or her impressions of the reading. No one immediately volunteered, but after a few seconds, MM shared his reaction. He began by saying that he had never thought of reflection as a legitimate means to professional development, but rather a practice he used when his students did not seem to "get it." SP, VA, and PR nodded in agreement. SP added, "I don't know, I

think there are days when on my way home I think about what went well or replay something in my head. I know on some level it helps me improve, but never thought of it as ‘professional development’.”

The researcher asked participants to consider the chapters they read and how reflection, as defined by Osterman and Kottkamp (1993), is relevant to their setting. VA said that from her perspective, many teachers are waiting for change, but even when a change is presented, they resist it. She believed that if teachers engaged in reflective practice, some of the problems they perceive could be remedied. PR added, “But someone has to be able to look at what they do and see that it is wrong or that it could be better. Some people think they do everything perfectly and it’s not their fault things don’t go right.” The researcher asked the group if they believed reflective practice could change an organization, and a group they did not believe it was possible. TK said, “There has to be something from up top.” He clarified this to mean that a school’s leadership must guide the practice if it is to lead to change.

After asking the likelihood of reflective practice in transforming schools, the researcher asked participants to think about whether or not reflective practice could change teachers and individual classrooms. All participants, save for PR, said it could. PR argued that a teacher has to be “self-aware enough to know if what they do is working.” The other participants concurred, but still believed that if a teacher looks at his or her students, communicates with them, and looks at the data available, he or she can make a rather honest assessment of his or her performance. The researcher asked each participant to consider their level of effectiveness using reflective practice.

TK was first to share his self-assessment. He said:

When I look at what I'm doing, I think it is good, but when I come here, I feel like I could do better. Maybe I don't reflect. I thought I did, but if I did then I guess I wouldn't need to hear stuff you guys do to make me think again about my class. I know if a lesson worked or not, but I don't think I thought of the, uh, um, the whole picture.

SP said she shared TK sentiments. She discussed the fact that during student teaching everyone is supposed to keep a journal and think about their experiences and try to use each day as a learning experience. She went on to say, "Nobody does that in the real world, but if we did I think it would be more along the lines of what the book is saying. But who has time for that?" The researcher asked participants if they saw any value in keeping reflective journals. MM said he did; the others were more reticent. The researcher took the opportunity to then review the procedures for keeping the reflective journals and for submitting them for data analysis. TK asked what he should write about and the researcher offered the following suggestions: an incident with a student or parent, a lesson that went well, a concept that is not being understood, or any other concern that if resolved, could enhance both the teaching and learning in your classroom.

The final part of the meeting was devoted to a review of the action that was decided upon during the previous cycle. The researcher asked SP to summarize the action the group had decided to take. She reviewed the new homework procedures, dubbing it "minimal homework," and the missing homework make up session, during which a student who did not turn in the day's homework would be required to do it after school. The researcher asked if everyone was still in agreement with the proposed action, and all participants indicated they were. The researcher also asked if anyone had implemented the procedure, and surprisingly, all indicated they had. Since time was running out, the researcher asked participants to consider their thoughts on the new homework procedures

in their reflective journals and be ready to discuss the practice in two weeks at the next PLC meeting. The meeting ended at 7:30 a.m.

The second PLC meeting took place the Thursday in October at 7:00 a.m. in the researcher's classroom. Participants were asked to come prepared to discuss their experiences with the new homework procedures and determine whether or not the action was meeting the goal of increasing student motivation. Once all participants had arrived, the researcher asked VA if she would like to share her experiences first. VA was selected because the researcher was curious as to whether her hesitation toward the modification of homework practices was still present. The researcher also wanted someone other than SP to share, as it was noted that SP sometimes dominates the meetings.

VA began her reflection by reiterating her initial hesitation, but she then indicated that after implementing the new policy, her students seemed to be grasping concepts better than they had before. She said she did not know whether she can attribute that to the new policy entirely to the content or to the students, but quiz grades are overall slightly higher and there are fewer "missing" assignments. The researcher asked her whether more students were turning in the work, or coming in after school to complete it. She laughed and said that she had some students who asked if they could complete their work after school with her the day it was assigned so she could help them, but it would not be marked late. VA said, "It's like a homework club. I have five or six kids who come in every day after school to do their homework. They start by helping each other out and if they don't get something they ask me. I seriously never thought that would happen." VA concluded that in her estimation, the new homework policies had succeeded

in motivating students, but there were about two students who were still not turning in work and did not show up to complete the “missing” tasks after school.

TK was the next to share his findings and they were very similar to VA’s. He said that while he did not have anyone trying to do their work before it was due, that the vast majority of students who failed to complete an assignment did come after school to complete it. TK asserted that while he had fewer “missing” assignments, students still were not completing tasks on time and the late penalties were lowering some students’ grades. SP asked, “But the grades are higher than they would have been with zeros because they did not turn it in at all, right?” TK confirmed this, but added that he would be happier if the work was turned in on time. PR jokingly said, “Baby steps.” The researcher asked TK if he had anything else to share, and he said that he would like to try something else to see if he can get students to complete the work on time. VA suggested he start a homework club so they can do the work the day it is assigned and be ready to turn it in the next day. TK said he liked the idea and may try it.

SP was the next to share, and she said that she had almost an identical experience to VA in that her students want to come after school and do their work. She said, “It’s like they wanted to do the work all along, but wanted someone there to watch them or help them.” She added that most times, her students did not even need help with the work, but liked when she checked it, or provided feedback. Then SP shared a revelation she had:

I guess this goes along with the whole reflection thing and it also has to do with what that other presenter said about needs. So many of our kids don’t go home to anyone and even those that do don’t have that family where they sit down to dinner then do their homework together. They need this after school time not just to do the work, but to feel like someone cares about them. I don’t think they weren’t doing work because they were lazy. Someone has to care for them to care.

The researcher asked if any other participants wanted to comment and TK said, “They don’t have anyone to care.” The researcher indicated to SP that through observation of her students and reflective practice she had come to a realization that may help her help her students in many different ways. SP said that the experience taught her a lot about the assumptions she had made about students and the importance of really getting to know them.

MM was the next participant to share and he indicated that his homework club was conducted before school. He concurred with those who had already shared that the results were positive, but he said that he felt more students came before school than they did after school. He said, “I see VA’s room after school and she always does have kids in there, and not like it’s a competition, but there are mornings I don’t have enough desks because I have so many kids in there.” He felt that since several students arrive prior to 7:30 and would prefer to be in the building, the study session gives them a legitimate reason to be inside and once there, work is completed. MM did say that while more work was being turned in, he did not find quiz grades to be increasing. He said:

I thought about it and sometimes there’s a disconnect between the homework and what kids get on the quizzes. I think I need to make the homework problems more challenging, or maybe let them work out problems in pairs so they can bounce ideas off of each other. I keep thinking about why the homework is good and not the quizzes, and I think one of those two things can help.

The researcher noted MM’s use of reflective practice to better understand his students and their performance in his class.

PR was the last participant to share her findings, and she said that she did not see much of a difference in the submission of assignments. She said, “I don’t want to say it is because I have low level classes and those kids don’t care. I am not that teacher.” She

displayed ownership over the problem and a commitment to continue trying to solve it. PR said, "I have not had any kids asking me to stay after or come before school, but I'm here anyway." She went on to say that she will begin holding a homework club, and perhaps even offer extra credit or some other incentive for attending. PR added that a couple of her students had commented on the decrease in the number of problems given and they liked it. She said that she was not surprised by this, but that giving fewer problems did not seem to have negatively impacted the students who were performing well prior to the change in policy. She finished her reflection by saying that she would be drafting a flyer for her homework club and giving it to students the following day. She noted that she had been inspired to do so by the success of the other PLC participants. The researcher made note of PR's dedication to helping her students improve and her willingness to try something different when the first action did not prove successful. It was also interesting that PR attributed her willingness to try a homework club to the other PLC members.

After all participants shared their findings, the researcher asked if there was another action they wished to try, or if they would prefer to build upon what seemed to be working for the majority. All participants agreed that while decrease in number or problems or frequency in homework was good, the real success was the homework club, which was an unplanned for and unintentional outcome that resulted from the initial action. The PLC elected to continue utilizing the new homework policy, but also to dedicate efforts to maintaining the level of student participation in their homework clubs.

The meeting concluded with a summary of the meeting by the researcher and a reminder that the next two meetings would be a part of the final research cycle. The

researcher also reminded participants to keep utilizing their reflective journals and to place excerpts they chose in the researcher's mailbox in the main office. Participants left the room at about 7:25 a.m.

Reflective journals. To encourage continued use of reflective practice and better understand the role reflective practice in individuals and the PLC as a whole, participants were asked to submit sample entries without names or other identifiers in the researcher's mailbox during Cycle III. The researcher did not want to know who wrote the journal entry for fear it would create bias or result in false conclusions being drawn. During the third cycle, three reflective journals were submitted. Summaries of the contents of each of the entries are given below.

The first entry that was submitted was placed in the researcher's routing box at the end of the first week of Cycle III, the day after the first PLC meeting of the cycle. The entry was approximately one page typed. The individual who submitted the entry wrote about his or her participation in the PLC and their reflection on the process. The researcher found this interesting in that the literature provided and the discussion concerning the reflective journals focused a good deal on classroom practices and students. The reflection began by disclosing the participant's initial reluctance to participate in the PLC because he or she felt it would be a waste of time. The participant went on to say that after the first or second meeting when he or she realized the PLC was focused on improving student motivation, a problem with which the individual could identify, his or her attitude shifted from hesitant to enthusiastic.

The participant spent a few lines of the reflection discussing how the professional development offered by the school rarely met his or her needs and found the time spent in

those workshops could be better used by PLCs. He or she noted that not everyone would share this level of enthusiasm, but that a change in ways in which professional development is presented could actually result in school-wide improvement. The researcher was interested in the suggestion that establishing and utilizing the PLC model was viewed by a participant to be a worthwhile change. It was also noted that the participant was aware of resisters within the organization.

The final paragraph of the reflection focused on the participants reflections of collegial interactions within the PLC. The participant noted that he or she did not share as much about their own experience as hoped. Instead, the participant lamented that because he or she was afraid of being judged, they stayed reserved, but believe if they had shared more early on, ideas regarding how to improve teaching and learning would have resulted. The participant concluded the reflection by saying that through the PLC the idea for homework club was born and implementation of that practice dramatically improved the relationships he or she had with their students, while also increasing the frequency with which homework was submitted.

The second reflective journal entry was submitted in the third week of the cycle. This participant chose to reflect upon an interaction with a particular student that appeared to have been an area of concern. The reflection was a little less than a page long, handwritten, and lacked the cohesion the first entry did. In the researcher's estimation, this entry was written immediately following an incident or while the writer was tremendously bothered by problem. The reflection opened by asking a question, "Are we really going to reach all students?" The participant went on to explain that this one student in particular simply would not turn in work, despite the teacher having tried

“everything.” A list of actions that had been taken was provided, but there was no length of time given for any of the interventions, nor was their reflection on each individual intervention, rather the conclusion drawn by the participant was that “nothing is going to work for this kid.”

The reflection went on to discuss the participant’s frustration because he or she feels a sense of failure that despite the hours spent trying to find something that will work for this particular student, the child is still failing and seems apathetic. The participant also noted that there is a perceived lack of support from the administration, that the child is the teacher’s problem, and that any teacher who cannot fix their own problems is ineffective. A list of the teacher’s accomplishments was given, which seemed to indicate the teacher does feel confident in his/her abilities, but that confidence is being diminished in part by the issue with the student, and in part by the perceived lack of support from the school administration.

The reflection concluded with the participant indicating a hesitation to discuss his or her problems because there was a sense that he or she was judged by others for being unable to handle the situation independently. He or she indicated that they wished they could talk to someone, but everyone seemed so “positive.” The person went on to say they were not interested in merely complaining, but felt they needed someone to say “me too” rather than say, “I cannot understand your problem because I have no problems.” She likened her situation to a person experiencing marriage troubles and every other wife she tries to talk about it tells her that their marriage is perfect. To the researcher, this seemed to indicate a culture of isolation rather than one of collaboration, at least as perceived by this participant. Perhaps most interesting was the participant’s perception

that no one would understand her concerns. The PLC had often vented to one another and expressed concerns about issues in their classrooms or with particular students. Even if the participant felt unsupported by administration, the researcher was confused why the participant did not engage the other PLCs members.

The third reflection was submitted during the fourth week of the cycle after the researcher sent an e-mail reminding participants to submit an entry. This suggested to the reader that participants may not have been keeping their reflective journal entries or they may not be comfortable with sharing the entries. The entry was about a paragraph long, but demonstrated a breakthrough for the participant. The first sentence of the entry gave a little bit of background information. A seemingly unmotivated student who rarely completed homework, but still performed relatively well on quizzes and tests, had been concerning the participant because he or she felt the student was capable of much higher grades. The participant said he decided to follow advice given to him by SP and have a talk with the student while a collaborative teacher in the room facilitated the lesson. The student immediately opened up to him, told him about some problems at home that were distracting, but also indicated he was “bored” with the homework.

The participant was honest in reporting that in the past he would have dismissed the student and probably would have been offended. He said that he asked the student to explain and the student, without even realizing it, gave an alternative assignment, which was far more engaging, and actually a better measure of whether or not students were mastering the concept. The student also indicated that he liked to work with other people because he usually answers their questions and he felt like this helped him to understand the concepts better. The student told the teacher that was the reason he always did well on

quizzes and tests because during the lab he went through and explained everything to his lab partner.

The participant credited SP, and indirectly the PLC, for helping him to better understand his students. He explained that he understood students were not merely going to walk up to him and tell him what is wrong and why they are not performing well, that he will actually have to work at developing a rapport with each of them. He indicated that he is much happier as a result of changing the way he interacted with his students. He also feels as if he is doing a better job of meeting students' needs than he had in the past. This reflection indicated that participation in the PLC and open dialogue with colleagues can improve practice.

Classroom observation of SP. The first observation conducted during this cycle was of SP's Advanced Placement English class. The structure of this course is somewhat different than College Prep level courses as the students are more self-motivated and more likely to initiate discussion and challenge each other's thoughts on a particular subject. For these reasons, both the researcher and SP thought it would be an interesting class to observe. The observation took place during fourth period on a Wednesday morning. All students were present, but the class is small with only 14 students enrolled.

The researcher arrived to class about one minute after the bell rang. The atmosphere was very relaxed; as SP spoke with one student at her desk about a college essay, other students discussed the assignment due that day. Once SP finished her discussion with the student, she asked the students how their teams performed the previous afternoon at their respective games before segueing into the day's lesson. Students were asked to pass their papers up as SP passed out a packet of sample papers

compiled by the College Board© to help students better understand the scoring process. Each essay was a response to the same prompt students had responded to for homework; thus they were familiar with the prompt.

SP asked students to rate each of the essays on the scale used by the College Board©, and students quickly went to their binders to retrieve the rubric. SP also asked them to “find hidden gems” in the essays, even if the holistic score is not high. The researcher noted this concept was taken from a writing workshop she and SP had attended the previous week with another colleague. It was interesting that SP was able to use the concept even with higher-level students who were often hypercritical of not only their own, but also their peer’s work. SP went on to explain that there is something useful in all of the essays that could be incorporated into students’ own writing. On the other hand, SP told students once they had found the “hidden gems” they were to find areas for improvement and to “be merciless.” To the researcher, this seemed to undermine the concept of accentuating the positive, and a note was made to follow up with this during the interview.

Students were given about 15 minutes to read through the papers and complete the brief analysis. For the remainder of the class, about 20 minutes, SP and her students discussed each of the essays. SP first allowed students to share their ideas and debate with one another, then she shared her own ideas. SP seemed open to listening to her students, but on a few occasions explained the fault in students’ analysis and redirected their attention to the rubric and basic components of effective writing. The class drew to a close, and SP took the stack of papers students had submitted earlier in the period and gave them back. She instructed the students to take their work home, find the hidden

gems, and compile a list of areas for improvement. Students would then take use their reflections and write a second draft, attaching both the first draft and the analysis of their work. The researcher wondered whether or not the reflective practice was purposefully or indirectly incorporated into the day's lesson and made note to ask SP about it during the interview.

Classroom observation of VA. The observation of VA's science class took place during the second half of a block period on a Tuesday morning. The class was returning from their break when the researcher arrived. There was a PowerPoint slide projecting the directions for a transitional activity. It was evident from this slide that the block period was divided and time was spent on several tasks, rather than only one. VA told the researcher students had completed a short lab during the first half of the class and would be reviewing for a test during the second half. She explained that the transitional activity provides students with time to refocus their attention, while also allowing her to speak with students or return graded work.

Students spent about five minutes completing the transition task, which asked them to create a graphic organizer that represented the steps one needed to follow when balancing an equation. While students worked, VA called a student up to her desk and provided her with a printout of missing work. She also indicated that the student would not be taking the test on Thursday, but would instead make it up Monday after school to provide her with enough time to catch up on work missed during an extended absence. Once VA had finished speaking with the student, she walked around the room and checked students' work. She made some corrections and asked questions in order to prompt students to correct their work. Once the majority of students were finished, VA

asked them to take out their review sheets and count off by fours creating four teams of four and one of three. VA looked at the groups and made a few changes, presumably to ensure optimum working conditions.

Once the teams were organized, VA projected a *Jeopardy* game using PowerPoint. Team names were placed on the front of the board. VA explained the rules and explained that the winning team would be awarded 10 points extra credit, the second place team eight points, third place six points, fourth place four points, and fifth place two points. The researcher found it interesting that all participants would receive some kind of reward for participating and made note to ask VA about this procedure. After reviewing the directions, VA asked if any team had questions. The collaborative teacher in the room served as scorekeeper and teams rolled dice to see who would go first.

During the review, students were highly engaged. Each group read each question, and worked together to find the answer even if it was not their turn so they would be able to earn points if the opportunity presented itself. VA offered an extra 500 points each time someone was able to explain their answer or provide an example that supported their response. The scores were quickly climbing into the thousands. While the activity itself created some noise, it was organized chaos, and students were demonstrating not only mastery of the unit's concepts, but also respect for one another and cooperative learning skills. More than once, the researcher observed a student take the time to explain something to a teammate, even if it meant losing points for that round.

The game ended with about five minutes remaining in the period. VA tallied the scores and informed students of the winners. She also asked students to write down their favorite pizza toppings and a review question a slip of paper, which would be used to

prepare the after school, review. She then wrote the date and time of the after school review session. Even though the bell rang while some students were still finishing their papers, they stayed behind to ensure the task was complete. The researcher noted the level of engagement demonstrated by students and wondered whether this was a characteristic of the class, or the enthusiasm that accompanies a game, or other type of competition.

Interview with SP. The interview with SP took place the Monday after the observation of her AP class. The researcher and SP met before school in SP's classroom. When the researcher arrived, SP asked "What did you think?" The researcher turned the question back to SP and said, "Actually, that was my first question for you." The researcher asked SP to take out her reflective journal and review the reflection she wrote after the observation. SP read the reflection then gave it to the researcher to read before they discussed it. SP began, "Sometimes I feel like the worst AP teacher because what I give them, I don't know if they get anything out of it. That's what I wrote about." The researcher asked if she recalled the discussion she had with students about the essays they critiqued. She said she did, but that she felt she often passed her own opinions off as "right" and that this was a habit she was still working on. The researcher told SP she did not necessarily see what SP was talking about and explained that her observation noted students discussing their opinions, challenging each other, then getting clarification from SP. SP shrugged her shoulders.

The researcher then asked SP if she thought the lesson met its objective and SP explained that to some extent it did, but students still seemed somewhat "stuck" when it comes to critiquing and evaluating their own work. She said:

If I ask them to peer edit, or better yet to critique someone's work they have never met, they can find a million ways to improve it, but when it's their own work it's like they're paralyzed. It's not that they are so arrogant to believe everything is perfect, but they are so convinced they have put their heart and soul into it and cannot recognize where it could be better.

The researcher asked if this was an aspect of the course that frustrated her, and SP indicated it was. She went on to say that each year she tries different ways of teaching editing and critique of one's own work, but has yet to teach it effectively. She added, "But I think this helped."

SP went on to explain that students thought they were done with their work, but getting their papers back after spending so much time critiquing and discussing other essays responding to the same prompt, they had fresh ideas and seemed better equipped to reflect upon their own work and improve it. She added that the critiques and revisions she received from students were far better than she had received in the past and believed this practice was a more effective way of teaching students to revise and edit their own work. The researcher asked SP if she purposefully incorporated the concept of reflection into the lesson as a result of the focus of Cycle III or if it was subconscious. SP laughed and said, "I had no idea, but now that I think about it, it really is similar." She added, "I guess a lot of things that help us, like talking about problems, also help the kids. Never really thought about it though."

The researcher then asked SP to reflect upon the lesson and talk about any changes she would make. SP explained she felt the lesson went really well, but that she would have broken it up by having students first find the positive, the "gems," discuss them, then look for areas to improve. The researcher told SP she had actually wrote in her notes that the way SP gave the directions, "be merciless," almost seemed to negate the

concept of finding positive attributes in each essay. SP said, “Exactly, and I knew as I said it wasn’t right. I’d break it into two parts next time.” SP’s reflection indicated her ability to not only recognize areas for improvement, even in an effective lesson, but also her willingness to make modifications.

The next question was, “How is AP different than other courses you teach?” SP thought for a second and responded, “The kids get forgotten about because they don’t need us as much.” She explained that lower level students and even college prep level students need more from their teachers whereas AP students are very self-motivated. SP said that sometimes she is not sure what her AP students need from her. The researcher then asked SP if she collaborated with other AP teachers, and SP indicated that while she often discussed specific students with other AP teachers, she did not discuss lessons or instructional practices. She echoed other PLC participants sentiments in that she would be better served discussing those topics with other English teachers because in her estimation the difference between content areas results in a difference in teaching methodologies.

The final question for SP was “How has your participation in the PLC affected your teaching or any other aspect of your professional life?” SP said, “Not really with AP because the PLC has mainly focused on motivation and those kids are more motivated than me half the time.” The researcher asked SP to think about her other classes, not only the AP class. SP responded:

I definitely do like talking about the students I have that MM or TK or anyone else also have because it gives me ideas or at least makes me feel like I’m not alone. I don’t want this to sound cocky, but sometimes I feel like what I say helps other people more than what they say helps me. I don’t mean that to sound bad or that I care, like I’m better because I’m not, I just feel that way. But I like the

meetings and I do get ideas, like homework club, that are helping me and I wouldn't have done that on my own.

The researcher assured SP that the way she feels about her role in the PLC is not wrong in any way and thanked her for being candid. The interview concluded with the researcher asking if SP had any questions, or anything else to share. SP said she did not and the interview ended.

Interview with VA. The interview with VA took place two days after the observation in the science office during lunch. The researcher began the interview by asking about VA's students' enthusiasm and whether they were always so enthusiastic or if the review game brought out their energy. VA said that particular class was generally energetic and participated in class, but that the activity seemed to engage even some of her more reluctant learners. She reminded the researcher the class observed was a special education collaborative class, thus some students who traditionally faced challenges in school were enthusiastic about the activity. The researcher asked VA if she was pleased with the lesson and what, if anything, she would modify in the future. VA explained that the bonus point structure was actually a result of reflection after the last review game.

She said:

After the last time I did not even want to do the game anymore because I felt like the kids were being babies when they lost and when they realized they couldn't win they stopped trying. I actually stopped the game in the middle in one of my classes. Not to be a suck up but it wasn't until we talked about the whole reflection thing that I thought about what I did wrong. So when I was planning for this review I decided to try it again and see if changing the points helped and it really changed everything.

The researcher told VA that during the observation she had noted her interest in the point structure and was pleased to hear reflective practice played a role in making that change.

VA added that in the future, she might assign groups more carefully too because some of

the more helpful students could benefit struggling learners and she would like to group them more purposefully to ensure that occurs.

As the interview continued, the researcher asked VA to share her experience thus far with the reflective journal and making a more conscious effort to think about her practice. VA said, “Sometimes it’s really hard because when I start to think about something that happened, I get really upset or frustrated.” She added that she has found herself focusing on the negative more so than the positive in her written reflections. VA said that when she has a positive experience she is less likely to write about it, so the habit of reflection has, “become more like painful therapy because I know it will help somehow, but writing those entries when I’m so made just creates this negative association with the reflection.” The researcher suggested that VA write each day at the end of the workday in order for the reflections to be more balanced and VA indicated that she might try it.

The researcher asked VA if she thought reflective practice was impacting her teaching in any way, and VA shared:

I seriously never thought so much about what I did that I think I know what it’s like to have OCD! I don’t like second guess myself, but I really started thinking more about everything I say, even where I stand in the room or what I write on a kid’s paper. Just by doing that I’m sure I’ve somehow become better. I still have my own beliefs about students and responsibility, but this makes me look more at the big picture and how I fit in.

VA also noted that when she thinks more consciously about a conflict with a student, she is better able to put herself in that child’s position and see the situation from his point of view. She believed this has helped her to better resolve issues with students than she had in the past.

The final topic for discussion was VA's experience with the PLC thus far. The researcher asked VA what her impressions of the PLC model were. VA said that at first she did not share much because she felt other members dominated the group, but as time goes on, she is more comfortable. She did add that sometimes she feels when she truly opens up that she is judged, and this perception makes her shut down. She noted that it is something she is working on and will try to "push past that and get the answers or help" she needs. When asked if she believed her participation in the PLC has helped her in the classroom she said:

Being a part of the PLC has helped me with my students and helped me to look at what I do and how I say things. I guess that in some ways it has changed what I do, but in a, um, indirect way. Someone may say something or suggest something and I look at what I'm doing and try to fit it in. It isn't like 'Oh try this' and I do it, like with lessons or a way of teaching. I don't know if that answers the question.

The researcher tried to clarify and asked, "You think that participating in the group makes you think more about what you do and you change as a result of that reflection?" VA said, "Exactly. I just did not know how to say it." The researcher said, "It seems the reflective practice component has had the most effect on you." VA agreed that it had, but that she does enjoy meeting and talking with the group, but that she needs to feel more comfortable before engaging more with the other participants. She said, "I work with MM all the time because we teach the same class. I think sometimes we don't understand each other because we teach different subjects and what works in English doesn't work with Chemistry." The researcher was interested to hear that VA's feelings were shared by nearly all of the other PLC members.

The interview ended with a brief discussion between the researcher and VA about PLCs, as VA was curious as to whether or not the PLC model would be adopted school-

wide. The researcher did not have the answer to her question, but indicated she hoped it would. VA said, “You should be in charge of it.” This indicated VA perceived the practice to be useful and that VA has confidence in the researcher’s leadership.

Discussion

The third action research cycle of this study aimed to determine the effect of purposeful reflective practice on both individual participants and the PLC as a whole. Several discoveries were made with regard to reflective practice, student achievement, the interdependence of reflective practice and PLCs, and growth of the pilot PLC. During this cycle, participants shared their experiences with the initial actions taken to improve student motivation, and attributed much of their success to both participation in the PLC and reflective practice.

Prior to beginning this cycle, the researcher noticed elements of reflective practice during the PLC meetings, classroom observations, and individual interviews with participants. While there appeared to be some resistance to keeping journals, teachers all demonstrated their use of reflective practice. Reflective practice was not entirely new to the teachers, but reflective practice as a vehicle for professional development was a new concept (Osterman & Kottkamp, 2004). Osterman and Kottkamp (2004) suggest, “unless we change behaviors organizations will not change” (p.1), and through purposeful reflection and examining their practice, teachers seemed to embrace the notion that while they may not be able to control the entire organization, their practice can be continually enhanced. All participants noted that reflection resulted in the recognition of an area for growth in practice, and a subsequent change in practice to better meet students’ needs.

Participants' reflections and subsequent adjustments and modifications to practice also reveal their ownership of student achievement. As DuFour and Burnette (2002) discuss, one of the greatest impediments to building successful PLCs is teachers' reluctance to take responsibility for student achievement and place blame for failure on outside forces. Teachers participating in the pilot PLC rarely mentioned outside forces, consistently focusing on their role in improving student motivation and subsequently, their academic achievement. In two reflections, teachers noted the time they spent working with individual students to better understand their needs, this is indicative of the level of responsibility teachers take for the success of their students.

Reflective practice seemed most beneficial to participants who seemed reluctant to share their experiences through discussion during PLC meetings. This suggests that reflective practice paired with PLCs may be more successful in providing opportunities for professional growth than either would be if used independent of the other. For example, as a group the participants determined that modification of homework policies and an after school make up session would be used to help motivate students to complete homework. This action was a result of the PLC. However, the evolution of the after school make-up session into a homework club was the result of teachers' reflective practice and willingness to make modifications that would better meet their students needs. The data gathered during this cycle suggest that when purposeful reflective practice is coupled with participation in the PLC, teachers are better equipped to recognize areas for growth and make the necessary modifications to their current practice.

Observations of PLC meetings and interviews conducted during this cycle also suggest that the PLC itself has positively impacted participants' practice. For example, participants' implementation of homework clubs seems to reveal their willingness to modify practice, which in turn improved the function of the PLC. Teachers also reported more conscious reflection and attempts to ensure their practice was meeting students' needs. These teachers indicated that prior to participation in the PLC they may not have been as apt to do so, thus indicating that participation in the PLC does impact one's practice. It must be noted that teachers only shared these sentiments during the third cycle, which suggests that several weeks may need to be spent developing the PLC before teachers begin to modify their practices.

Despite the apparent success of utilizing reflective practice to enhance the PLC, there were also some concerns expressed by participants. The first was a continued frustration with the current professional development model and its inability to meet teachers' needs. As DuFour and Eaker (1998) suggest, "If teachers are asked to devote their time and energy to a new program, or practice, there should be compelling evidence that the innovation actually makes a difference in teacher effectiveness..." (p. 263). Teachers in Millersville High School including the pilot PLC participants have not seen the connection between the professional development and their practice, which is resulting in a resistance to any type of change in practice or procedure.

The second concern voiced by the pilot PLC participants was a lack of support from the school's administration. Teachers feel as if they are left to handle any adversity in their classrooms on their own and are viewed as "ineffective" or "lazy" if they cannot get their students to succeed. The notion of a learning community as defined by DuFour

and Eaker (1998) requires school leaders to become entrenched in solving problems collaboratively with teachers. DuFour and Eaker (1998) assert, “strong principals are crucial to the creation of learning communities” (p. 183). If PLCs are to be implemented in Millersville High School, both the school leadership and teachers will need to move from a culture of isolation to one of collaboration in which teachers assume leadership roles, but are supported in doing so by principals and other administrators (Rasberry & Mahajan, 2008).

Conclusion

While there were interesting discoveries made during the third cycle, limitations to the study were also discovered. Teachers participating in the pilot PLC have demonstrated their use in reflective practice well before its implementation during the third cycle. The researcher is left to question whether or not the book study and reflective journals are responsible for the reflective practice or if the teachers were already reflective by nature, and simply honed these skills during the cycle. Participants did indicate that they perceived themselves to be more reflective than they had previously been, suggesting that the focus on reflective practice yielded improvement, even if the participants were already using it.

The researcher was most interested in understanding the interrelationship between PLCs and reflective practice. While both are proven means by which teachers may improve practice, the researcher found that utilizing both practices yielded more positive results than PLCs alone. This suggests that development of PLCs in any context could benefit from also requiring teachers to engage in purposeful reflective practice. At the same time, the researcher questions whether or not reflective practice alone can garner

the same results as when the reflection is paired with participation in a PLC. In order to better understand this, further study is needed on the role of reflective practice on PLCs.

During this cycle, the researcher also began to better understand the role of an interdisciplinary PLC at Millersville High School. While the PLC model discussed by DuFour and Eaker (1998) has teachers of the same content and even same grade level working collaboratively, the small population of Millersville High School is more conducive to implementing PLCs that focus on school-wide issues, rather than more specific, curriculum-based issues. Interdisciplinary PLCs focus less on specific teaching and assessment strategies and more on policies and practices that will improve student achievement across the board. This leaves a gap for some teachers who need professional growth in delivering their specific content most effectively, but this may be filled by coupling the interdisciplinary PLCs with content area PLCs. While the structure of the pilot PLC is somewhat different than the traditional, its apparent success suggests that there is merit in developing and sustaining interdisciplinary PLCs.

The researcher gained confidence in her leadership during this cycle because it appeared the PLC was meeting its goals. There remains concern that the researcher is utilizing more transactional leadership as she facilitates the function of the PLC; this could prove detrimental to the sustainability of the PLC as teacher leaders must evolve for the PLC to be truly successful. It is hypothesized that the researcher has used transactional leadership in order to sustain the PLC to meet the needs of the research project and that in another setting other leadership styles, including transformational and servant leadership, would dominate. The only way to study this further is to continue the

PLC after the conclusion of the research and note whether or not the researcher's style is different without the burden of sustaining the PLC for research purposes.

The findings from this cycle were used to plan for the final cycle. While the original research plan was to develop and implement a common assessment, the interdisciplinary nature of the PLC and its focus on student motivation led the researcher to develop an alternate course of action. During the final cycle of this research study, the participants in the pilot PLC will engage in classroom visitations of other PLC members in order to promote the shift from isolation to collaboration. The researcher is also interested to know whether or not classroom observations will result in more emphasis placed on instructional practices.

Chapter VII: Cycle IV

Overview

The fourth and final cycle of this research project immediately followed Cycle III, taking place in November of 2010. During the previous cycles, the researcher determined that a culture of isolation was still present in the organization and could be an impediment to building a sustainable PLC. PLC research suggests that a collaborative culture in which teachers are comfortable discussing not only their own, but also their colleagues' practices is essential for establishing and sustaining PLCs (DuFour R. &, 1998; DuFour R., 2002; DuFour R., 2003; DuFour & Burnette, 2002; Kruse, Louis, & Bryk, 1994; Mattos, 2008).

During this final cycle, pilot PLC participants were required to visit and observe their colleagues' classrooms. Each participant was asked to complete one observation. In order to promote a more collaborative culture, participants visited other teachers' classrooms, observed what they saw, and used the observations to initiate dialogue about professional practice. The goal of this cycle was to determine the extent to which classroom visitations and the subsequent conversations impacted the PLC, promoted willingness to modify practice, and professionalized practice. Observations of PLC meetings, observations of classroom visits, and individual interviews were used to ascertain the effectiveness of classroom visitations.

Prior to the first PLC meeting of the cycle, participants were e-mailed an overview of the classroom observation process. Teachers were instructed that the purpose of the observations was to learn more about their colleagues' classrooms and professional practice, not to evaluate. The observations could include comments about the class

structure, relationship between teacher and students, and/or assessments. Participants were instructed to take notes and formulate questions and comments about what they saw. Each member of the PLC was asked to review the expectations and e-mail the researcher with teacher's name and class they would be observing.

The researcher was most interested to find whether or not classroom observations would provide the necessary foundation for teachers to discuss instructional strategies instead of only focusing on student motivation and performance. While teachers did engage in conversations and exchange ideas that seemed to have yielded success, there was little discussion of best practices during PLC meetings, despite participants' use of these practices in their own classrooms. Teachers cited the differences between content areas as the reason for a focus on the student rather than the instruction and assessment; the researcher was interested to know whether or not teachers' classroom visits would initiate more dialogue focused on practice, and in turn result in modifications of their own practice and professionalization of practice.

Findings

First PLC meeting. There were a total of three PLC meetings during Cycle IV, the first of which was brief and held to review the expectations for the classroom observations and how teachers' observations of their colleagues would be worked in to the subsequent PLC meetings. The first meeting of this cycle took place on a Tuesday morning at 7:15 in the English Department's office. All participants were present. The researcher handed out hard copies of the instructions for classroom observations (See Appendix C) and asked if any of the participants had any questions. SP said, "Can we do this like a learning walk instead?" Learning walks were a practice introduced to the staff

two years prior to this research by the same individuals who provided the PLC workshop in September. The researcher thought this was a great idea, but was surprised by SP's suggestion because at the time of their introduction, the learning walks were not well received by the staff and had not been used because some faculty members claimed it was a violation of their contract to be evaluated by other teachers.

The researcher indicated to the participants she was unsure if there would be enough time for participants to conduct learning walks in each participant's classroom.

SP took control of the situation and said:

We talked a lot about not understanding what happens in classes that are different from ours so what if we looked at one English class and one math class. No offense, but those are the areas that are tested so it might be better than science.

Neither MM nor VA disagreed with SP's suggestion and the group agreed that SP's junior college prep English class and PR's freshman algebra class would be observed by the other participants. The subsequent PLC meetings would then be used as the discussions of what was observed during the learning walk and how instruction and/or assessment can be improved.

PR asked, "This may be a stupid question, but does this relate to student motivation?" The researcher explained to PR and the other participants that instruction plays an integral role in any problem a PLC is working to solve. She went on to say that while modified homework policies and homework clubs appeared to be successful, determining instructional practices that motivate students can go a long way to creating consistency between content areas and motivating students within the regular classroom setting. The participants, including PR, agreed that the instruction component made

sense. The researcher was concerned that participants still did not appear to see the link between student achievement and classroom practices.

The meeting was adjourned at approximately 7:35, and the researcher told the participants to check their e-mail for a schedule of observations and meetings. When the researcher asked if participants would mind meeting after school for the final two meetings to ensure they did not have to cut the meeting short, all participants were willing to do so. The researcher left the meeting impressed with the participants' willingness to engage in a practice many of them had previously opposed. The researcher wondered whether or not participation in the PLC had fostered their willingness to change and made note to ask that question during the interviews.

Learning walk in SP's classroom. The first learning walk took place during SP's eighth period junior college prep English class. This particular period was agreed upon for two reasons: First because it required only one person to have his class covered, and second, SP indicated there were several students in this class who she would classify as being in need of motivation. Prior to the beginning of class, all PLC participants, including the researcher arranged themselves in different parts of the room so each would have a different vantage point. While a traditional learning walk would require each observer to focus on a different aspect of the classroom and instruction, participants were instructed to pay close attention to the instructional strategies and students' participation and engagement.

When class began, SP asked students to respond to a reflective journal prompt that was written on the board. Some students took out spiral or composition notebooks, while others wrote on loose-leaf paper; all students appeared to be working on the

assigned task. While students were writing, SP took attendance and then walked up and down the aisles, reading over some student's shoulders and making comments that assisted them in further developing their writing. When there was approximately one minute of journal writing time remaining, SP posted a chart on the white board that listed students, their assigned group and the Shakespearean sonnet they had been assigned.

After about eight minutes of journal writing, SP asked students to direct their attention to the front board. She instructed them to put all their materials in their bags, as they would be moving around the room. She then read students names, group numbers, and the page number in the book students would need to refer to. SP gave students one minute to find their group members and arrange the desks so they were facing each other. When students were in their groups, SP passed out papers containing the directions for the activity; she also provided participants with a copy of the directions and a copy of her daily lesson plan. SP explained that each group should read the directions and get started on the activity. At this point, the researcher began to watch the participants as they took notes.

For the remainder of the period, SP moved from group to group asking students questions about the activity in general and also specific questions related to the particular sonnet they had been assigned. Occasionally, a student would ask a question and SP would get the entire class' attention before answering it so all students would benefit from the information she was giving. As the class ended, SP informed students they would have time in class the following day to finish the activity and begin to develop their presentations. She instructed any students who were having difficulty to e-mail her or see her after school. She also reminded students that a component of their research

paper was due in a few days. Students spent the final minute of class putting the desks back in to rows and putting away their materials.

Discussion of first learning walk in PLC meeting. The PLC meeting focused on discussing SP's class was held after school in the researcher's classroom the same day the learning walk was conducted. The researcher provided coffee and snacks and the participants arranged the desks in a circle as they had done for all PLC meetings. SP was the first to speak and began by saying, "I have a lot of work to do with them tomorrow."

VA asked SP what she meant and she said:

The students in that class need a lot more direction than my other classes and I seem to forget that. I should have gone over the directions with them and I should have given them an example of what I was looking for because I feel like it would have made it easier for them and for me. I was really frustrated; don't know if you guys picked up on that.

Each of the participants indicated they were surprised by SP's reaction because they thought she appeared calm and organized during the lesson. The researcher then directed MM to continue the discussion by addressing one of the observations he made during the lesson.

MM stated he thought the lesson went really well and he did not have that much to say. The researcher wondered whether this was MM's true feeling or if he was holding back because he feared a conflict with SP, or if he felt his observation was not as valid because he taught a different content area. SP responded to him saying, "Um, it really wasn't, so why don't you say something that is useful." While SP's tone was not necessarily appropriate, her sentiment was. If MM was not able to critically observe and share his findings, the practice of classroom observations would not likely improve the function of the PLC. Albeit reluctantly, MM did begin to share. He said:

I thought the activity was good and I like when students work together to figure things out because they can explain things to each other that we sometimes cannot figure out a way with. I just wondered whether you thought of going through a sonnet with them first before setting them off on their own. Like model for them what they needed to do, and then see if they could do it. I have to do that a lot, even with my honors kids or I spend the whole period answering questions. Makes things go smoother.

The researcher noted that MM cited two best practices in his discussion of SP's lesson: Collaborative learning groups and modeling. The researcher noted that these were valuable contributions, but wondered why MM was resistant to share. A note was made to perhaps interview MM for this cycle.

The next participant to share was PR. She said that from the observation, she began to understand how certain practices were effective, regardless of the content area. PR clarified by admitting she rarely used collaborative learning groups because she felt as though students were not able to complete tasks without her. She said:

I have to laugh because it's like I get frustrated that they cannot do something, but really they cannot do it because they're used to me holding their hand through it. If I let them do it on their own, well not on their own, but in groups, they may not get it at first, but when they do they'll probably have a better understanding of the concept.

VA asked PR how she would group her students because VA felt that sometimes some students take too much control while others are able to get through the task without ever really doing or learning anything. PR said that she was not sure she had the answer, but she would probably either homogeneously group the students so they were adequately challenged on their level or use quizzes as a double-check to ensure all students were mastering the concept. The researcher noted that the discussion of this PLC meeting was far different than previous meetings as it was focused on instructional practices.

When PR had finished speaking, TK told VA that when he used collaborative learning groups, he assigned each student a specific role to ensure all members of the group participated. He indicated that he would evaluate students based upon the group's collaborative efforts, but also the individual effort put forth. He believed that individual responsibility kept students more focused. TK added that he rarely let students select their own groups because in his experience, friends do not work as well together. TK also made a suggestion to SP that she differentiate the groups. From what TK said, he knew the students and that the groups SP developed were heterogeneously. TK indicated that some of the sonnets were easier to analyze than others and it was a good opportunity for higher-level students to be challenged. Interestingly, TK did not mention supporting struggling students through this same practice. MM agreed saying, "KR suggested that to me after she observed my class and I differentiated the groups the next time. It really was different and I feel like the kids learned more because they weren't bored or frustrated working with people or aren't on their level."

The discussion of SP's class lasted about half an hour. As the discussion was wrapping up, the researcher asked participants what they learned from their observation of SP's class that they can use in their own practice. The consensus was collaborative learning groups can be effective during any stage of a unit, but needed to be carefully planned. Participants also noted that collaborative learning activities were a great place to incorporate differentiated instruction, something a couple participants had noted they struggled with in the past. SP said that she was able to realize what was missing after the discussion and was going to model what she expected of her students. She noted modeling was a practice she uses, but is more aware of when it is most effective. The

researcher asked participants if they had any questions or final comments; they did not. She then told them to check their e-mail for the date and time of the next learning walk and PLC meeting.

Learning walk in PR's classroom. The second learning walk was conducted in PR's ninth period, ninth-grade college-prep level Algebra class. Just as they had with the learning walk of SP's class, participants arrived about two minutes prior to the start of class and arranged themselves around the room so as to not be obtrusive. PR provided each participant with a packet containing her daily lesson plan, the results of a quiz she had given the previous day, and the activity packet she would be giving to students. As students began to arrive PR wrote the anticipatory set on the white board; students were to review the results of the previous day's quiz.

As the class began, students were reviewing their work. Some expressed disappointment, while others seemed to be content with low, but passing grades. PR walked around the room and facilitated the process of students reviewing their work and beginning to understand where they made mistakes. After about two minutes, PR addressed the whole class. She explained that students would be reviewing and correcting their work in small groups. She went on to tell students she had placed them in groups based upon which questions they seemed to have struggled with on the quiz. She passed out the activity packets and asked that students follow along as she read and explained the directions. The activity had students review the steps for completing certain algebraic equations. While each group was working on similar problems, the groups were determined based upon which step seemed to be confusing to students. Students were to write out the steps for solving the problem and prepare a mini-lesson that would instruct

others how to complete the problem. The researcher noted that in addition to collaborative learning, PR had created a task that had students working at the highest levels of Bloom's Taxonomy.

Once the directions had been explained and PR gave a sample of what students' work would look like, she instructed them to meet with their groups and begin working on the activity. She informed them they would have the remainder of the class period to plan, five minutes of the following day to review, and would then present their lessons tomorrow. As students worked, PR moved from group to group. She made suggestions to some groups and helped others recognize mistakes. With two of the groups, she sat down with them and had them complete problems step by step to ensure they had an understanding of the concept to be able to complete the activity. As the class continued, students were overheard correcting each other, encouraging each other, challenging each other, and supporting each other as they worked toward creating the lesson.

With about five minutes remaining in the class period, PR asked students to return the desks to rows as she gave each of them a slip of paper. She had written two questions on the board that students were asked to respond to on the exit pass: (a) What did you learn today that you did not know before you took the quiz? (b) What do you need to know before your group can give the lesson? As students wrote, PR told them they would have the entire period the following day to continue planning for their lessons because it was apparent to her they needed more time. Students were still working as the bell rang, but finished their exit passes and handed them to PR as they left.

Discussion of second learning walk in PLC meeting. The PLC meeting following PR's classroom observation took place immediately following the lesson in

PR's classroom. Participants arranged the desks in a circle and took a few minutes to organize their ideas before the researcher asked someone to initiate the discussion. PR began by saying she took what she saw in SP's room along with the suggestions that were made during the previous PLC meeting. She went on to say that she thought if she paired direct instruction with collaborative learning it could have a more positive impact on student's ability to master concepts. PR added that she liked when students taught lessons and had gotten the idea from a colleague in the history department. The researcher noted that again, the discussion focused on instructional practices and that participants were demonstrating the ability to recognize how practices can be incorporated into all content areas.

When PR had finished explaining her lesson, MM stated that he thought her use of the quiz scores and the way she organized the groups was beneficial, but wanted to know how long PR spent grading the quizzes and looking at the data. PR said it took her about two hours to grade the quizzes, enter the data, and group students accordingly. She went on to say that creating the lesson took about another hour. TK said he thought that was a lot of time to spend on one lesson, but PR said:

I would have said the same thing, but I realized that I probably spend that much time teaching, quizzing, grading, and re-teaching the same concepts. I am totally experimenting here, but I think the time I put into this will actually save time in the long run. I also feel like the kids were really understanding on a different level, more than just memorizing steps.

TK agreed with PR that the time spent on the lesson was worthwhile if it promoted higher levels of achievement.

MM was the next to ask PR a question. He wanted to know how PR would be evaluating student work. PR said that she planned to give each student class participation

grades and then give another quiz after all the lessons had been given. MM suggested PR develop a rubric and use the presentations as the quiz grade. PR said that while she liked the idea of developing a rubric to assess the presentations, she really needed to give another quiz to determine if students were able to put all the pieces of the puzzle back together. MM indicated that he understood PR's point of view, but that testing after a performance assessment seemed pointless because the performance assessment requires so much more from students. PR said she would take it into consideration, but it did not appear as though she would change her mind. The researcher noticed that MM, who was reluctant to critique SP, gave suggestions more freely to PR. The researcher wondered whether MM was reluctant to critique SP for fear of conflict or if he had become more comfortable with the process.

The researcher asked SP and VA if they had any questions or comments. SP said she had a comment about the learning walks in general. She indicated that her level of comfort with allowing people in her classroom has grown and she does not feel defensive with the PLC participants, but still does with administrators. SP went on to say that she thought she learned more about what she can do differently from "one learning walk than I did from eight years of formal observations." The other participants agreed with SP. The researcher asked participants if they thought that learning walks would help to improve professional practice and they indicated that teachers who were willing to participate would learn a lot. VA said, "I did not really get how what one of you did in your class related to what I did in mine until we did this. I did not think we could do the same things, but now I feel like we do a lot of the same things." The researcher noted that the learning walks appeared to have a positive impact.

The final PLC meeting lasted about twenty-five minutes. The researcher indicated to participants this was their final meeting and asked if there were any final comments or questions. SP said, “You did a really great job with this. I’m serious; I did this to help you out, but I really got a lot out of this and I feel like you would do an amazing job and creating PLCs here.” The other participants seemed to agree with SP and TK said, “If this is what professional development was like I don’t think I’d hate it so much.” The group laughed, and the researcher thanked them for their time and efforts.

Interview with MM. The first of two interviews in this cycle was conducted with MM. The researcher was curious about MM’s experiences with the learning walks and wanted to learn more about his change in demeanor from the first to second learning walk. The researcher met with MM during the third week of the cycle after both learning walks and PLCs had been conducted. MM was asked to share his first impressions when the PLC participants decided to do learning walks. MM indicated that although he did not share his concerns, he was hesitant to participate in learning walks because he did not believe some members of the PLC would be amenable to receiving constructive criticism, even if they said otherwise. The researcher asked if he was referring to SP, and he said he was referring to her, but also to the entire group. He said that he believed teachers were conditioned to receive feedback from their superiors, but not from each other. MM elaborated by saying:

It isn’t that we don’t respect each other or think we don’t know what our colleagues are talking about, it’s just that we are defensive to some degree because most of us put a lot of effort into what we do and some people don’t want to hear that they could be doing better.

The researcher noted that while MM was discussing his feelings on this topic, he cracked his knuckles and bit his nails, something she had never observed him do in class, during

his previous interview, or during any of the PLC meetings. This seemed to be an issue that made MM nervous.

The researcher asked MM the way he thinks others may react influences what he says or how much he shares. MM said:

Absolutely it does because I hate conflict and I don't want anyone to get offended and then take a shot at me or my classes or students. Sometimes I feel like when we talk about our classes we get so protective and people can be nasty if they feel attacked, not that anyone is being attacked, but I guess that's how they feel.

The researcher asked if MM held back at all during PLC meetings, and he said that he held back comments he felt could be misconstrued or that people might take offense to. When asked if he had an example he said, "I wanted to tell PR a couple times that some of her kids really don't get things even when she goes over and over it, but how do I say that without her getting mad?" The researcher did not have an answer to his question.

The researcher asked MM if there was anything that could be done about the structure of the PLC that would make him feel comfortable enough to share more candidly. MM said that as the PLC continued he became more comfortable and he thought that came through in the final meeting. He said he made a "conscious effort not to hold back" what he was thinking. MM believed that the more time colleagues spent together, the more comfortable they would become sharing their own experiences and critiquing others. When asked to share any final thoughts regarding the PLC or any of the practices used during the study, MM said that he liked working with people outside his department more as time went on. He said, "In the beginning I did not know if it would be worth it because I did not know if what other people did was something I could use, but it definitely was." When asked which activity he felt was most beneficial, he said the

learning walks gave him a better idea as to how practices are applicable across content areas and he learned different approaches from watching his colleagues.

The researcher's final question asked MM if he thought Millersville High School would benefit from PLCs. MM thought for a moment and said:

I think most people would get a lot out of it, but I don't know that it would work because not many people would do what we did, like stay after school or observe each other. I think the groups would need to be created by someone who knew which people could work together and which cannot. If no one is there to tell people what to do, it will be a waste. If all you did was sit there and tell us to talk about kids or teaching, we would not have been able to. Not as much at the end, but at the beginning, like in September, I feel like you did everything.

The researcher thanked MM for his time and asked him if there was anything else he wished to share or anything he had a question about. He said he did not, and the interview was over.

Interview with PR. The second interview conducted during this cycle aimed to better understand the experience of the teacher being observed by his/her colleagues. For this reason, PR was interviewed during the final week of the cycle. The first question asked was, "How did you feel prior to and during the learning walk?" PR indicated that she was more nervous the day before because she wanted to impress her colleagues. She said:

I'm not going to pretend like I did not care, because I really did. I wanted everyone to think I did a good job. I'm not saying that I don't always try to do a good job, but I put a lot of effort into it [the lesson]. During the actual lesson I pretty much forgot everyone was in there because what I was doing required a lot of my attention.

Given PR's response, the researcher asked PR if the lesson she planned would have been executed if she was not observed during a learning walk. PR said that she would still have used the lesson she planned. She indicated that she got the idea for the activity after

the learning walk of SP's class and said, "I really wanted to start doing more group work after that."

The researcher then asked PR to talk about her experience having her peer's critique her lesson. PR said that she felt she had an easier time with it because she was the second teacher to be observed, not the first. "I took what SP did and used the feedback we gave her," she said. PR continued, "But it's still a little unnerving because even though it's the lesson and practice people comment on, it's still the lesson or practice I used...". The researcher asked if PR felt the learning walks were a worthwhile practice and she said, "Oh my God, yes!" When asked to elaborate she said:

I would not have done group work if I did not see SP doing it. Not only that but if SP or anybody else told me in a PLC meeting to try group work, I would have said, 'I cannot in Math.' I was one of those teachers and it took this to make me get it. I had to see, experience, what someone else was doing. I did not do the group work because I had to, I did it because I saw it done and *wanted* to use it in my classroom.

The researcher noticed that PR was quite emphatic about her experience with the learning walks and believed the practice had positively impacted PR's classroom.

PR was asked to share her overall experience with the PLC. The researcher reminded her of the various activities during each cycle. PR said that while she learned a lot from the learning walk and wanted to keep doing them if possible, she felt she learned a lot about her students and what she could do to help them during the PLC meetings. She said she would not have thought to change her homework policy or held after school sessions if it were not for the PLC meetings. PR went on to say, "It was near the end of this though that all the pieces came together. I liked the meetings, but each part is important. I don't think the meetings are enough." The researcher asked PR to elaborate upon her last statement and she said:

If all we did was the after school time we weren't going to get anywhere or change anything. When I really started to do things differently was when we did the journal writing. I never spent that much time thinking about what I was doing. But then the learning walks took it a little further. I don't think this is for everyone, but I got a lot out of it.

The researcher asked PR what she meant by 'I don't think this is for everyone.' She said, "Most teachers wouldn't want to do this because of time or whatever else. I liked it, but most won't." The researcher asked PR her reasons for thinking that and she said:

It wouldn't work because nobody is there to make sure everyone is doing what they need to do to get something out of it. We, well I will just speak for myself, I had a good experience because you told us what we were doing and why. Who would do that? I just don't think it could work, no offense.

The researcher thanked PR for her honesty. When asked if she had any questions or any final comments, she said that she wanted to e-mail the principal to see if the learning walks could be reinstated for those teachers who wished to participate. The researcher encouraged her to do so and said if she needed any help or wanted to observe a class, she was more than welcome into her classroom. The interview then concluded.

Discussion

The goal of this final cycle was to determine the effectiveness classroom observations, specifically learning walks, would have on professionalizing practice. As a result of one of the participant's suggestions, learning walks were conducted, and each participant was given the opportunity to observe one of their colleagues. These observations initiated discussions about classroom practices, specifically what appeared to be successful and what could be improved. Each of the teachers in this study actively participated in the learning walks as observers, and two volunteered to be observed. At

the end of the cycle, the researcher interviewed the one who observed and the one who was observed to better understand their experiences and perceptions of this practice.

One of the most important findings was teacher participants' willingness to embrace a practice they had previously resisted. When the concept of learning walks was first introduced during the previous academic year, the teachers participating in this study were opposed to it. However, when the topic of classroom discussions came up during the first PLC meeting of this cycle, it was one of the participants who suggested using learning walks as the means by which the observations were conducted. After discussing this informally with SP, the teacher who suggested it, it is likely that the practice was embraced for two reasons. First, there would be no administrative presence and there was a higher level of trust between the teachers in the PLC than between the teachers and the administrators. This suggests that trust is an integral part of any change initiative, as suggested by Lencioni (2002) and Evans (1996). SP also suggested that working in the PLC for several weeks gave her a new perspective about her teaching and she was "more open to sharing" her practices. This suggests that PLCs may be an effective means by which teachers can begin to modify their practices.

While teachers did demonstrate the willingness to modify their practices, it was also interesting that there was some resistance to giving critical feedback. The researcher had believed there would be more resistance to receiving critical feedback, but the opposite seemed true. If a teacher is perceived to be highly adept, as was the case with SP, and is somewhat outspoken, there was hesitation to provide constructive criticism. This might have been the result of the process of learning walks being fairly new and teachers being unsure how to offer feedback, but MM confirmed during an interview that

he hesitated to give feedback because he felt she would be defensive and wanted to avoid conflict. This suggests that individual teacher's behaviors affect the other participants in the PLC and may hinder open discussion.

The most important finding was that classroom observation, in this case learning walks, seems to be the most effective method of not only de-privatizing practice, but also initiating dialogue about best practices, which is also suggested by (Rasberry & Mahajan, 2008). During the PLC meetings focused on discussing what was found during the learning walks, both teachers who were observed made reflective statements, suggesting they consciously think about their practice and recognize areas in need of improvement. However, the classroom observations provided the suggestions needed to actually change practice. Thus, the research suggests that neither PLC meetings nor reflective practice without classroom observation and critical feedback can be as effective in professionalizing practice. During previous cycles, PLC meetings focused on improving achievement through motivation, and action was taken to ameliorate a problem. The researcher noted that discussion of best practices was not taking place. With the introduction of classroom observations, teachers were able to focus their attention to instructional practices, an integral component of the PLC model (DuFour & Eaker, 1998).

Conclusion

Two of the most disconcerting statements in this entire research project were made during this cycle. Participants who seemed to have enjoyed their experience with the PLC and learned a great deal did not believe PLCs would work in Millersville High School. They suggested a lack of supportive leadership and other teacher's disinterest as

the two primary reasons. While the researcher was credited with sustaining the pilot PLC, this was not viewed so much as a compliment as it was an impediment to developing and sustaining other PLCs. The researcher discovered an apparent lack of teacher leadership within the culture of the school, which a couple participants attributed to the current administration. Regardless of the changes made, the interviews and informal conversations with participants suggests that without strong, supportive leadership, sustainable PLCs that professionalize practice are not possible.

As a result of reflection on the previous cycles, the researcher made a conscious effort to allow the PLC participants to take more active leadership roles. This was achieved through facilitation of the PLC, but less active participation. This was uncomfortable for the researcher as she a person who enjoys asking questions, sharing her experiences, and making suggestions. It was important for the PLC to be able to function more independently, and if she did not take a less active role, this would not be possible. To her surprise, the PLC participants engaged in critical discussions and the meetings went well. This was important for the researcher in that she was able to utilize more transformational, servant leadership, rather than the transactional style she felt she was utilizing during previous cycles. The role of reflective practice was once again effective.

This final cycle lasted about three weeks, and it is impossible to generalize the findings. In order to better understand the role of classroom observations and the impact they have on PLCs and participants, further study is needed. The researcher's own bias may have also impacted the study. The researcher is a team-oriented person who frequently invites other teachers and administrators into her classroom. This is atypical

for most teachers, but this tendency to be more collaborative by nature may have impacted this study.

Chapter VIII: Discoveries and Conclusions

PLCs are one of the best means by which teachers can work collaboratively to better understand the problems they face and how to solve them. The purpose of this case study was to better understand how a PLC develops and functions and the effects participating in a PLC can have on teacher's practice. Employing action research allowed each cycle to build on previous findings in order to best answer the research questions. The essential characteristics and three big ideas presented by DuFour and Eaker (1998) were the driving forces behind each action research cycle. Each action taken aimed to anchor one of the essential characteristics into the culture of the PLC. Reflective practice played an integral role in getting teachers to better understand their own practice in order to share their experiences and learn from one another (Osterman & Kottkamp, 2004). Building a culture of collaboration was emphasized throughout this study, but primarily in the final cycle as a PLC cannot function in a culture of isolation (DuFour, 1997; DuFour & Eaker, 1998; DuFour, 2001; Graham, 2007). Throughout the four months the pilot PLC was studied, a great deal of knowledge emerged regarding the development, facilitation, sustainability and impact of PLCs. This chapter discusses the discoveries made as well of the limitations of the study and suggestions for further research.

Research Questions Addressed

Impact of teachers' behaviors on the PLC. The participants in this study were selected because they responded to a school wide e-mail sent asking for volunteers. The researcher believed in the beginning of the research that there might have been personality conflicts. The researcher also recognized the stagnant culture in Millersville

High School and that even those teachers believed to be most effective were often resistant to change, and outspoken in their resistance. Some of those teachers had volunteered to participate in this research.

The impact of teachers' behaviors was recognized most during observations of PLC meetings. In many cases, non-verbal communication such as crossed arms, using a cell phone, eye rolling, or doodling indicated that there was a disconnect between the discussion and the participant. Sometimes the non-verbal cues were picked up on by other participants, causing friction. For example, when discussing homework policies, there was tension between SP and VA because SP was very outspoken and when VA tried to share her experiences and feelings on the subject, SP rolled her eyes. VA saw this and to some extent she shut down because she believed that instead of being supported by her colleague, she was being challenged. The researcher did not address this issue, but in retrospect, she believes that SP should have been made aware of the negative impact her quips and gestures had on other participants. At the time, the researcher believed this confrontation would have alienated SP, so she chose to allow the PLC to continue without addressing the issue.

The researcher also observed some peer pressure in the group, which had positive and negative impacts. Sometimes participants, especially VA, MM and TK, who appeared to avoid conflict, went along with what the group was doing, even if was in opposition to what they wanted. At other times, like when SP suggested conducting learning walks, the others went along with the idea, and this appeared to have had a positive effect on the PLC.

The researcher found that PLC participants' behaviors do impact the PLC, but during the course of this study, there were more positive behaviors elicited than negative. However, the researcher understands that this is likely because of the dedication of these teachers and that they are already ahead of most of their peers in that they volunteered their own time to participate in the PLC. Most of the negative behaviors led to only brief conflict, and in the end, the conflict led to a higher level of sharing and collaboration, as was the case with SP and VA and SP and MM. The researcher notes that participant behaviors will likely impact other members of PLCs, and that for these reasons PLCs should be carefully developed and individual personalities should be considered in order to avoid negative conflict that could prove detrimental to the development and sustainability of the group.

PLC participation and modification of practice. One of the most surprising findings of this research was PLC participants' willingness to modify their practices. There was very little resistance to modifying their classroom policies or the instructional strategies used to deliver material. When there was some resistance, as was the case with VA's initial reluctance to modify her homework policies, the other participants, in this case SP, were able to engage in a discussion that allowed the merit of the modification to be realized. Teachers often engaged in discussion and shared ideas about students and their achievement.

In a few interviews and during PLC meetings, teachers directly attributed their experimentation with a new practice or a new approach to instruction to an idea given to them by a peer, particularly their fellow PLC members. While it appeared that the PLC helped teachers to modify their practice, their willingness to modify also allowed the PLC

to function well. If participants had been more stubborn or unwilling to change, the PLC would not have been able to make progress and go about improving student motivation. It seems that willingness to modify practice is a very important quality of PLC participants; without modification of practices, little can be learned.

The researcher does not believe all PLC participants will be as willing to modify practice as those who participated in this case study. Again, the participants in this study were volunteers; their participation was not mandated. These teachers desire to improve student motivation served as the catalyst for their willingness to modify. The researcher suggests that PLC could be organized around specific problems teachers would like addressed as it may increase their willingness to change.

Professionalizing practice. There has been much discourse in federal and state governments, as well as globally, about the professionalization of teaching. This means that teachers continue to study their craft and incorporate new understandings. Sagor (2009) believes this may be the most important component in improving school systems. During this study, teacher participants made strides in professionalizing their practice. For example, KR began to use quizzes as formative assessments and made meaningful changes to instruction based on the data yielded from analyzing student work. MM began to incorporate differentiated instruction to better meet his students' needs. SP began to develop a more student-centered, constructivist classroom in which her role became that of a facilitator.

Each best practice incorporated by these teachers was done so during the latter part of the study. This suggests one of two things: Either participants need sufficient time working within a PLC to begin to professionalize practice, or engaging in reflective

practice and classroom observations are more likely to professionalize practice than participation in a PLC alone. The researcher believes that the most effective PLCs will incorporate reflective practice and classroom observations to promote professionalized practice. Without those practices, PLC meetings may not be as focused and productive as possible and participants may lose sight of their purpose.

Researcher's leadership. The researcher learned a great deal about her own leadership during this study. During the planning stages of this project, the researcher envisioned herself to be a facilitator and a transformational servant leader who gave her followers the tools they needed to succeed. This theory met reality during the first cycle. The researcher learned the importance of transactional leadership when initiating change. While transactional leadership will not change systems and empower followers in the long run, when introducing new policies and practices, telling followers what they must do and what is expected of them increases clarity (Burns, 2003). The researcher attempted to let the PLC find its own way, but clearly learned that participants' lack of familiarity with PLCs created a great deal of confusion and frustration because they were unsure what to do without instruction.

The researcher struggled a great deal with balancing transactional and servant leadership with her ideal of being a transformational leader. She wondered whether or not her transactional approaches were creating a dependence upon her within the PLC, which would inhibit its sustainability. Yet without her, the PLC would not have been able to function. The researcher began to better understand the role of a leader and that during the change process, a strong leader must be one who can clearly communicate expectations and procedures, then build the necessary capacity so the change may

eventually be anchored within the organization (Kotter, 1996). The transformational component of her leadership began to emerge during the fourth cycle of this study as she did little more than facilitate the process. The major intervention was actually suggested during SP during this cycle, which suggested the PLC, and her leadership, had empowered others.

Bias

Any qualitative study must contend with a degree of researcher bias. The researcher did her best to reflect often and question her actions and assumptions to keep bias in check. There were two main biases that may have affected the study. The first was the researcher's knowledge of PLCs and involvement in the district's professional development committee. The researcher continued to assume participants' familiarity with PLCs and best practices were near to her own, and they were not. The result of this was dedicating an entire cycle to reviewing and imparting concepts and understandings that should have been given during the first cycle.

The second major bias was the researcher's learning style, which is very collaborative and team-oriented. The researcher prefers to work with others, shares her experiences frequently, and invites others into her classroom. She learns a great deal from speaking with others, and has difficulty understanding why a person would prefer to work independently in isolation. When participants seemed resistant, the researcher attributed this to reluctance to change, rather than a difference in learning style. The researcher did her best to use her emotional intelligence and understand the differences between herself and the participants.

Limitations and Further Study

This study is limited in that one very small group of volunteer participants engaged in a PLC for four months. In order to develop a better understanding of the impact PLCs can have on professionalizing practice, a broader study should be developed that pulls together different teachers who did not volunteer and would be better able to understand the role PLCs play in professionalizing practice. The fact that participants in this study were volunteers eager to improve a problem they had already identified indicates they are not representative of the majority of teachers.

The study is also limited in that it focused only on teachers and not the administration. When asked to participate in the study, the administration respectfully declined, but given the collaborative nature of PLCs, their participation is important. A future study should involve building level administration in both the planning and execution of the study. The administrators should engage in the PLCs as active participants. This may help an entire school to see the larger context.

Yet another limitation to this study was the frequency with which meetings were held and the duration of the meetings. Because there is no time built into the school's schedule for PLC meetings, meetings needed to take place before or after school hours. Following that, meetings only took place once a week during the first cycle and every other week during the second, third, and fourth. In order to determine a PLC's ability to professionalize practice, regular meetings should take place. A further study could monitor PLC participants who meet daily, or at least a few times during the week.

Reflection and Next Steps

This research project proved immensely valuable in helping the researcher to better understand PLCs, the change process, as well as her own leadership. Using the knowledge and skills developed during this research, the researcher will work collaboratively with Millersville's district and school-based professional development teams to implement PLCs during the 2011-2012 school year. As a result of this study, teachers will be grouped according to their areas of interest, and at least one member of the professional development team or building level administration will facilitate the meetings to acquaint participants with the big ideas and essential characteristics of PLCs (DuFour & Eaker, 1998). PLCs will not be expected to function independently during the first year of implementation, but will rather be scaffolded through the process as a result of the researcher's experience during the first cycle. Reflective practice and learning walks will also be incorporated into the PLCs. Millersville High School's PLCs will meet once per week after school in a mutually agreed upon location, and plans are being made for PLC time to build into the schedule for the 2012-2013 academic year.

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Appendix A
PLC Survey

PLC Research Survey

DO NOT PUT YOUR NAME OR OTHER IDENTIFIER ON THIS PAPER

Please read each question and provide as much information as you can to help me plan for an informative and effective professional learning experience. When you finish, place this in my routing box in the main office. If you have any questions or wish to share any more information, please e-mail me at kroselle@hotmail.com.

1. Briefly discuss or a bullet a list of things you know about professional learning communities (PLCs).
2. What are your feelings about working collaboratively with your colleagues?
3. What do you believe are the most effective approaches to solving school-wide problems?
4. How often and/or how willing are you to discuss your experiences in the classroom?
5. Which best practices do you most frequently incorporate into your classroom to promote high levels of student achievement?

Appendix B
Introduction to Professional Learning Communities

Introduction to PLCs

DEFINITION AND FUNCTION

- PLCs are defined as groups of professionals working toward common goals.
- PLCs aim to:
 - build collegiality
 - foster collaboration
 - identify problems
 - develop solutions

CHARACTERISTICS OF PLCs (DuFour, 1998)

- Shared mission, values, and goals
- Collective inquiry into “best practice” and “current reality”
- Results oriented
- Focus on continuous improvement

SMART GOALS

- Specific (identify a specific action or event)
- Measurable (qualitatively or quantitatively)
- Attainable (can be achieved)
- Relevant (focuses on desired outcomes)
- Time-bound (within a specific time frame)

COLLECTIVE INQUIRY THROUGH ACTION RESEARCH

- Review the data
- Identify the problem
- Brainstorm solutions
- Select a viable solution
- Monitor progress
- Assess the effectiveness
- Repeat as often as necessary

Appendix C
Instructions for Classroom Observations

**MILLERSVILLE HIGH SCHOOL
PILOT PLC: CLASSROOM OBSERVATIONS**

Please remember the following as you conduct observations of colleagues' classrooms:

- ✓ Schedule observations for your emergency or lunch periods—class coverage can only be arranged if someone is willing to cover your class free of charge (i.e. no blue slips will be given).
- ✓ Remember the difference between observing and evaluating. During an observation, you should gather information to better understand the classroom. The observation will help to initiate discussion.
- ✓ Look at the entire classroom and pay attention to the students just as much as you watch the teacher.
- ✓ Write questions you have or something you wonder about. These will help to initiate conversations during PLC meetings.
- ✓ Compare and/or contrast practices.
- ✓ What seemed to go well?
- ✓ What suggestions might you have?

If your class is observed, remember that the classroom observations are meant to serve as learning experiences.

- ✓ Provide information such as a lesson plan or handouts if they are readily available.
- ✓ Avoid being defensive, listen to what your colleagues have to say. Provide information that may help them better understand your class.
- ✓ Be willing to hear alternative approaches.
- ✓ Do your best to reflect upon the lesson that was observed in order to prepare for the subsequent PLC meeting and discussion.

If you have any questions, please find me in room 108 or e-mail me at kroselle@hotmail.com