

THE INFLUENCE OF PRINCIPAL LEADERSHIP RESPONSIBILITIES ON
PROFESSIONAL LEARNING COMMUNITIES: PERSPECTIVES
OF HIGH SCHOOL TEACHERS AND PRINCIPALS

by
Jeril Lyn Hehn

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ABSTRACT

This study investigated teacher and principal perspectives regarding how principal leadership responsibilities influence the functioning of Professional Learning Communities (PLCs). PLCs are a concept and a structure through which schools can address and respond to the myriad social, political, and technological forces that educators face today. By utilizing principal leadership responsibilities associated with second order change as a basis for identifying the needs of PLCs, data was gathered to analyze and inform principals in how to determine the needs of their PLCs. Such information can then be used to develop a school improvement plan to meet PLCs at their current level of functioning, and focus on addressing the specific needs of each PLC in a targeted manner that employs differentiated leadership designed by principals to positively impact teaching and learning.

The purpose of this embedded case study was to examine how teachers and principals describe the influence of principal leadership responsibilities on PLCs. The case study was conducted at a class AA high school in Montana consisting of five principals, 95 teachers, and approximately 1830 students in the initial years of PLC implementation. The primary sources of data collection were: teacher and principal focus group interviews, document analysis, researcher's journal, and the use of archival collective efficacy data. Findings suggest the importance of clear ideals and beliefs; an emphasis on the need for principals to support teachers in differing ways; varying interpretations of principal leadership responsibilities between PLCs as well as between principals and teachers; and various levels of PLC functioning. As principals seek to develop and implement continual school improvement plans to enhance teaching and learning, they must understand the needs identified by their PLCs and develop a differentiated leadership plan to utilize principals' time, talents, and resources to meet those needs and support positive PLC functioning. Recommendations are made for further research.

CHAPTER ONE

INTRODUCTION

Introduction

In the discussion regarding how to best lead teachers for increased student learning in today's complex global society, one important aspect has yet to be investigated – the challenge faced by principals striving to identify the specific needs of their current staff in order to most effectively design a leadership plan to meet those needs. Previous research has emphasized the role of the teacher as the primary factor in student achievement (Marzano, Waters, & McNulty, 2005; Wahlstrom & Louis, 2008; Hattie, 2009; DuFour & Marzano, 2011; DuFour & Mattos, 2013). Further research has provided insights into the implementation of Professional Learning Communities, or PLCs (DuFour & Eaker, 1998; Hord & Sommers, 2008; Roy, 2010) and role of collective efficacy in supporting improved student achievement (Bandura, 1997; Goddard, 2001; Hoy, Sweetland, & Smith, 2002; Goddard, Hoy, & Woolfolk-Hoy, 2004; Goddard & Skrla, 2006; Ware & Kitsantas, 2007). However, few researchers have explored the specific relationship between the functioning of PLCs and collective efficacy. Even fewer studies have addressed the challenges of principals at our larger high schools when trying to identify the principal leadership that is needed to support the functioning of PLCs and the development of collective efficacy with their current staff. Thus, this study was designed to identify the principal leadership responsibilities that teachers identify as

important to the functioning of their PLCs, as well as to note changes in collective efficacy as PLCs were implemented at a large high school in Montana.

The Need for the Study

The Problem

As educators face the daunting task of preparing students for a constantly changing global society (Daggett, 2010), a primary question for school principals is how to best utilize their time and talents to support staff and increase student achievement. While technology makes a significant amount of educational research readily accessible, sorting through what to use and when to use it is still a distinctly individualized process for each school building. As principals work with their teachers to improve teaching and learning, they must find a way to determine the specific needs of their current staff and then create and implement a plan to meet those needs.

Secondary schools exhibit their own specific challenges for principals. As most high schools tend to be large, it is not unusual to have 100 or more teachers in a building led by an administrative team consisting of several principals. The challenge for this team is to figure out how best to lead a diverse staff to improve teaching and learning for an even more diverse student population. There are a multitude of factors to consider, not the least of which is an understanding of current educational research and how to apply that knowledge for the benefit of staff and students.

There are a variety of external forces that impact the decisions that principals must make for their schools. The political, economic, and technological realities of

today's society influence and shape those decisions. One example of those realities is the No Child Left Behind (NCLB) Act of 2001, which ushered in an unprecedented era of accountability for educators. While NCLB demanded that all students were to be proficient or advanced in reading and math by 2014, schools were also required to ensure that all student subgroups, such as minority groups or those designated as low socio-economic status, were also making Adequate Yearly Progress (AYP) toward 100% proficiency by 2014 (U.S. Department of Education, 2002).

In the state of Montana, the Office of Public Instruction (OPI) is the governing body charged with monitoring compliance with NCLB. In addition to AYP targets for proficiency, high school dropout rates and graduation rates are also measured to determine whether or not a school is deemed successful. Failure in any single measure or subgroup, or for any single school within a district, earns that district an overall failing grade. This expectation has become increasingly difficult for the larger districts in Montana, designated as "AA", to achieve. As the size of the student population grows, the variety and number of challenges inherent in the classroom increases as well. Teachers must attend to this greater diversity in student learning requirements. Therefore principals, as instructional leaders, must support teachers as they address these learner needs. To accomplish this, it is the principals' responsibility to identify the professional development needs of their teachers. With more teachers on staff in a larger school setting, this can become a daunting and arduous task for high school principals.

In addition to federal and state accountability standards, principals are also challenged to respond effectively to our increasingly intricate and rapidly changing

global society. Technological advances and the Internet have connected people, information, and cultures in a manner that is vastly complex, while simultaneously offering improved access to knowledge and ideas. There are benefits and challenges to this age of information and change, both of which impact schools. It is the responsibility of school principals to assess the impact of these issues on their particular schools, as well as to decide the appropriate actions and responses. Such determinations should be grounded in research-based practices to ensure that their school improvement plans will result in positive outcomes for students. Principals have the greatest degree of control over one thing – the actions and behaviors in which they themselves choose to participate. Therefore, there is an urgent need in high schools across the nation for a process in which principals can identify the diverse professional development needs of their current staff, and the principal leadership that can best support teachers in growth that will increase student achievement.

Purpose and Rationale

With the increasing demands of educational accountability and a rapidly changing global society, principals are responsible for leading the changes necessary to meet these expectations. In a review of successful school leadership, Leithwood, Harris, and Hopkins (2008) found that the classroom teacher is the only factor that has a greater impact on student learning than school leadership, emphasizing the responsibility and the importance of the role of the principal. Northouse (2010) directs principals to apply their skills of analysis to not only understand their current situation, but also to be able to respond with the appropriate decisions and actions that will benefit their team. To be

effective, principals must be able to assess the needs of their teachers in order to lead in a way that supports their staff in meeting these challenges.

In large high schools, principals must weigh dozens of variables when calculating how to best meet the needs of a sizeable staff. One method of making this process manageable is the use of teacher teams. Northouse (2010) described teams as “organizational groups composed of members who are interdependent, who share common goals, and who must coordinate their activities to accomplish these goals” (p. 241). Many high schools utilize departments based on content areas to organize teachers with common interests and responsibilities. But there is more to being a team than just grouping teachers by subject areas. Senge (2006) commented extensively on the role of carefully aligned teams in a learning organization, emphasizing the importance of alignment in vision and purpose, as well as the collaboration necessary to develop a synergy that empowers the entire team. Colinson and Cook (2007) further describe such organizational learning as involving members who work systematically together to energize, transform, and learn in order to make positive gains. Clearly, experts in the field emphasize the need for members of an organization to analyze and adjust to promote learning and growth toward common goals.

Such an emphasis on team dynamics has a unique application at the high school level. Although it may seem natural that schools would be compatible with the concepts and practices of learning organizations, high school teachers have traditionally taught in isolation. This presents a specific challenge for secondary principals, as such isolated practice is incompatible with the definition of teams and learning organizations described

by Northouse (2010), Colinson and Cook (2007), and Senge (2006). Yet it remains the responsibility of high school principals to determine how to lead teachers for school improvement in a systematic way that includes the tools and support necessary for teacher and student success. Simply grouping teachers together does not create a team. Therefore, high school principals in particular are in need of guidance in how to lead teachers out of isolation and into collaborative learning practices that will allow them to grow and respond positively in today's complex global society.

Research Questions

In today's multifaceted educational environment, educators continue to face the daunting task of preparing students to be successful, contributing members of our communities in an era of accountability and change. As the world transforms at an increasingly rapid pace, it seems impossible to accurately predict the "right" set of skills our students will need for the future. To meet this challenge, schools must be prepared to change as well, and it is the responsibility of principals to support and lead teachers through these changes. While the politics of accountability and high expectations for our schools exist, the reality is that leading for learning continues to be a complicated and ever evolving responsibility for principals.

The research base for both PLCs and collective efficacy indicates that there is potential for utilizing these structures and measures to assist principals in leading their staff to improve teaching and learning. PLCs provide a focused and purposeful structure for the growth and development of a learning organization (Hord & Sommers, 2008; Barton & Stepanek, 2012; DuFour & Fullan, 2013). Collective efficacy is a reflection and

measurement of school culture that supports positive student achievement (Goddard, 2001; Hoy, Sweetland, & Smith, 2002; Goddard, Hoy, & Wookfolk-Hoy, 2004; McIntyre, 2011; Oliver & Hipp, 2006). In order to promote teacher growth in PLCs, principals must identify the specific needs of teachers in their building before they can plan to effectively address those needs. Identifying specific staff needs regarding the principal leadership that teachers identify as necessary for positive growth will inform principals as to how they may more productively allocate their time, talents, and resources. Through their meta-analysis of 35 years of research studies related to principal leadership behaviors, Marzano, Waters, and McNulty (2005) identified 21 principal leadership responsibilities correlated with student achievement, providing a research based to utilize in exploring the actions principals can and should take to improve teaching and learning in a way that benefits students. Therefore, this study set out to examine how principal leadership responsibilities influence the functioning of PLCs. The following research questions guided this study:

1. How do teachers describe the influence of principal leadership responsibilities on PLCs?
2. How do principals describe the influence of principal leadership responsibilities on PLCs?

Background of the Study

This section outlines the conceptual literature in which this study was grounded and provides operational definitions for the key constructs in the study. Foundational assumptions upon which this study was built are also delineated.

Conceptual Literature

PLCs have developed as a research-based model for team learning and growth. Barton and Stepanek (2012) connect our current era of accountability with the increase in the implementation of PLCs as an effective model for professional development that is focused on learning. DuFour, DuFour, Eaker, and Many (2006) define a PLC as “composed of collaborative teams whose members work *interdependently* to achieve *common goals* linked to the purpose of learning for all” (p. 3). This definition echoes Senge’s (2006) common purpose and empowering the team as a whole to achieve more together than each member can do independently. Barton and Stepanek (2012) found that the strength of PLCs comes from not only the collaboration, but more so from the shared belief that working interdependently together can improve student achievement. This is well aligned with both DuFour et al. (2006) and Senge (2006) and emphasizes the importance of a school culture focused on working together to benefit students.

One of the keys to successful PLCs is the foundational belief in the efficacy of the team. Fullan (2005) emphasized that one of the primary responsibilities for sustaining effective school culture was the ability of school leaders to develop leadership and efficacy in their staff. Hoy and Miskel (2008) define collective efficacy as “the shared

perceptions of teachers in a school that the efforts of the faculty as a whole will have positive effects on students” (p. 188). Studies in this area found that high collective efficacy could lead to improved student performance, while low collective efficacy could result in decreased student performance (Hoy & Miskel, 2008). Oliver and Hipp (2006) connected collective efficacy and PLCs as mutually beneficial in building and sustaining a learning culture. The concepts of both PLCs and collective efficacy reinforce the impact that beliefs and collaborative actions can have on improved student learning, and their compatibility make them an intriguing basis for further study.

Principals still bear the ultimate responsibility for shaping and leading their staff for such a learning culture. Numerous leadership resources are available to guide their actions and aide in decision-making regarding school improvement plans. The Interstate School Leaders Licensure Consortium (ISLLC) Standards for School Leaders (2008), composed of six standards and 31 functions, are designed to support school leaders in maintaining their focus on improving teaching and learning for all (Appendix A). An additional resource is a meta-analysis by Marzano, Waters, and McNulty (2005) that identified 21 responsibilities of school leaders that are most strongly correlated to improved student achievement (see Table 1 in Chapter 2). By understanding the scope and impact of their leadership responsibilities and actions, principals can make research-based decisions regarding how to support their staff with the principal leadership that will have the greatest positive impact on staff and students.

In this era of increased educational accountability and the expectation of preparing students for a rapidly changing global society, high school principals must

determine how to identify the specific needs of the staff in their building. Only then can they determine how best to lead their staff for growth that positively impacts student achievement. Current research on PLCs, collective efficacy, and principal leadership responsibilities can be applied to effectively guide principals in meeting these challenges. Organizational and leadership theories, particularly in regards to learning organizations, team theory, and transformational leadership, can guide research in the areas of PLCs and collective efficacy development to provide principals with important information as they guide and lead school-wide improvement in teaching and learning.

Foundational Assumptions

It is important to note a few assumptions upon which this study is based. The first is in regards to the selection of an AA high school in Montana. The underlying assumption is that larger high schools face more complex leadership challenges due to their size alone. While it is acknowledged that any school community, regardless of size, faces unique challenges, the ability to continually determine the needs of a school staff is arguably more difficult when there are more staff members. Just as a greater number of students with more diverse learning needs challenges teachers to differentiate their instruction, principals must also identify and understand the diverse needs of their staff in order to successfully act to meet those different needs. The use of teacher groups, such as PLCs, can help reduce the number of factors involved in such an analysis in a large high school. However, the reality remains that communicating with and determining the needs of 100 staff members is a different challenge than that of working with fifteen or so.

Another assumption is the ability of the researcher, as a current administrator in the high school being studied, to obtain honest and meaningful responses from PLC members. The decision of the researcher to conduct this study in her own school was deliberate. It is not feasible for high school principals to obtain the services of a researcher or agency whenever they want to identify the needs of their staff. Instead, principals need a process for gathering this information themselves. In order to study a research environment that mirrors a real-life situation, the researcher conducted this study in her own school to explore a possible model for other high school administrators to implement in their schools. However, in order to ensure the soundness and validity of the research study, a moderator and recorder were hired to conduct the data collection that involved direct contact with teachers and principals at this high school.

Definition of Terms

AA Schools – Schools in Montana are designated by the Montana High School Association based upon enrollment as AA, A, B, or C. AA indicates the largest high schools with a population range from 1024 to 1973 (MHSA, 2012).

Collective efficacy – The basic belief of teachers as to what extent their efforts can help improve student achievement; “the shared perceptions of teachers in a school that the efforts of the faculty as a whole will have positive effects on students” (Hoy & Miskel, 2008, p. 188).

High school principal(s) or principal(s) – For the purposes of this study, the term “principal(s)” or “high school principal(s)” includes not only the singular principal of a

high school but also any associate or assistant principals that compose the building level high school administrative leadership team.

ISLLC Standards – Interstate School Leaders Licensure Consortium Standards, developed by the Council of Chief State School Officers, are a set of six standards for school leaders; each standard includes knowledge, disposition, and performance indicators that clarify the standards in action (Council of Chief State School Officers, 2008).

Organizational learning – “The deliberate use of individual, group, and system learning to embed new thinking and practices that continuously renew and transform the organization in ways that support shared aims” (Collinson & Cook, 2007, p. 8). Involves changes in thinking and doing, norms, pedagogy, and behaviors; epitomizes continual change; members analyze and adjust in order to promote learning and growth.

Principal leadership responsibilities – The 21 principal leadership responsibilities that a meta-analysis of 69 studies conducted over 35 years focusing on principal behaviors found to be correlated to student achievement based on their “domain of interest” as “school leadership as practiced by principals” (Marzano, Waters, & McNulty, 2005, p. 28).

Professional Learning Communities – “Collaborative teams whose members work *interdependently* to achieve *common goals* linked to the purpose of learning for all” (DuFour, DuFour, Eaker, and Many, 2006, p. 3).

Overview of the Study

This section provides an overview of the study. It outlines the context for the study and gives a brief synopsis of the important elements of the investigation.

Context for the Study

This study employed an embedded case study design (Yin, 2014) to explore the implementation of PLCs at a specific AA high school in Montana, referred to as HS1. The student population at HS1 is currently around 1830, with 95 certified teachers, six counselors, and five administrators. The concept of collective efficacy was initially introduced to the staff in November of 2010. The first staff development speaker on PLCs took place in January of 2011, after which the school focused all staff development opportunities on preparing for the implementation of PLCs in the fall of 2012. At the time of this study, HS1 was nearing the end of the second year of PLC implementation, with principals and teachers looking for ways to ensure successful PLC functioning. In order to address the accountability demands of NCLB relating to student proficiency as well as the Montana OPI initiative of increasing graduation rates, the four core academic areas served as the focus for this study – English, Math, Science, and Social Studies. These are the content areas students must pass in order to graduate, and therefore are arguably most related to student success at the high school level.

Summary of Methodology

To address the research questions posed for this study, an embedded case study (Yin, 2014) method was employed. Data was collected using focus group interviews,

document analysis, and a researcher journal. Focus group interviews were conducted with teachers from the English, Math, Science, and Social Studies PLCs as well as for the principals. In addition, collective efficacy data from 2010, 2012, and 2013 at HS1 was disaggregated by English, Math, Science, and Social Studies departments, which is how PLCs are organized at HS1, in order to further describe and understand the impact of PLC implementation.

A qualitative design was used to explore the research questions regarding how teachers and principals describe the influence of principal leadership responsibilities on PLCs. A document analysis was conducted to identify patterns and themes in the Weekly PLC Reports each PLC turned in to the principals during the first two years of PLC implementation at HS1. This analysis focused on the response to the question, “Do you have any concerns or needs for our administrative team?” which was part of each report. This document analysis contributed to an understanding of how the English, Math, Science and Social Studies PLCs communicated with principals regarding the needs of their PLCs. Responses were organized into topics related to the principal leadership responsibilities upon which this study was based, with additional topics assigned as needed to address remarks not related to the five principal leadership responsibilities. Results were compared to the data from the focus group interviews to identify areas of alignment and dissimilarity in how teachers described the influence of principal leadership responsibilities on their PLCs.

Focus group interviews were conducted with members of the English, Math, Science, and Social Studies PLCs as well as with the Principals. A moderator and

recorder were hired and trained to conduct the interviews due to the researcher's role as an administrator at HS1. Participation was voluntary and anonymous. Participants were asked to describe how the five principal leadership responsibilities influenced PLCs during the first two years of PLC implementation as well as which principal leadership responsibilities were needed most at this time and moving forward to improve PLC functioning. In addition, participants were asked to self-assess the current level of PLC functioning, as well as identify which principal leadership responsibilities were most important to their PLCs. How teachers and principals described and rated these responsibilities provided the primary data base for answering the research questions.

Limitations

As a researcher, I must be clear that my positionality is one of an active proponent of PLCs and collective efficacy, as well as an administrator at HS1. As a principal at this high school, one clear limitation was whether participants would respond openly and honestly during the focus group interviews. PLC members could have been mindful of my role as their administrator during the focus group interviews, and our interactions could have been tainted by their relationships with me, either positively or negatively. While the informed consent served to reassure them of the confidentiality of the research methods, it could still have been a challenge for some teachers to separate my role as administrator from my role as researcher. This is where Tschannen-Moran's (2003, 2004, 2007) emphasis on trustworthiness was likely to be most significant; the level of trust that PLC members had in me as their administrator was bound to impact their trust in me as a researcher. In order to proactively address these limitations, I first met the teachers where

they typically gathered during PLC time and presented the Institutional Review Board (IRB) approved Informed Consent (Appendix B) information to the PLC members. I was also deliberate in presenting a positive and non-evaluative outlook, from the Informed Consent reassurances of confidentiality to the purpose of the research – trying to identify how principals can best support the functioning of each PLC. Most significantly, a moderator and recorder were hired to conduct the focus group interviews. The moderator emailed teachers and principals to invite them to participate, communicated with participants as to the time and place of the focus group interview, and ensured Informed Consent forms were signed and collected. The moderator then conducted the actual focus group interviews with each group at HS1. The recorder assisted the moderator with the audio recording equipment as well as tracked participant responses to allow the moderator to focus on facilitating the focus group interviews. In addition, the moderator transcribed all interviews and notes and presented the transcriptions to the researcher. The researcher did not know who volunteered to participate and did not listen to the audio recordings in order to protect the integrity of the research as well as the confidential participation of the volunteers.

The school district in which this research study took place is supportive of both the implementation of PLCs and the administration of the Collective Efficacy Scale (CE-SCALE). Because this study was designed as a dissertation research study for Montana State University (MSU), as well as to provide data to be analyzed as part of the district's primary high school initiatives of PLCs and Graduation Matters, writing the Informed Consent to encourage teacher involvement and yet allow for participants to decline

participation was a challenge. Without significant participation, the validity of the results of the CE-SCALE would be compromised. Since teacher collective efficacy is, by definition, a collective measure, it is important to have a high participation rate. In this case, teacher participation for each CE-SCALE administration was high: 84% in 2013, 91.6% in 2012, and 86% in 2010.

Timing could have been a potential limitation for this study. The focus group interviews took place the first week of May. While this allowed the CE-SCALE data to be collected and utilized the same school year as the focus group interviews, teacher fatigue toward the end of the school year could be a factor. A potential benefit to the timing was that participants were able to reflect on the majority of the school year as they shared their perspectives regarding the PLCs that in their perspective were most beneficial to their PLCs. As a primary purpose of this research study was to assist principals in planning for effective staff development, conducting the study in the spring allowed principals at HS1 the opportunity to analyze and utilize the data over the summer when planning for the next school year.

Delimitations

One boundary in the methodology was influenced by the goal of the researcher to keep the conversation in the focus group interviews framed on the principal leadership responsibilities connected to the school initiative of PLCs as well as on those that positively impact students. Providing a handout describing and defining PLCs, the five principal leadership responsibilities, characteristics of PLCs at work, and collective efficacy served to focus participants on the topics under study. The process inherent in

semi-structured interviews allowed the moderator the ability to redirect participants back to the topic at hand if the conversation strayed to unrelated topics.

Significance

High school principals today must meet the demands of accountability in education as well as the changes in our global society by working through and with the current staff in their buildings. A primary starting point for principals when designing a successful school improvement plan is an understanding of the specific needs of their staff. While a significant amount of research exists that explores “best practices” in education and leadership theories, principals must identify the needs of their staff before they can determine how to best meet those needs. If principals were able to systematically identify the needs of their staff by PLCs, they could then design an action plan to meet the specific needs for each PLC. The identification of PLC needs will not only allow for greater growth opportunities for teachers, it will also assist principals in more effectively utilizing resources, time, and talents by focusing on the principal leadership responsibilities that are most likely to have a positive impact on their current staff, and therefore improve teaching and learning.

CHAPTER TWO

REVIEW OF THE LITERATURE

Background

The review of the literature for this study included a variety of concepts that have been researched and shown to have a positive impact on students primarily through their impact on teachers. In order to explore how principals can identify the professional development needs of their current staff, specifically during the implementation of Professional Learning Communities (PLCs), this chapter includes a review of the literature regarding the nature of PLCs, teacher collective efficacy, and principal leadership responsibilities. This review was conducted using the theoretical lens of leadership theory, as informed by transformational leadership, team leadership, and distributed leadership theory, as well as organizational learning and change theories.

Current Political, Social, and Technological ContextGlobal and National Context

Prior to exploring specific theories and research, it is important to understand the political and social context of this educational topic. At the national level, the No Child Left Behind Act of 2001 (NCLB) placed a stronger measure of accountability on all schools to ensure that every student was learning, rather than simply measuring and reporting overall percentages for an entire school. In the U.S. Department of Education's

Blueprint for Reform (2010), President Obama emphasized the need for a stronger educational system as imperative in our increasingly global society:

The countries that out-educate us today will out-compete us tomorrow. We must do better ... A world-class education is also a moral imperative – the key to securing a more equal, fair, and just society ... Our goal must be to have a great teacher in every classroom and a great principal in every school. We know that from the moment students enter a school, the most important factor in their success is not the color of their skin or the income of their parents – it is the teacher standing at the front of the classroom. To ensure the success of our children, we must do better to recruit, develop, support, retain, and reward outstanding teachers in America's classrooms (p. 1).

The above introduction foreshadows several significant points in the Blueprint, including educational priorities, turnaround models, and the need to hold teachers and administrators accountable for as well as reward them for quality in education. The priorities outlined in the Blueprint focus on the following: college and career ready students; great teachers and leaders in every school; equity and opportunity for all students; the charge to raise the bar and reward excellence; and to promote innovation and continuous improvement. The Blueprint for Reform is significant in its attempts to address the shortcomings of NCLB, as well as in its emphasis on student achievement and continuous school improvement. While the priorities of the Blueprint may appear to be a tall order for educators to address, the challenges our students face in today's global society require that high school principals and teachers work together to prepare students for success in a manner that is distinctly different from the traditional model of education.

The reality of our rapidly changing society is both fueling and adding pressure to the requirements of accountability that principals' face. Educators and students are inundated with information and technology that changes faster than our educational

system can possibly imagine. While exposure to such vast quantities of information can certainly benefit teaching and learning, the rapid rate of technological advancement makes integrating new knowledge and systems into a traditional school model overwhelming. Yet technology has become a pervasive and permanent part of our society. For example, smart phones have placed the power of a computer in the palm of one's hand. The Pew Research Internet Project (2013) found that 90% of adults in America have cell phones, and 58% have smart phones. Such instant access to the Internet, where students and staff can find the answer to almost any question and where societies around the world can be connected instantaneously, requires that educators be willing to learn, grow, and change how we teach to prepare students today for a future that we cannot even imagine (Daggett, 2010).

Current Context in Montana

As schools across Montana continue to struggle with meeting the requirements of accountability under NCLB in today's changing global society, the Montana Office of Public Instruction (OPI) has worked to challenge and support schools in the goal of ensuring students graduate college and career ready. The Graduation Matters Montana initiative was adopted in 2010 to not only focus efforts on this laudable goal but to also work toward decreasing dropout rates and increasing graduation rates. The philosophy of NCLB that requires schools to look at each student group, rather than just overall percentages, in addition to the priorities expressed in the Blueprint for Reform, are echoed in the Graduation Matters program. This initiative strives to ensure every student not only graduates, but that these graduates are also prepared to be successful in the work

force and in higher education. According to the OPI (2011), students who fail to graduate high school indicated that one of their top five reasons for dropping out was failing grades. High schools in Montana need to address how to prevent such failures in the first place by identifying and intervening when students are not being successful in the classroom. This process must include the teachers who are responsible for the teaching and learning that takes place each day in those very classrooms.

As school principals work to promote the academic success of every student, one primary factor within their control is the leadership behaviors they choose to employ to support improvements in teaching and learning. Marzano, Waters, and McNulty (2005) identify these behaviors as principal leadership responsibilities. Each school has a unique set of teachers and students and thus requires a specific set of leadership responsibilities tailored to support those teaching and learning needs. In this regard, the primary challenge for principals is to determine the combination of principal leadership responsibilities that will best fit the needs of their schools. The purpose of this study is to develop a process or model that principals might employ to identify the principal leadership responsibilities that can best meet teachers' needs during the implementation of PLCs.

Theory Base: Leadership Theories

There are numerous leadership theories that can provide a foundation for the study of how principals can identify the professional development needs of their current staff, particularly in the context of the development of PLCs. Team Leadership Theory

offers insights into how groups work toward common goals. Distributed Leadership Theory helps to describe the implications of the collaborative and interdependent nature of PLCs. When considering a focus on how principals can best lead and support their PLCs for positive growth, Transformational Leadership Theory provides a window into the importance of the level of engagement needed by both principals and teachers in order to transform and improve teaching and learning through a collaborative process.

Team Leadership Theory

The Team Leadership Model developed by Susan E. Kogler Hill (Northouse, 2010) focused on the role of the team leader and the responsibilities for ensuring team effectiveness. At the secondary level, principals are responsible to act as team leader. However, distributing or sharing this leadership role with staff helps to ensure that the team is able to continually analyze the current realities and work together to adapt as needed (Northouse, 2010). Hill's (2010) model focused on the decisions regarding whether to monitor or act, intervene to address task or relational needs, and whether such intervention should be internal or external to the group. One particular aspect of the Team Leadership Model that informs this research project is the need to analyze and change in order to maintain a focus on continual improvement. This approach includes not only principals but the teachers as well. Principals continuously strive to improve their schools, but if their efforts are not aligned with the needs of their teachers, then their efforts are unlikely to produce the desired results.

Existing studies have examined the role of work teams in the private sector as a means to improve productivity, innovation, and performance (McGrath, Arrow &

Berdahl, 2000; Ilgen, Major, Hellenbeck & Sego, 1993). Applying those successes to the field of education makes sense in this age of accountability and change. Northouse (2010) explored a variety of models and research that supports the importance of the role of the leader in building and sustaining successful teams, findings that can inform principals as they lead the teachers in their buildings. Another significant application of the Team Leadership model to this topic is the focus on the role of the leader in identifying the needs of the team in order to take the appropriate action steps (Northouse, 2010).

There are strengths and criticisms associated with team theory. Strengths include the emphasis on research regarding real-life work groups, a focus on effective teams, the active role of the team leader to diagnose and address changing situations, and the establishment of desirable leadership qualities (Northouse, 2010). These strengths are related to and supportive of the discussion regarding principals and PLCs, as their effectiveness, or lack thereof, can have a significant impact on the success of the students in their care. Particularly at large comprehensive high schools, working with teacher teams can be an effective way of simultaneously leading and supporting teachers in the daunting task of educating all students well. However, two key criticisms of team theory focus on the fact that this theory is relatively new and therefore lacks substantive research support, and that the complexity of the model makes application challenging (Northouse, 2010). As large high schools themselves are rather complex, these criticisms may actually open the door to a variety of options for further examination in order to add to the body of research on team theory.

Distributed Leadership Theory

Studies of distributed leadership in school settings have noted how distributed leadership could provide significant insights into the patterns and practices of leadership in our schools (Spillane, Camburn, Pustejovsky, Pareja & Lewis, 2008). In order to properly apply the benefits of distributed leadership, principals must first understand how such an approach works best in a school setting, particularly regarding the benefits of teachers and leaders working together on professional development that is focused on producing positive school improvement (Hargreaves & Fink, 2008). Teachers are educated, trained, degree-holding professionals who should be an active part of the school improvement process, and it is up to principals to understand, support, and build upon the knowledge and skills their teachers possess. Harris (2008) connects distributed leadership with team leadership as a way to build leadership skills for all team members.

There are aspects of distributed leadership that are particularly compatible with a school setting. Each principal and teacher has been educated and trained not only in one or more specific content areas, but also in regards to teaching methods and educational research. In addition, most states require ongoing training and professional development for continued licensure. As such, each principal and teacher has knowledge and skills that can and should be utilized when addressing school improvement. Both team leadership and distributed leadership theories require active participation from all members in order to make decisions and move forward. They also require leadership behaviors that are focused on inclusion and collaboration in order to establish goals and determine the action steps necessary to achieve those goals.

Transformational Leadership Theory

Transformational Leadership theory is considered by many to be the primary paradigm through which educational leadership is discussed today. As Northouse (2010) describes it, “transformational leadership is the process whereby a person engages with others and creates a connection that raises the level of motivation and morality in both the leader and the follower” (p. 172). Political sociologist James MacGregor Burns is credited with establishing the significance between leaders and followers in his seminal work, *Leadership* (1978). Burns emphasized the transformational power of such an approach because it can motivate both leaders and followers to achieve more than is likely under a transactional approach. The primary distinction is that the latter focuses on individual needs and more of a “what’s in it for me” attitude, whereas a transformational approach maintains focus not only on mutual goals, but also incorporates the needs and motivations of everyone involved and focuses that energy on big picture goals. Bass and Avolio (1990) emphasize the strength of transformational leadership as supporting followers in moving past their own needs and achieving beyond expectations in the best interests of the group as a whole, not just the interests of the individual.

This transformational approach is echoed in the work of several other notable researchers. Bennis and Nanus (2003) highlight the role of four common strategies of transformative leaders: providing a clear vision; serving as social architects for shared meanings; creating and maintaining trust within the organization; and building positive self-regard for both leaders and followers. Kouzes and Posner (2007) describe the power of transformational leadership as moving people from inspiration to action, and offer

“The Five Practices of Exemplary Leadership” as a research-based approach to leading for extraordinary results: “Model the Way; Inspire a Shared Vision; Challenge the Process; Enable Others to Act; Encourage the Heart” (p.14). In addition, Kouzes and Posner (2007) emphasize the importance of behavior rather than personality, with a focus on the positive results that come from leading significant change. Principals can be encouraged by this focus, as changing behavior is more realistic and achievable than changing one’s personality, whether trying to change their own or that of their teachers. Senge’s (2006) reflections on the concept of synergy mirror this transformational process by emphasizing that the results of a team working interdependently can exceed the successful efforts of each of those team members working independently.

Such transformational change is no easy task. Northouse (2010) further states that transformational leaders must focus not only on the needs of their members, but also on the responsibility to lead those members in positive growth. This expresses the heart of the challenge for high school principals today – how to identify staff needs and work effectively to meet those needs, all for the purpose of maximizing teaching and learning.

Transformational Leadership Theory has its strengths and challenges as well. On the positive side, it is intuitively appealing due to the fact that it takes into account the needs and goals of both leaders and followers. It makes sense that establishing a strong vision and working together toward a common goal will create a more genuine and focused learning organization. The moral emphasis is an important point for principals, as it is their responsibility to meet the needs of their students and staff and do what is right for both. It is significant to note the distinction between doing what is right as opposed to

being right. Transformational leadership is also focused on a process approach rather than the more limited view of top-down or leader-driven theories. However, detractors have challenged the lack of conceptual clarity and interpreted the approach to imply trait-like qualities for the successful transformational leader (Northouse, 2010). Furthermore, concerns have been raised about the potential for abuse if not viewed and implemented through an appropriate moral base (Northouse, 2010). For example, a charismatic principal could use the traits and actions associated with transformational leadership to focus staff on a new vision and set of values, without regard to whether or not the new goals are indeed good for students or if they are founded on faulty or non-existent research. Such a scenario can result in a leader being praised for bringing change, but not necessarily change that helps students. Tschannen-Moran (2003) focused on the role of fostering trust as perhaps more significant than the behaviors associated with transformational leadership. Such an emphasis on trust is consistent with collective efficacy, wherein teacher beliefs play a significant role, and in supporting PLCs as a structure in which teachers can learn and grow together to improve teaching and learning.

Overall, transformational leadership theory is a strong foundation for the study of how principals can identify the professional development needs of their current staff, specifically during the implementation of PLCs, and transform their learning environment for the benefit of their students.

Theory Base: Organizational Theories

Our world is comprised of innumerable organizations, the functioning of which have been studied, analyzed, and synthesized to distinguish the characteristics of those which are successful and those that are not. An understanding of organizational theory helps to address the foundational aspects of how schools function as complex organizations consisting of people and structures that work together toward the common goal of learning. Owens (1998) and Tompkins (2005) reflect on the need for organizational leadership that enhances the talents and strengths of the people within the organization in order to provide opportunities for all to share in making decisions and taking actions that are focused on common goals. This description relates well to the responsibility of principals to develop each staff member or group to benefit the whole school, for without the involvement of every member of the team the efforts of the school as a whole will struggle to maximize their collective potential to achieve their goals. Principals and teachers are part of a school for a common purpose, and keeping all members of the organization focused and moving forward requires deliberate and purposeful leadership.

Learning Organizations

While acknowledging that individual and school-wide goals may not always be in sync, the effort to be a “purposeful school community” can address this apparent conflict by utilizing collective efficacy and the strengths of the school community to work collaboratively toward mutual goals (Marzano, Waters & McNulty, 2005). Senge (2006)

specifically defines a learning organization as one “where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together” (p. 3). It is hard to imagine a place where such a concept should be implemented more so than in our schools. Educators in a rapidly changing global society must continue to learn and grow along with the world around them in order to have any chance at preparing students for success in school and beyond. Schools that function as learning organizations are characterized by a focus on the continual process of improvement through self-analysis, planning, implementation, inquiry, and a willingness to challenge themselves to change and grow (Argyris, 1999). The ability to deliberately examine current practices for alignment between goals and outcomes is an important aspect of a continual growth process in a learning organization that must include a change in both thinking and doing (Collinson & Cook, 2007). Leadership that supports the efforts of all groups working deliberately together to identify their current reality and then creatively problem-solving to overcome barriers to growth and improvement can transform a school into a successful learning organization.

Organizational Change Theory

In a rapidly changing global society, principals must understand the process of change in order to successfully lead for continual school improvement. Fullan (2006) reflected on the need for a systemic approach to leading lasting and significant change in our schools in this era of accountability and argued that high stakes accountability does not lead to continuous improvement; instead he promoted capacity building as a

successful means to improve leadership and learning. Fullan (2005) also established the moral purpose for educational reform by linking to the bigger picture of societal change, wherein principals must be aware of what is going on not only within the walls of their schools and districts, but in our global society as well in order to make decisions that are in the best interests of our students today. Sergiovanni (2001) emphasized a systemic approach when leading change, particularly in regards to tying change to the values and goals of the school, as well as taking into account the impact on staff, students, and school culture. It makes sense that this is best accomplished by working through and with the staff who are responsible not only for teaching and learning, but also for implementing the action steps required for change.

These essential ideas are in sync with the theory of transformational, team and distributed leadership theory, as well as organizational learning and change. Each theory provides insights and applications for high school principals leading diverse staff members in a school improvement process that has as its goal positive and productive changes in teaching and learning.

Impacting Student Achievement

Collective Efficacy

As high schools work to increase student achievement and graduation rates, the focus must turn to the classroom as that is where teaching and learning occurs. The effectiveness of the teacher at the head of the classroom has been shown to have the greatest impact on student achievement (Marzano, Waters, & McNulty, 2005; Wahlstrom

& Louis, 2008; Hattie, 2009; DuFour & Marzano, 2011; DuFour & Mattos, 2013).

Previous research indicates that teacher' perceptions of how much of a difference they can make with students makes an impact on teacher effectiveness (Hoy & Miskel, 2008). This construct has come to be known as collective efficacy, defined as "the shared perceptions of teachers in a school that the efforts of the faculty as a whole will have positive effects on students" (Hoy & Miskel, 2008, p. 188). Assessing the collective efficacy of teachers can be useful in identifying whether staff beliefs are promoting or hindering student success, since high collective efficacy can lead to improved student performance and, conversely, low collective efficacy can result in lower student performance (Hoy & Miskel, 2008). Therefore, an understanding of the level of collective efficacy in a school can provide important information for principals who want to lead school improvement efforts designed to benefit student achievement. In addition, collective efficacy may influence teachers' willingness to be active participants in the school improvement process itself, particularly in regards to sharing leadership and increasing collaboration and responsibility (Wahlstrom & Lewis, 2008).

The concept of collective efficacy has its roots in the work of Bandura (1986) in social cognitive theory and self-efficacy. Self-efficacy is linked to resiliency when facing challenges (Usher & Pajares, 2008) and to motivation and action (Bandura, 1986), ideas that most educators would agree are well aligned with improving teaching and learning. Teachers today regularly debate the nature of student motivation as well as how to effectively promote positive engagement in the learning process. However, there is some agreement that positive attitudes towards students and expressions of efficacy (Hoy,

2005) can support not only student motivation, but also student attitudes and eventually student action, the result of which is likely to be increased student learning.

Research by Hoy (2005) in the area of collective efficacy suggests that principals should understand teachers' perspectives regarding the extent to which they believe their efforts can help improve student achievement. Efficacy beliefs may be evident in such teacher behaviors as effort, goal setting, resiliency, persistence, and motivation (Tschannen-Moran, Hoy, & Hoy, 1998). Teacher collective efficacy has been researched by McIntyre (2011) and shown to be more powerful than socio-economic status in its relationship to student achievement, primarily due to the finding that teachers who believe they have an impact on the learning of their students display more persistence and resourcefulness, characteristics which positively impact learning.

As Fahy, Wu and Hoy (2010) state, "One of the most important contributions educational researchers can make to education is to identify characteristics of schools and qualities of individual teachers that make a positive difference in academic achievement of students" (p. 222). Studies of collective efficacy have demonstrated a positive impact on student learning through building a culture of interdependence and working together to identify areas for improvement in teaching and learning (Hoy, 2005; McIntyre, 2011; Barton & Stepanek, 2012).

Professional Learning Communities

Professional Learning Communities (PLCs) have developed as a strong model for team learning and growth in our current culture of accountability. Principals and teachers are in need of a professional development model that goes beyond sharing new

information (Barton & Stepanek, 2012). DuFour, DuFour, Eaker and Many (2006) define a PLC as “composed of collaborative teams whose members work *interdependently* to achieve *common goals* linked to the purpose of learning for all” (p. 3). This definition echoes Senge’s (2006) common purpose and the synergy that results from empowering the team as a whole to achieve more together than each member can do independently. Barton & Stepanek’s (2012) findings are well aligned with both DuFour et al. (2006) and Senge (2006) that the strength of PLCs comes from not only the collaboration, but more so from the shared belief that working interdependently together can improve student achievement, particularly when basing this belief and practice on using data to meet student needs. This emphasis on the important role of teacher beliefs aligns well with the concept of teacher collective efficacy.

It is important to understand the primary philosophy that provides the foundation for the work of a PLC. The “three big ideas that drive the work of a PLC” (DuFour et al., p. 14) are: 1) grounded in the purpose of ensuring high levels of learning for all students; 2) an acceptance of the need to work collaboratively together to achieve this purpose; and 3) a reliance on results to determine whether or not the purpose has been achieved as well as to analyze those results to drive teacher instruction and teacher responsiveness to meet the needs of all students. These beliefs are foundational to the success of the PLC process.

PLCs provide a structure in which teachers have time and support for staff development that is focused on teaching and learning. The four critical questions for PLCs help teachers maintain their focus on student learning:

1. What do we want students to learn?
2. How will we know if they have learned it?
3. What will we do if they don't learn?
4. What will we do if they already know it? (All Things PLC, n.d.)

According to Marx (n.d.), PLCs impact student achievement primarily through their emphasis on teachers embracing responsibility for student learning and creating a culture of learning. Teachers must first agree upon what is most important for students to know, thereby providing consistency in the learning that takes place throughout the various classrooms in a department or school. Data must be collected to determine whether or not students are learning what has been determined to be essential.

Leithwood, Lewis, Anderson, and Wahlstrom (2004) found that high quality leaders have a greater impact when they facilitate the use of data to monitor progress and performance, as well as when designing relevant staff development along with the support and tools necessary for successful teaching and learning. This finding supports the practice of PLCs and emphasizes the importance of the role of the leader in that process.

Once teachers have agreed upon what is essential and gathered data to determine student progress toward those learning goals, the next step is to take action. Teachers must have a plan to follow up with students who did not learn, as well as address the needs of students who have already learned. This is where the most productive conversations regarding research-based strategies can take place that provide the greatest benefit for all students. PLCs that are implemented with fidelity can create an environment in which these practices become the norm.

PLCs also provide a structure through which schools can address the demands of accountability, as well as determine appropriate responses to change. PLCs promote a growth mindset that includes agreement upon goals, collection and analysis of current data, and the opportunity to collectively design action plans to address areas of improvement to help close the achievement gap and increase learning for all students (DuFour, DuFour, Eaker, & Karhanek, 2010). Principals support PLCs by promoting a collaborative climate, assisting PLCs in the collection and analysis of current student data, and empowering PLCs to take action based upon their analysis to improve teaching and learning (DuFour & Mattos, 2013). The collaborative structure of PLCs provides the opportunity for ongoing analysis and improvement that allows teachers to be responsive to student learning needs, a particularly important practice in this time of accountability and change. Yet collaboration time alone is not the key; the work teachers address during their PLC time must remain focused on improving student learning (Barton & Stepanek, 2012).

The belief of teachers that they can make a difference in the learning of their students can only serve to strengthen the PLC process. Transformational leadership's emphasis on trust is also consistent with collective efficacy, wherein teacher beliefs play a significant role, and in supporting PLCs as a structure in which teachers can learn and grow together to improve teaching and learning. The collaborative and interdependent emphasis of PLCs and collective efficacy are well aligned with the theories of distributed leadership, team leadership, and transformational leadership. As principals lead for

continual school improvement, moving forward as a learning organization is also compatible with the work of PLCs.

However, healthy PLC development will not occur in a vacuum. This process requires highly effective instructional leadership. Principals must focus on building positive relationships that support their staff in regularly going beyond the basics (Kouzes & Posner, 2002). While this may be a tall order for principals, PLCs and collective efficacy are concepts that echo and support such growth and progress in teaching and learning.

Principal Leadership

While reference has already been made to the research-based impact of the classroom teacher on student learning, principal leadership has also been studied and shown to have an impact on student achievement, although such an affect is typically indirect (Waters, Marzano & McNulty, 2003; Leithwood, Lewis, Anderson, & Wahlstrom, 2004; Lindahl, 2010; Louis, Dretzke, & Wahlstrom, 2010; Supovitz, Sirinides, & May, 2010). These findings support the role of the principal as a key factor in leading educational change in a manner that impacts students. Since principals influence student achievement primarily through their impact on teachers, it is important to understand the specific principal leadership behaviors that have the most significant and positive impact on teachers as well as on students.

Marzano, Waters, and McNulty's (2005) meta-analysis of 69 studies published over 35 years concluded that there are specific behaviors of school leaders that impact student achievement. This meta-analysis found a correlation of .25 between student

achievement and what they identified as principal leadership responsibilities (Marzano, Waters, & McNulty, 2005). This research resulted in the identification of 21 responsibilities of the school leader that are most strongly correlated to student achievement (Table 1). This emphasis on principal leadership responsibilities is significant because it provides evidence that principals need more than general statements and beliefs regarding effective leadership. Principal duties and responsibilities are vast and broad while the time and resources available to address them are limited. Thus, principals need to be able to focus on the responsibilities that are supported in the research as having a significant impact on student achievement. When these responsibilities are described in terms of leadership behaviors, principals can target their time and energy on activities that will likely produce the most positive results.

Table 1. The 21 Responsibilities of the School Leader

Responsibility	Description
Affirmation	Recognizes and celebrates accomplishments and acknowledges failures
Change Agent	Is willing to challenge and actively challenges the status quo
Contingent Rewards	Recognizes and rewards individual accomplishments
Communication	Establishes strong lines of communication with and among students and teachers
Culture	Fosters shared beliefs and a sense of community and cooperation
Discipline	Protects teachers from issues and influences that would detract from their teaching time or focus
Flexibility	Adapts his or her leadership behavior to the needs of the current situation and is comfortable with dissent
Focus	Establishes clear goals and keeps those goals in the forefront of the school's attention
Ideals and Beliefs	Communicates and operates from strong ideals and beliefs about schooling
Input	Involves teachers in the design and implementation of important decisions and policies

Table 1. Continued

Intellectual Stimulation	Ensures faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of the school's culture
Involvement in Curriculum, Instruction, and Assessment	Is directly involved in the design and implementation of curriculum, instruction, and assessment practices
Knowledge of Curriculum, Instruction, and Assessment	Is knowledgeable about curriculum, instruction, and assessment practices
Monitoring/Evaluating	Monitors the effectiveness of school practices and the impact on student learning
Optimizer	Inspires and leads new and challenging innovations
Order	Establishes a set of standard operating procedures and routines
Outreach	Is an advocate and spokesperson for the school to all stakeholders
Relationships	Demonstrates an awareness of the personal aspects of teachers and staff
Resources	Provides teachers with materials and professional development necessary for the successful execution of their jobs
Situational Awareness	Is aware of the details and undercurrents in the running of the school and uses this information to address current and potential problems
Visibility	Has quality contact and interactions with teachers and students

While all of the above principal leadership responsibilities are significant, Marzano et al. (2005) went on to determine the degree to which these behaviors impacted student achievement. No two schools are identical, however, and the degree to which one or more responsibility should be addressed and in what measure may vary from school to school. The responsibilities listed in Table 1 provide principals with a research-based foundation for making decisions regarding the utilization of their time and talents, and may provide a framework in which to categorize the behaviors teachers identify as most significant to improvement.

An additional guideline for principals that is frequently emphasized in Educational Leadership programs is the Interstate School Leaders Licensure Consortium's (ISLLC) Standards for School Leaders (2008). The ISLLC Standards are composed of six standards and 31 functions that maintain focus on the primary school leader responsibility of improving teaching and learning for all students (Appendix A). Although the purpose of the ISLLC Standards is to provide a framework for educational leadership policy and practice, it is the application of these standards on a day to day basis that can serve as a guide for principals seeking to prioritize the best use of their time, talents, and resources. The ISLLC Standards emphasize a variety of focal points that mirror the primary benefits of collective efficacy, PLCs, and the various leadership and organizational theories already discussed, including collaboration, the use of data, organizational learning, goal setting, action plans, analysis for continual improvement, instructional leadership, accountability, building relationships, allocation of resources, integrity, and distributed leadership. Such strong alignment between the ISLLC Standards and the topics central to this study, principal leadership and PLCs and collective efficacy, may support the use of these standards as a framework for categorizing teacher perspectives regarding the leadership support they need.

Synthesis of the Literature

The world in which schools exist today is vastly complex. With the political realities of accountability, a rapidly changing global society, and technological advances that connect people with information virtually instantaneously, educators have numerous

factors to consider and address when striving to meet the needs of their students (Daggett, 2010). Principals must understand not only the governmental expectations for accountability, societal forces, and research-based best practices in education, but also the current realities in their own buildings. Especially for principals in large high schools, effectively and accurately assessing the needs of a diverse staff in the context of a complex political, social, and technological age can quickly become a daunting challenge.

Utilizing the structure of PLCs can help make such principal leadership tasks more manageable. By working with teacher teams organized as PLCs, principals can reduce the number of factors for analysis considerably. For example, in a high school of 100 teachers, creating department level PLCs can organize 100 individual teachers into ten to fifteen teacher teams. Utilizing team theory and distributed leadership theory (Northouse 2010; Harris, 2008), as well as the literature supporting PLCs as a successful structure for continual school improvement (DuFour et al., 2006; Hord & Sommers, 2008; Roy, 2010; DuFour et al, 2010), principals can begin to assess the needs of teacher teams (PLCs) rather than every individual teacher.

The benefits of PLCs reach significantly beyond simply organizing teachers into teams. The research base that supports PLC implementation exhibits numerous positive results, including an emphasis on collaboration, a focus on student learning, shared goals and beliefs, the appropriate use of data, a growth mindset of continual school improvement, creating a culture of learning for both staff and students, and a structure

that allows staff to be responsive to current and changing realities (Barton & Stepanek, 2012; DuFour et al., 2006; DuFour et al, 2010; DuFour & Mattos, 2013; Marx, n.d.).

Another research-based concept that can aid principals in understanding their current school climate and culture is collective efficacy (Goddard & Goddard, 2001; Hoy, 2005; Hoy & Miskel, 2008; McIntyre, 2011). The big ideas central to the philosophy of PLCs are also crucial to teacher collective efficacy, particularly in regards to collaboratively working to make a positive impact on student learning (Oliver & Hipp, 2006; Wahlstrom & Lewis, 2008). Although school culture is a complex measure to operationalize, assessing teacher collective efficacy can provide informative feedback for principals in identifying whether teacher beliefs are hindering or helping to increase student learning (Goddard, Hoy & Woolfolk, 2000). But just labeling the level of collective efficacy in a school provides information only; it does not on its own inform principals as to the action steps necessary to move forward. While literature and research in the areas of collective efficacy (Goddard & Goddard, 2001; Hoy, 2005; Goddard & Skrla, 2006; Hoy & Miskel, 2008; McIntyre, 2011), PLCs (Barton & Stepanek, 2012; DuFour et. al., 2010; DuFour & Mattos, 2013), and principal leadership behavior (Waters, Marzano & McNulty, 2003; Council of Chief State School Officers, 2008) can help in identifying strategies that positively impact student achievement, principals still must first determine how to identify the needs of their current staff in order to decide what action to take.

Due to the numerous leadership roles for which principals are responsible, determining where to focus their efforts is a challenge all principals must address

(Sebastian & Allensworth, 2013). A Wallace Foundation study (Portin, Schneider, DeArmond and Gundlach, 2003) concluded that one of the primary responsibilities of school principals is to diagnose the needs of their specific school and then develop a plan to meet those needs based upon the time, talents, and resources available. The initial challenge that principals face is where to start. Even with an overall understanding of the climate, culture, student achievement data, and staff composition, the needs of each PLC will not necessarily be the same; in fact, it is unlikely that each teacher team will have the same needs at the same time. Principals must determine these specific needs in a manner that ensures a clear understanding of not only what each PLC needs in terms of principal leadership, but what those responsibilities look like to the teachers.

Methodology

An embedded single case study design was employed in this research study to examine PLCs and principal leadership responsibilities (Yin, 2014). Information regarding changes in collective efficacy as PLCs were implemented was included to help describe and understand the PLCs as the embedded cases. A case study approach allows for an in-depth study of the factors being analyzed and the opportunity to address more specific descriptions and explanations (Yin, 2014). The examination of a single high school, HS1, as the overall unit of analysis, with PLCs as the embedded unit of analysis, allowed for exploration of how teachers in different PLCs, or embedded cases, and principals describe the influence of principal leadership responsibilities on the functioning of PLCs.

Qualitative research is defined “as social research that is aimed at investigating the way in which people make sense of their experiences” (Savin-Badin & Major, 2013). The qualitative design for this study included document analysis, focus group interviews, and a researcher journal. This use of more than one method of data collection and analysis provided triangulation to increase understanding, credibility, and validity in the results (Savin-Badin & Major, 2013). The document analysis provided insights into the ongoing work of PLCs as well as a source for identifying emerging themes (Lichtman, 2013). Focus group interviews were conducted as the primary method of data collection to further explore teacher and principal perspectives regarding the functioning of their PLCs and the principal leadership responsibilities that support PLC growth. The purpose of the focus group interviews was to reveal, clarify, and illuminate the particular experiences of each PLC (Savin-Badin & Major, 2013). In addition, the researcher maintained a reflective journal throughout the data collection and analysis process. The researcher used the reflections in this journal to question assumptions as well as to acknowledge and counteract biases brought into the study (B. Ruff, personal communication, September 27, 2013).

Goddard & Hoy’s (Hoy, 2005) Collective Efficacy Scale, or CE-SCALE, was utilized to identify levels of collective efficacy for the overall unit of analysis, HS1, and the embedded units of analysis, PLCs, which are organized by department. The development of Goddard & Hoy’s (Hoy, 2005) CE-SCALE was initially based on the work of Gibson and Dembo on teacher efficacy from 1984 (Hoy, 2005-2010). Review by a panel of experts led to additional items being added, after which a field-test and pilot

study was conducted. When those results were positive, Hoy submitted the items to a principal axis factor analysis, in which “All items loaded strongly on a single factor and explained 57.89 percent of the item variation. The alpha coefficient of reliability was strong (.96)” (Hoy, 2005-2010). For criterion-related validity, “there was a moderate and positive ($r=.54$, $p<.01$) correlation between personal teacher efficacy aggregated at the school level and collective teacher efficacy”; in addition, “trust in colleagues was positively and significantly related to collective teacher efficacy ($r=.62$, $p<.01$)”, and “the observed relationship between collective teacher efficacy and environmental press was not statistically significant ($r=.05$, n.s.)” (Hoy, 2005-2010). All of these outcomes were predicted by Hoy and supported the statistical analysis. A hierarchical linear model was employed to test predictive validity, which showed “that scores on the collective efficacy scale were significant predictors” of math and reading achievement (Hoy, 2005-2010). The CE-SCALE was administered over time as PLCs were introduced and implemented at HS1. Descriptive statistics for HS1 and the department subgroups were used primarily to more richly describe and understand PLCs at HS1, which are organized by departments, rather than as a means of significant statistical analysis.

Summary

There are a few existing studies that have examined the relationship between collective efficacy and PLCs (Kurt, Duyar, & Calik, 2012; Wahlstrom & Lewis, 2008; Oliver & Hipp, 2006). In addition, the identification of principal leadership responsibilities that are correlated with student achievement by Marzano, Waters, and

McNulty (2005) provide a focus on the behaviors and responsibilities of principals that can support teachers in a way that positively impacts teachers and students. What has not been studied yet is how principals can use that knowledge to determine the needs of their staff today in order to develop a plan to meet those needs and continually improve teaching and learning. As Wahlstrom and Louis (2008) found, there is a “limited amount of research that directly links policies and practices of leaders at the school level to high-quality instruction in the classroom” (p. 464). The focus of this research study was to explore how principals can identify the principal leadership responsibilities their staff need in order to increase the effectiveness of leading and supporting PLCs through continuous school improvement. It is important as well to determine whether such staff needs differed between PLCs or if the entire staff, composed of various PLCs, expressed the same needs at the same time, and as to whether those needs differed in relation to departments, self-assessed PLC functioning, or collective efficacy. Employing an embedded case study designed allowed for such an analysis of HS1 overall as well as individual PLCs.

CHAPTER THREE

METHODOLOGY

This chapter describes the research design employed in this study of principal leadership responsibilities and Professional Learning Communities (PLCs). This chapter provides a description of the research methods, procedures, protocols, and the survey instrument used to collect data. Data analysis procedures are also described in detail, including the use of archival collective efficacy data and PLC documents as well as data from five focus group interviews with teachers and principals.

Purpose of the Study

In order to improve teaching and learning in today's complex educational environment, principals need to be able to identify the personal and instructional needs of their teachers. For example, previous research has determined that collective efficacy, a measure of teacher perceptions of the difference they can make with students, has an impact on teacher effectiveness (Goddard, Hoy & Woolfolk, 2000). Assessing the collective efficacy of teachers can be useful to principals in identifying whether staff beliefs are promoting or hindering student success, since high collective efficacy can lead to improved student performance and, conversely, low collective efficacy can result in decreased student performance (Hoy & Miskel, 2008). It is informative for principals to know the collective efficacy levels in their school and what they can do to help teachers build a stronger sense of collective efficacy.

Previous research suggests that collective efficacy may be related to the important positive outcomes that can occur in the context of teachers' Professional Learning Communities, or PLCs (Oliver & Hipp, 2006; Wahlstrom & Louis, 2008; McIntyre, 2011). Well-structured PLCs can provide teachers with the opportunity to work collaboratively and interdependently together, and this effort has been shown to improve student achievement (Barton & Stepanek, 2012; DuFour, DuFour, Eaker & Many, 2006; Hipp & Huffman, 2010). In large high schools, organizing teachers into PLCs not only provides a research-based model for continual school improvement, but it also provides the benefit of utilizing teacher teams, as opposed to individual teachers, as a unit of growth and development. While principals can utilize the measurement of collective efficacy to aid in identifying, understanding, and studying the needs of their PLCs, they must also delve further into the perspectives of each PLC in order to determine which principal leadership responsibilities best support PLC growth to improve teaching and learning.

Marzano, Waters, and McNulty's (2005) meta-analysis of 69 studies over 35 years focused on "looking for specific behaviors related to principal leadership" (p. 41). Their analysis resulted in the identification of 21 principal leadership responsibilities that are correlated with student achievement. Eleven of those responsibilities were identified as being significant to second order change (Marzano, Waters, & McNulty, 2005), five of which were selected as the basis for this study due to their positive correlation to student achievement and the applicability to principals striving to support teachers in PLC

growth. The five selected were: Knowledge of Curriculum, Instruction, and Assessment; Intellectual Stimulation; Monitor and Evaluate; Flexibility; and Ideals and Beliefs.

Research Questions

An embedded case study approach was employed to examine how principal leadership responsibilities influence the functioning of PLCs as guided by the following two research questions:

1. How do teachers describe the influence of principal leadership responsibilities on PLCs?
2. How do principals describe the influence of principal leadership responsibilities on PLCs?

Setting

This study was conducted in a large AA high school in Montana, hereafter referred to as “High School 1” (HS1). Situated in the largest district in the state, HS1 is also the largest of the district’s three comprehensive high schools. Over the last four years, the student population at HS1 has experienced a temporary decline, decreasing from 1975 students to 1830 students in grades nine through twelve. HS1 has consistently performed above district and state averages on a variety of academic indicators, including state (MontCAS) and national (ACT, NWEA) standardized tests. However, the size of the high school, the growing demands of accountability in education, and the increasing complexity of our global society create an urgent need for principals at HS1 and at high

schools across the nation to understand how best to lead teachers in the implementation of PLCs and support them through the changes that must take place in order to properly prepare students for success during and after high school.

HS1 was selected for this study for several reasons. As one of the largest high schools in the state, the size of the teaching staff and number of principals provide the opportunity to study a case that may have applications for large high schools across the state and throughout the country. In addition, HS1 was in the initial years of PLC implementation, providing an opportunity to research and explore ways for principals to successfully lead their teachers through this process. HS1 also had archival data to support the research study and allow for triangulation of data. Weekly PLC Reports from the first two years of PLCs at HS1 were available for a document analysis to examine how teachers communicated their needs and concerns to principals throughout the initial PLC implementation. Collective efficacy data was available for HS1 starting in 2010, which was prior to any discussion or staff development related to PLCs, and continuing through the first two years of PLCs at HS1. The existence of this archival collective efficacy data, collected by the researcher in previous pilot studies, as well as the archival documents and the stage at which HS1 was in the PLC implementation process provided the opportunity to study the influence of principal leadership responsibilities on PLCs that could add to the existing literature on PLCs, collective efficacy, and leadership as principals strive to develop continuous school improvement plans that support advances in teaching and learning.

Participants

The concept of PLCs was first introduced in this school district through a professional development speaker in January of 2011. Over the next eighteen months, the district and HS1 focused all staff development on information and training for the implementation of PLCs. HS1 ensured every administrator and at least one member from each department attended an out of state PLC conference as part of their preparation for PLC implementation. District and building level staff development workshops were also provided to train all staff in the purpose, expectations, and guidelines for the functioning of PLCs. In the fall of 2012, HS1 launched PLCs utilizing a late-in Wednesday morning schedule, allowing students to start class late so that teachers could meet as PLCs for one hour each week. HS1 organized all PLCs by department, with larger departments dividing into smaller PLCs based upon common curricular assignments, and smaller departments connecting creatively with their counterparts located at the other high schools in the district. In the fall of 2013, HS1 had a student population of approximately 1850 with five principals, six certified counselors, and 95 certified teachers. These 95 teachers were organized into thirteen PLCs at HS1.

For the purpose of this study, data was collected from the PLCs representing the four core academic areas of English, Math, Science, and Social Studies. This purposeful sampling method was designed to focus on the four disciplines that comprise the primary academic requirements for graduation. Therefore it was appropriate to study PLCs in these areas as a means to support teachers in meeting the expectation of improving student success in the academic areas most connected to high school completion.

Research Design

An embedded case study design (Yin, 2014) was employed to examine how principal leadership responsibilities influence the functioning of PLCs. This case study of one AA high school in Montana examines the single organization of HS1 as the overall unit of analysis, with the PLCs of English, Math, Science, and Social Studies as well as the Principals as the embedded units of analysis. Taking a qualitative methods approach was appropriate in order to explore the perspectives of both teachers and principals regarding the influence of principal leadership responsibilities on PLCs, while also investigating the embedded units of analysis, to examine the connections between PLCs and principal leadership responsibilities. This research design allowed the researcher to explore how both teachers and principals describe their perspectives regarding the influence of principal leadership responsibilities on the functioning of PLCs, as well as convergences and divergences between PLCs. Collective efficacy data was used primarily to describe the PLCs, with changes in levels of collective efficacy included to more fully understand the impact of the implementation of PLCs at HS1.

Previous Research

The research base for both PLCs and collective efficacy indicates that there is potential for utilizing these structures and measures to assist principals in leading their staff to improve learning. A pilot study (Hehn, 2010) utilized Goddard & Hoy's (Hoy, 2005) Collective Efficacy Scale, or CE-SCALE (Appendix C), to establish a baseline measure of school-wide teacher collective efficacy at HS1, as well as to identify the

collective efficacy levels of teachers as grouped by departments. This initial employment of the CE-SCALE was conducted prior to any discussion of PLCs at HS1. As HS1 teachers completed the survey anonymously, they were only asked to identify their primary subject area as English, Math, Science, Social Studies, Health Enhancement, Special Education, World Languages, or Elective. This allowed for the analysis of mean collective efficacy scores by department as well as a comparison to the mean collective efficacy score for the school. This disaggregation of the CE-SCALE data by department is a new application of the survey instrument. The researcher chose this step to provide data regarding levels of collective efficacy for each department so that principals could further understand department strengths and challenges.

In an additional pilot study, Hehn (2012) administered the CE-SCALE a second time at HS1. This study was conducted after over a year of professional development to prepare for and 3 months in to PLC implementation at HS1. In November 2013, three months into the second year of PLC implementation, the CE-SCALE was administered a third time at HS1 to determine if levels of collective efficacy changed over time as PLCs were implemented. Data from each administration of the CE-SCALE was disaggregated by department, which is how PLCs are organized.

CE-SCALE Instrument and Data Collection

Goddard & Hoy's (Hoy, 2005) CE-SCALE instrument consists of 21 questions to which participants respond on a six-point Likert Scale. Eleven of the questions result in a direct score of one through six, while ten of the questions are reverse-scored, six through

one, due to the positive or negative impact the question has on collective efficacy. Therefore, mean collective efficacy scores range from one to six. Mean collective efficacy scores can be examined per question to inform school leaders in regards to specific areas for improvement; however, such an analysis was not conducted in this research study.

Existing collective efficacy data for HS1 was analyzed to describe the cases (PLCs) in this study. The CE-SCALE was first administered at HS1 in November of 2010, and the results were disaggregated by department (embedded cases) as well as examined overall for the entire school (case). These results provided a baseline measure of collective efficacy prior to the introduction of the concept of PLCs at a district level training in January of 2011. HS1 focused all staff development efforts from the spring of 2011 through the summer of 2012 on preparing HS1 teachers and principals to implement PLCs in the fall of 2012. The definitions for collective efficacy as “the shared perceptions of teachers in a school that the efforts of the faculty as a whole will have positive effects on students” (Hoy & Miskel, 2008. P. 188), and PLCs as “collaborative teams whose members work interdependently to achieve common goals linked to the purpose of learning for all” (DuFour, DuFour, Eaker, and Many, 2006, p. 3), both address the belief that teachers working together can impact student learning. As a result, HS1 again administered the CE-SCALE in November of 2012 to see if the preparation and initial implementation of PLCs had an impact on collective efficacy. The CE-SCALE was administered a third time in November of 2013, three months into the second year of PLC implementation, to again note any changes in collective efficacy as PLCs were

implemented. Each time, the CE-SCALE results were examined overall for HS1 as well as disaggregated by department, which informed the embedded cases in this study.

In the administration of the CE-SCALE, the researcher presented the informed consent (Appendix D) and the CE-SCALE survey to each department chairperson. Protocols were provided (Appendix E) to ensure that informed consent and clear disclosure regarding the purpose of the pilot study, as well as how the district and the researcher intended to utilize the information, was communicated to all participants. Department chairpersons administered the survey during their department meetings in November of 2010 and during their PLC meetings in November of the 2012 and 2013 survey years. Every teacher in attendance that day was given the opportunity to participate in the survey, and department chairpersons followed up with absent staff members to ensure they had an equal opportunity for participation. As per Institutional Review Board (IRB) expectations, teachers were given the choice to opt out of the survey. Because collective efficacy is a reflection of the entire staff, a significant portion of teachers in each department needed to participate in order to support the validity of the data analysis. At the end of each PLC meeting, completed confidential surveys were gathered and placed in a sealed envelope, which the chairperson then delivered to the researcher. Absent teachers were allowed to turn in their surveys to department leaders the next day, which were then given to the researcher. Overall participation was strong at 86% in 2010; 92% in 2012; and 84% in 2013.

For the purposes of this study, the CE-SCALE data was not examined statistically for significant changes or correlations over time or between subgroups. Rather, this

archival data was used primarily to describe the PLCs, which are organized by department. This data allowed the PLCs to be situated in terms of how they compared with the greater school population in terms of collective efficacy as well as to further the researcher's understanding of HS1 teacher beliefs and the collaborative functioning in their PLCs.

Analysis of Teacher and Perspectives

While understanding that the research supports a correlation between collective efficacy and student achievement, the significant focus for principals is to determine what they can do in order to support teachers in continual growth in the PLC process, and hopefully in collective efficacy as well. Specifically, high school principals must determine the steps necessary to identify the particular needs of each PLC, followed by a determination of what actions are most important and effective to move those teachers forward in their PLC functioning. To best answer the research questions regarding how teachers and principals describe the influence of principal leadership responsibilities on the functioning of their PLCs, data was collected through teacher and principal focus group interviews as well as a document analysis to examine how principal leadership responsibilities influence PLCs.

Document Analysis

Savin-Badin and Major (2013) define qualitative research "as social research that is aimed at investigating the way in which people make sense of their ideas and experiences" (p. 11). Since the beginning of PLC implementation at HS1, each PLC was

required to submit a Weekly PLC Report (Appendix F) that followed a generalized format regarding the work completed during their PLC time. Included in each report was a specific question that asked, “Do you have any concerns or needs for our administrative team?” These reports were submitted to principals for two purposes: to provide ongoing communication between the PLCs and the principals, and to serve as a means for holding PLCs accountable for meeting and reporting their weekly PLC activities. This study examined the Weekly PLC Reports through a document analysis focusing on the concerns and needs that PLCs communicated to principals.

Savin-Baden & Major (2013) express caution regarding the need to evaluate the quality of a document by asking if it is authentic, credible, and representative, as well as asking what it means (p. 407). PLC reports that were completed and submitted weekly would not satisfy all of those questions as a sole source for analysis, but they provided authentic data representing ongoing communication from teachers to principals regarding the work and needs of PLCs, as well as provided insights to aid in understanding the functioning of each PLC. Practical documents “include those written products that are used regularly by members of a community” (Savin-Baden & Major, 2013, p. 405), a criteria met in the Weekly PLC Reports. As Savin-Baden & Major (2013) further state, “These documents can provide a researcher with a rich and often readily accessible source of information for understanding participants and the research context” (p. 403). This document analysis provided an opportunity to study the ongoing feedback of PLC members and examine at a fundamental level what teachers reported from their PLCs regarding their needs or concerns to their principals.

To prepare the documents for analysis, all reports submitted by PLCs at HS1 during the 2012-2013 (Year 1) and 2013-2014 (Year 2) school years were collected. The reports were then separated by department, with the departments under study of English, Math, Science, and Social Studies compiled for analysis and ordered chronologically by date. Remaining forms for other departments were returned to HS1. A word document was created for each of the English, Math, Science and Social Studies departments that listed the dates for every PLC meeting scheduled throughout Year 1 and Year 2. The PLC reports were read, one PLC at a time, with a focus solely on the response to the question, “Do you have any concerns or needs for our administrative team?” All responses were typed verbatim next to the corresponding date. This created an initial organization of PLC responses by department and date. Also noted were dates for which a PLC did not submit a report, as well as when the response to the question under study was left blank or the equivalent, such as “NA”, “none at this time”, etc. Once responses from all of the reports were typed out verbatim, they were printed and compared to the Weekly PLC Reports a final time to ensure the completeness and accuracy of the data.

Once the data was verified as accurate, responses were read and key words and ideas were highlighted as an initial coding of the data. Once the codes were identified, they were read and categorized according to the five responsibilities of Knowledge of Curriculum, Instruction, and Assessment; Intellectual Stimulation; Monitor and Evaluate; Flexibility; and Ideals and Beliefs. Two additional codes that were immediately evident were “No Report”, indicating the weeks for which no form was submitted, and “No Needs”, signifying the various responses that expressed no needs or concerns for the

principals. The remaining codes were read again to determine if they fit into one of the seven existing categories. Responses that still remained uncategorized were then examined and categorized as either General Management or Student Related concerns. These categories were consistent across all four departments, with only the Math department having comments that still did not fit an established category. These two Math comments during Year 1 were statements of affirmation, “We are plugging and chugging away”, which indicated their PLC efforts as opposed to expressing any needs or concerns for principals.

After all comments were coded and categorized, the responses under each category were tallied for Year 1, Year 2, and the total for both years combined. This data was then ready for analysis. In addition, the data from the document analysis was compared to the focus group interview results to identify any similarities, differences, patterns, or themes that affirmed, contradicted, or added new insights into the data collected from the teacher and principal focus group interviews.

Lichtman (2013) referred to the “Three C’s” of qualitative data analysis as codes, categories, and concepts (p. 252). These three elements are evident in the methods described above to prepare the Weekly PLC Reports for analysis through the coding of responses, the organization of those codes into categories, and the analysis of the findings that emerged. Savin-Baden and Major (2013) stated that, “The behaviour that documents capture occurs in a natural setting, generally prior to the research project and generally without the intention of serving as data, so it tends to have strong face validity” (p. 410). These Weekly PLC Reports have been a part of the PLC process at HS1 from the

beginning in the fall of 2012, prior to any discussion of their use as data for research, therefore providing support for their examination as an ongoing reflection of the functioning of each PLC, particularly in regards to PLC expressions of needs or concerns.

Focus Group Interview Protocols and Data Collection

In order to further explore teacher and principal perspectives regarding the influence of principal leadership responsibilities on PLCs, focus group interviews were conducted with the English, Math, Science and Social Studies PLCs as well as with the Principals at HS1. These focus group interviews took place during scheduled staff development time at HS1 in May of 2014. The purpose of the focus group interviews was to reveal, clarify, and illuminate the particular experiences (Savin-Badin & Major, 2013) of each PLC in regards to the principal leadership responsibilities they perceived to be most influential on the functioning of their PLC, as well as the perspectives of the principals regarding the influence of the five responsibilities on PLC functioning at HS1.

As the researcher was a principal at HS1, a moderator and recorder were hired to communicate with participants and conduct the focus group interviews. The researcher contacted a well-respected former teacher from HS1 who was a current professor at a local university. This professor recommended a highly skilled graduate student to serve as the moderator. The researcher met with the graduate student and reviewed the role of the moderator and determined that the graduate student was competent to serve in that role.

In April of 2014, the researcher visited the English, Math, Science, and Social Studies PLCs as well as a meeting with the Principals to introduce the study and share the IRB approved Informed Consent (Appendix B) forms. The researcher clarified that all further communication regarding the focus group interviews would be initiated by and responded to by the moderator, who was recommended by the university professor that was well known to the staff. The moderator then emailed all members of the PLCs as well as the principals to invite their voluntary participation in the focus group interviews. All responses were made directly to the moderator via email to maintain anonymity regarding those who chose to participate or opt out. While the researcher eventually knew the number of participants per focus group interview, no other identifiable information was gathered or shared beyond the focus group interview for which volunteers participated.

At the beginning of each focus group interview, the moderator ensured all participants present had signed and submitted the IRB approved informed consent form and opt-out information (Appendix B). This introduction included the purpose for the study as well as the intended use of the focus group interview responses and observations, which had also been shared when the researcher previously visited with each PLC and the principals. It was important for participants to understand that the intent of the researcher was to determine their perspectives on how principals could best support them in their PLC growth, and be reassured that the entire process was anonymous and in no way evaluative. Once all participants present had either consented or opted out of the focus group interview, the moderator proceeded to conduct the

interview using the Moderator's Guide for the Teacher Focus Group Interviews (Appendix H) and for the Principal Focus Group Interviews (Appendix I). In addition, a second individual accompanied the moderator and served as a recorder, operating a high quality audio recording device to record the session, as well as to accurately attribute responses to particular participants. Identifiers were used to maintain anonymity, with participants randomly assigned alpha pseudonyms of A through F, depending upon the number of participants.

After the initial introduction, the moderator distributed a handout (Appendix G) to each participant to frame the context and discussion for the focus group interview. The handout included definitions of collective efficacy, PLCs, the Four Indicators of a PLC at Work, and the five principal leadership responsibilities that formed the research basis for this study. Participants were given time to read and ask questions regarding the handout before proceeding with the interview questions. The moderator also described the use of blank sheets of paper under a document camera on which the moderator wrote a summary of the responses to each question. Participants were asked to confirm or update the written items, projected onto a screen visible to all participants by the document camera, to ensure the moderator was accurately representing their voice. This method of member checking was developed by the researcher and referred to as the Response Summary Validation. This step served to validate and confirm the responses for each question in an immediate manner that promoted confidence in the accuracy of the data.

In order to identify any potential issues in methodology, a "practice" focus group interview was conducted with a PLC at HS1 that was not part of this study prior to the

actual focus group interviews from which this study collected data. The Health Enhancement PLC at HS1 was asked to participate in the same focus group interview protocol that was to be used with the English, Math, Science and Social Studies PLCs approximately two weeks prior to the actual focus group interviews. This step helped to identify and correct any unanticipated problems in the methodology prior to the actual focus group interviews where the data was to be collected for analysis in this study, as well as to train the moderator and recorder in the protocols to be used. This step also helped to ensure all five focus group interviews in the data collection process followed the same interview protocols and procedures.

The actual focus group interviews commenced in a semi-structured format with the moderator directing participants to the handout as appropriate and asking the following questions in the teacher/PLC focus group interviews:

1. How has the principal leadership responsibility of Knowledge of Curriculum, Instruction, and Assessment contributed to the functioning of your PLC over the past two years?
2. How has the principal leadership responsibility of Intellectual Stimulation contributed to the functioning of your PLC over the past two years?
3. How has the principal leadership responsibility of Monitor and Evaluate contributed to the functioning of your PLC over the past two years?
4. How has the principal leadership responsibility of Flexibility contributed to the functioning of your PLC over the past two years?

5. How has the principal leadership responsibility of Ideals and Beliefs contributed to the functioning of your PLC over the past two years?
6. Which of the five principal leadership responsibilities, from your perspective, were most important to your PLC?
7. On a scale of one to six, with six being high and one being low, how would you rate the current functioning of your PLC and why?
8. From your perspective, which principal leadership responsibilities are needed most at this time and in the immediate future (next school year) to improve the functioning of your PLC and why?
9. Does anyone have any additional comments to add to our discussion today?

For the Principals' focus group interview, the questions asked by the moderator varied slightly from the teachers' questions to reflect their different roles in the PLC process as administrators rather than PLC members and can be found in the Moderator's Guide for Principals (Appendix I).

Preparing the Focus Group Interview Data for Analysis

After each focus group interview, the moderator transcribed the audio recordings verbatim and presented the researcher with hard copies of the transcriptions for analysis. To preserve the anonymity of the participants, copies of the audio recordings were placed in a sealed envelope, along with the signed Informed Consent forms, and delivered to the researcher for preservation of data, but the researcher has not and will not listen to or review them to avoid the possibility that voices and signatures would be recognized. The

Response Summary Validation notes were also typed by the moderator and presented to the researcher for analysis. The Response Summary Validation notes were read and analyzed along with the verbatim transcriptions by the researcher in three distinct phases: by PLC, by focus group interview question, and by principal leadership responsibility.

Each focus group was assigned a different color of paper and three copies of the transcriptions and Response Summary Validation notes were made on the corresponding colors. The colored paper allowed for visual ease and accuracy in tracking the group to whom the responses belonged throughout the data analysis process. Participant responses were numbered chronologically within each focus group interview to maintain the flow and context of each response.

Focus Group Interview Data By PLC. As the researcher did not conduct the focus group interviews and therefore had no initial knowledge regarding the data, the first step in the analysis process was to become immersed in the data by department. This was accomplished one department at a time by following these steps:

1. An initial straight through reading of the PLC's transcription and Response Summary Validation notes.
2. A second reading of the PLC's transcription and Response Summary Validation notes with the researcher creating margin notes regarding observations or ideas that stood out as particular in that data set, including paraphrased summaries of participant responses.

3. A third reading of the PLC's transcription and Response Summary Validation notes to review the accuracy of the margin notes and record them as part of the researcher's journal.

Data displays were created for each focus group interview organized by the PLCs of English, Math, Science, Social Studies, as well as for the Principals. One set of color-coded transcriptions was cut apart by participant responses to each question and glued to a separate sheet of flip chart paper for each PLC and the Principals. The Response Summary Validation notes for each department were also included in the data display. This allowed the researcher to examine the responses to the focus group interview questions on one large page per group and was used throughout the analysis process to compare and contrast responses and descriptions of the influence of the five principal leadership responsibilities on PLCs by focus group interview.

Focus Group Interview Data by Question. The first research question was designed to identify how teachers described the influence of principal leadership responsibilities on the functioning of PLCs. Thus, the data generated by each of the four PLCs (English, Math, Science, and Social Studies) were analyzed by interview question in the next step of the analysis. Data displays were created using one sheet of flip chart paper for each of the nine questions in the focus group interviews with teachers. The Principals' focus group interview was not included during this step for two reasons: this research question specifically focused on teachers' descriptions, and the questions for the Principals' focus group interview included slight variations due to their role in the PLC process as administrators rather than as PLC members.

In order to handle the data consistently, the following procedures were implemented:

1. Using the color-coded copies of the PLC transcripts, each participant response was read one at a time for the first question. A participant response (PR) was defined as the complete statement of a single participant prior to another participant speaking.
2. Key words and phrases were identified and highlighted in each PR, with a different color highlighter used when new ideas or topics emerges. Such ideas, words and phrases were identified as those relating to the research question as well as those that most accurately represented participants' experiences and perspectives as verbalized in their responses. This served as the initial coding stage.
3. Each PR for the first question was read a second time and cut apart as an entire response, retaining the participant letter and chronological numbering. However, many PRs contained more than one highlighted color, resulting in PRs being too large for meaningful coding. PRs were then divided into participant segments (PS) as appropriate to accurately represent the different codes. Each PS was then cut apart, again retaining the participant letter and chronological numbering, and organized by code.
4. Once all PRs and PSs for the first question were cut apart and organized by code, they were reread to ensure the accuracy of the coding and updated as appropriate.

5. The codes were then examined and organized into categories based on the actual key words and phrases and the message they conveyed. All PRs and PSs were glued onto the data display for that question, grouped under the appropriate category.
6. The color-coded Response Summary Validation notes for the first question were also cut apart and glued onto the data display in the upper right hand corner. This allowed for the Response Summary Validation notes to be added to the data display while still distinguishing them from the PRs and PSs.

Steps one through six above were then followed for interview questions two through nine from the PLC focus group interviews. At the end of this process, there was a data display for each interview question containing all of the Response Summary Validation notes as well as the PRs and PSs for that question, with codes highlighted and organized into categories.

The second research question was designed to identify how principals described the influence of principal leadership responsibilities on the functioning of PLCs. Thus, the data generated by the Principals' focus group interview were analyzed by interview question in the next step of the analysis. Questions for the principal focus group interview followed the same pattern for teachers, with variations as appropriate for the administrative rather than teacher role. Principals' PRs and PSs were coded and categorized using the same six steps described above for the teachers' focus group interview data, and a data display for principals was created with all nine questions on one sheet. This allowed the researcher to examine how principals responded to each

question as compared to the responses from the teacher focus group interviews. The researcher noted areas of similarity and differences in how principals and teachers described the influence of the five principal leadership responsibilities on the functioning of PLCs at HS1 as they answered the nine questions in the transcriptions and in the Response Summary Validation notes.

The benefit of the data displays was that it allowed the researcher to visually examine the codes, categories, numbers of PRs and PSs, and patterns of responses by PLC as well as by question due to the color-coding of the transcriptions and Response Summary Validation notes. However, the data displays were large and therefore not easily handled. Therefore, the researcher typed the data from the displays into a word document, one per display, which contained the same information in a more easily referenced, managed, and stored format. Both structures allowed the researcher to check data and findings in an iterative manner to ensure accuracy throughout the data analysis process.

Focus Group Interview Data by Principal Responsibility. At this point, all five focus group interview transcriptions and Response Summary Validation notes had been reviewed and organized into data displays by PLC (English, Math, Science, Social Studies) and Principals, and by the focus group interview questions. This allowed for an analysis of the data from each group on their own as well as a comparison between groups. The next stage in the analysis was necessary to specifically identify how each group responded in regards to the five principal leadership responsibilities, regardless of

the question being asked, to more fully examine how each responsibility influenced the functioning of PLCs as reflected in the perspectives of teachers and principals.

All transcriptions, Response Summary Validation notes, and researcher notes were reviewed for references specifically related to the five principal leadership responsibilities of Knowledge of Curriculum, Instruction and Assessment; Intellectual Stimulation; Monitor and Evaluate; Flexibility; and Ideals and Beliefs. A new data display was created for each of these five principal leadership responsibilities. PRs, PSs, and notes were organized by responsibility and glued to the appropriate data display. This allowed the researcher to visually examine all responses, discussion, and reflection pertaining to a specific responsibility in one display. This allowed the researcher to identify when and how principal leadership responsibilities were discussed and described, regardless of when the responses occurred during the focus group interviews. This data was also compared and contrasted between PLCs as well as between teachers and principals to identify overall themes that emerged from the data. These themes are reported in chapter four and discussed in greater detail in chapter five.

Dealing with Anomalous Data. At the completion of the analysis by principal leadership responsibility, a few responses and categories remained that did not fit with the five principal leadership responsibilities and therefore did not apply specifically to the research questions. A separate data display was created where this anomalous data was displayed in order to not ignore the data, yet to also not allow it to inappropriately influence the data directly related to the research questions. Much of this data was related to one time topics or issues regarding which a PLC may have shared responses that were

not germane to the questions asked in the focus group interviews. While the comments were potentially important to the participants, they did not further elucidate the findings related to the research questions.

Researcher's Journal

Throughout this study, a reflective researcher's journal was maintained while gathering, preparing, and analyzing the data. The purpose of this ongoing step was to question assumptions, acknowledge and counteract biases brought into the study, and provide for a more thorough and traceable discussion of the data analysis and implications (B. Ruff, personal communication, September 27, 2013). This step also provided an opportunity for triangulation in the data collection and analysis process, as it provided a reference point for documenting the progress of the data analysis at every stage and was utilized in an iterative manner to cross check observations and elucidations (Krefting, 1991). Notes and reflections recorded in the researcher's journal included the following:

- Dates and timeline of analysis steps.
- Questions or ideas that arose that may not necessarily apply to the step currently being addressed but that the researcher wanted to recall and address at another point in the analysis.
- Researcher reflections that might be premature at the current stage of analysis but that, once recorded in the researcher's journal, the researcher was able to set aside in order to maintain focus on the analysis at hand to guard against researcher bias.
- All steps and refinements in the data analysis process.

The researcher's journal was reviewed after each analysis step was completed. This allowed the researcher the opportunity to address any threads or findings that arose during one step that appeared or applied in other phases of the analysis. For example, the researcher noted that the principal leadership responsibilities were often discussed by participants in terms of behaviors. While this point did not emerge in the form of verbatim participant responses from focus group interview participants or in the responses from the document analysis, it was a recurring impression that the researcher recorded in the researcher's journal at various states in the analysis based on the way the participants spoke regarding the principal leadership responsibilities. While the researcher's journal was not specifically analyzed as a data source, it was an important step in the methodology to address and track the rigor of the study, and identify and address any potential bias as it arose.

Statement of Researcher Positionality

It is important to understand the lens through which this research was conducted. Senge's (2006) work on organizational theory reflects on the concept of synergy, whereby the results of a team working interdependently can exceed the successful efforts of each of those team members working independently. This concept corresponds well with both collective efficacy and PLCs and lends itself to a systems approach of examining PLCs at work at HS1. As a researcher, I must be clear that my positionality is one of an active proponent of collective efficacy and PLCs, as well as a principal in the building in which I conducted this study. Deliberate steps were taken to minimize

researcher bias, such as the use of a moderator and recorder to conduct the actual focus group interviews; participation in the focus group interviews was solicited and communicated to the moderator directly, and I had no knowledge as to which teachers responded; the researcher's journal maintained a log of methods, chronology, steps, and reflections that were continually analyzed to identify and limit bias; interviews were conducted by the moderator in a comfortable conference room at HS1 where participants were not observed entering or leaving by the researcher; participants were assured that the data gathered would be anonymous and would not be used in any way as evaluative; and the interviews were audio recorded and transcribed by the moderator so that the researcher saw only the typed transcriptions with alphabetic identifiers for participant responses. While it was logical to determine that the four principals who participated were the four principals with whom the researcher worked, there was no identification as to which principal was participant A, B, C or D. In addition, the PLCs were large enough that there was no way to infer who participated and who did not, as the PLCs ranged in size from ten to sixteen, while the participants per PLC focus group interview ranged from three to six.

Trustworthiness

In order to support the rigor of qualitative research, Shenton (2004) outlines four criteria to address trustworthiness: credibility, transferability, dependability, and confirmability. In addition to the triangulation of the qualitative methods described above, all four of Shenton's criteria received due emphasis in this study. Credibility

dictates that there are assurances that the researcher is accurately portraying the participants' views. The development and use of the Response Summary Validation in the focus group interviews ensured that the moderator accurately represented the voice of the participants, with all participants encouraged to verify the lists and explanations immediately as they were discussed and displayed. In addition, the document analysis covered the entire 2013-2014 school year, the same year that the final CE-SCALE was administered and in which the focus group interviews were conducted, as well as the initial 2012-2013 year of PLC implementation, to provide an accurate representation of teacher needs and concerns over time as PLCs were implemented at HS1. Transferability refers to whether the context and conditions being studied are similar enough to other situations or circumstances to which the findings could reasonably be applied. HS1 is a large high school facing accountability requirements and technological advances in a rapidly changing global society that has chosen to implement PLCs as part of a continual school improvement process. As every public high school in our country today is situated in similar political, technological, and societal contexts, and is required to design and implement a school improvement process that produces positive results, the findings from this study have implications for the many high school districts across the country that include PLCs as part of that process. Dependability requires that the researcher design a study that can be replicated. This study is detailed in such a manner as to allow the process, procedures, and analysis to be recreated. In addition, by conducting the study in the researcher's own school, the intent is to introduce a model or process that principals in any large high school can follow to identify the professional growth needs of their own

staff through the PLC process. Confirmability dictates deliberate safeguards in the procedures of data collection and analysis to provide assurances that the results truly emerge from the data rather than from the influence of the researcher. Although the positionality of the researcher in this study as a proponent of collective efficacy and PLCs may at first appear to threaten this criteria, the research design that included the triangulation in the qualitative design (document analysis, focus group interviews, and researcher journal) as well as archival collective efficacy data served to provide checks and balances to ensure the necessary measure of objectivity in the data collection and analysis process.

Summary

Principals must purposefully collect and examine data and teacher perspectives in order to develop a school improvement plan that outlines the specific principal leadership that will meet the needs of their current staff. By utilizing teacher feedback regarding the functioning of their PLCs tied to the principal leadership responsibilities staff identify as most important, principals at large high schools can determine the specific needs of their teacher groups. Such an approach is compatible with the tasks of PLCs themselves in collecting and analyzing current student data to determine effective instruction, and then utilizing that information to improve teaching and learning. Principals can model this task by examining current teacher data and feedback as a means for examining how best to take action to support teacher growth in collective efficacy and PLC functioning. While CE-SCALE data and Weekly PLC Report document analysis provide foundational data,

the focus group interviews allow principals to ask questions, clarify responses, and challenge their own assumptions regarding the needs of their staff. This information is crucial in designing a continuous school improvement plan that meets teacher needs so that principals can successfully lead for improvements in teaching and learning.

CHAPTER FOUR

RESULTS

Introduction

In light of the need for principals to support teacher professional development in this era of accountability and change, the purpose of this study was to examine how principals lead and support the implementation of Professional Learning Communities (PLCs) at the high school level. This study was designed to explore the perspectives of teachers and principals regarding what teachers need and what principals can do to foster successful PLC implementation and development. Focus group interview questions were designed to examine how principal leadership responsibilities influence the functioning of a PLC using the following research questions:

1. How do teachers describe the influence of principal leadership responsibilities on PLCs?
2. How do principals describe the influence of principal leadership responsibilities on PLCs?

Participants in focus group interviews in the fall of 2014 included 17 teachers and four principals from HS1, a AA high school in the state of Montana. All teachers from HS1 participated in weekly PLC meetings, for which Weekly PLC Reports were submitted to principals during the 2012-2013 (Year 1) and 2013-2014 (Year 2) school years. In addition, all teachers from HS1 had the opportunity to complete the Collective Efficacy (CE-SCALE) survey in November of 2010, 2012, and 2013.

Five of the principal leadership responsibilities identified by Marzano, Waters, and McNulty's (2005) as correlated to improved student achievement served as the focus for data collection and analysis, particularly in the focus group interviews. To provide triangulation, a document analysis was conducted to examine the Weekly PLC Reports submitted by English, Math, Science, and Social Studies PLCs to principals over the first two years of PLC implementation at HS1. A researcher's journal was kept to record timelines, methods, and reflections to aid in tracking findings as well as identify and eliminate bias. In addition, CE-SCALE data from 2010, 2012, and 2013 were analyzed to further describe the PLCs in this study, as well as explore the impact of PLC implementation on collective efficacy.

In order to fully answer the research questions, this chapter presents the findings in three sections. The first section reports the results of the analysis that address how teachers describe the influence of principal leadership responsibilities on the functioning of their PLCs. Included are results from the four focus group interviews with teachers from English, Math, Science, and Social Studies PLCs at HS1. The second section reports the results of the analyses from the focus group interviews with the principals at HS1 to address how principals describe the influence of principal leadership responsibilities on PLC functioning. The third section reports the similarities and differences found in the results between PLCs, between teachers and principals, and between the focus group interviews, the document analysis, and collective efficacy data.

Teachers' Descriptions of Principal Leadership Responsibilities on PLCs

Marzano, Waters, and McNulty (2005) identified 21 principal leadership responsibilities that are correlated to student achievement. Five responsibilities were selected to serve as the foundation for this study due to their correlation to second order change, as well as their descriptive connection to PLCs. Those responsibilities were: Knowledge of Curriculum, Instruction, and Assessment; Intellectual Stimulation; Monitor and Evaluate; Flexibility; and Ideals and Beliefs. In the focus group interviews, teachers were asked to describe how they believed each responsibility contributed to the functioning of their PLC over the past two years. Later in the interview, participants were asked which of the principal leadership responsibilities their PLC needed most at this time and in the future to improve the functioning of their PLC. The results are reported here and organized by principal leadership responsibilities. Quotes from the focus group interviews are identified alphanumerically by group (E for English; M for Math; S for Science; SS for Social Studies; P for Principals) and by participant (1, 2, 3, 4, 5, 6).

Knowledge of Curriculum, Instruction, and Assessment

Support. The most common theme in teacher responses to the principal leadership responsibility of Knowledge of Curriculum, Instruction, and Assessment was a need for support. While most teachers saw themselves as the curriculum experts for their content area, they expected principals to have enough of an understanding of their subject matter so that principals could understand and support their work rather than micromanage it. As

S2 stated, “the administrators should know, have kind of a working knowledge of what is going on in the various curricular activities within the school curricular areas.” The implementation of Common Core was a prevalent topic in regards to curriculum, and while teachers expressed mixed views on the level of knowledge required or expected of their principals in regards to Common Core, they agreed that there was an expectation of support and follow up when they ask for help. Teachers described PLCs as a great platform for curricular conversations, a practice that was not common prior to PLC implementation, and gave principals credit for organizing and supporting the time and opportunity that PLCs provided. E3 described PLCs as presenting,

.... an opportunity to try and, unpack I guess is the word, figure out what the curriculum was and how we were going to go about trying to teach it in a collaborative way... giving us time to deal with that and allowing us space to kind of try things out ... the administration’s role in that was to give us that time.

Another significant way teachers described principal support in this area was when they discussed principal visits to their PLCs, although this was often expressed in the negative due to a perceived lack of such visits. “I think that if they had visited more often that we might have seen more support” was shared by M2, while S2 stated, “we’ve had very little visitation by administrators.” M2 went on to add, “I think we struggled, we needed so much support, and the support, if we got any, was we sought them out. We were falling apart.” All participants expressed a desire for support and follow up from their principals, and a visit from one of the principals during PLC time was viewed positively, such as when S1 said, “periodically we will have the principal come in ... he has been very supportive of what we have been doing.”

Guidance. Teachers also shared a desire for guidance and direction as another significant theme. S4 stated, “sometimes I feel like we could use a little more direction”, while SS2 expressed experiencing “some drift in the PLC” when discussing the desire for more guidance from principals. Although most teachers described principals playing a facilitator role, there was a definite expectation of leadership that provided guidance and feedback. This need for guidance was often connected to the Weekly PLC Reports that were submitted to principals. Each group of teachers articulated frustration over their perception that these reports were not read in a timely manner or followed up on by the principals. S1 expressed this concern by stating,

There are times on the PLC form that we fill out and give to the administrators at the end of each PLC, there’s a place that’s marked there that says what sorts of needs do you have from the administrative team, and oftentimes when you write something in there, it doesn’t get acknowledged for a long, long, long time, and usually it takes a personal contact to get the needed help there ... when we take the time to write down that need, that it would be addressed as soon as possible.

Similar comments were made in each focus group interview, with the lack of feedback or response to their weekly PLC reports a consistent area of frustration due to a perceived lack of follow up and guidance.

Different Interpretations. While each department expressed consensus in the desire for support, guidance, and feedback, differences in their responses were evident as well. Math teachers were critical of their principals’ lack of knowledge in terms of both the curriculum and pedagogy, what Math teachers do in the classroom, as expressed by M4, “Well, I would say that they have very little knowledge of what’s happening, and it hasn’t contributed at all”, a statement with which M1 and M5 agreed. However, Science

teachers viewed the lack of principal visits and knowledge in this area as something that could be interpreted as a reflection of trust in them as professionals to know their curriculum, exemplified in S2's comment,

... they have given us a lot of freedom to instruct, develop, and implement ideas with curriculum through the PLC. And I guess I am one of those people that would rather have it that way than somebody always directing me that this is what you have to do.

English teachers agreed that the lack of principals' visits and knowledge was fine as they simply requested support when needed, as shared by E1 and to which E3 and E4 agreed, "we waited until we had questions, then we would invite an administrator in to answer our questions and that seemed to work well." In addition, E1 and E3 reflected on this principal leadership responsibility as the "end goal", with the other four responsibilities leading to or supporting Knowledge of Curriculum, Instruction, and Assessment. Social Studies teachers agreed that they were rather lost in regards to curriculum, with most of the emphasis under Common Core focusing on English Language Arts, Math, and Science, while acknowledging that this wasn't just an issue for HS1 but rather a tri-fold issue at the district and state level as well.

Intellectual Stimulation

Training. Each teacher group reported that principals provided opportunities for PLC training that were focused and strong across the building and departments. Teachers credited the principals for providing these training opportunities for staff. This was important, as SS2 shared, "So there is a core of people who understand the PLC concept, or at least have been exposed to it." E3 expressed a similar viewpoint when saying,

multidisciplinary groups ... attending workshops and seminars and lectures just to sort of get an idea of what the PLCs were all about, and then coming back to present out, I think, to the faculty. ... so that definitely helped, I think, just understanding what it is we were trying to do.

M3 recalled a webinar presented to the staff, and M4 referenced speakers brought in to share about PLCs. This expertise extended to principals as well. E1 recalled a time when “we invited some administrators in to answer our questions and to kind of get back to the basics of what everybody was trained in.” When this training was referenced, teachers consistently stated that it helped when their PLC was struggling to use these resources to ensure they were on the right track or readjust if necessary. E1 and E2 expressed a desire for more training at this time in order to understand where they are and where they want to go with PLCs. This was echoed in the Math focus group interview, where participants nodded in agreement to M4’s assertion, “I think we are in a prime time to actually adjust our focus with some help.”

Vision. Teachers again discussed the need for guidance from their principals, particularly in regards to sharing their building-wide vision. Even though the responsibility under consideration was Intellectual Stimulation, the Math teachers expressed that they were “unsure what the administration’s vision is for PLCs”, and “Minimal guidance from the admin team; trying to understand what a PLC should accomplish”, both recorded on their Response Summary Validation. Science teachers echoed this sentiment with their Response Summary Validation statements, “No building wide emphasis to move everyone forward” and “Oftentimes lacking from the administration”. M4 prompted nodding in agreement from all participants after stating, “I

think we are in a prime time to actually adjust our focus with some help. ... we could use some help and some vision on that” in regards to adjusting their focus to what a true PLC should be.

As with the Science PLC under different interpretations of Knowledge of Curriculum, Instruction, and Assessment, the theme of trust arose again when S2 expressed an appreciation for principals “trusting that people that you hire are professionals and they are going to do it. I really prefer it that way, and I feel that’s the way we’ve been treated, for the most part” in regards to Intellectual Stimulation. While there seemed to be general agreement to this perspective among the Science participants, the concept of trust was not discussed by any other groups in relation to this principal leadership responsibility.

Professional Responsibility. Science participants viewed intellectual stimulation as primarily their responsibility, understanding that each content area may have different issues, but also as professionals “who are very committed to knowing what the best practices are in science, and so we don’t depend on our administration to do that for us” according S1. They saw the connection between PLCs and Intellectual Stimulation, as articulated by S4, “I do think that PLCs have given us a way to visit with each other about our practices within our department and what we can do for each other and give us ideas to teach.” The Social Studies teachers made similar comments in regards to a willingness as professionals to share and learn together, and how PLCs provided that opportunity. SS2 noted,

... the ultimate goal of the PLC would be listening to colleagues who have different techniques and different ways, and can reach students in different ways than I can, and I'm always more than willing to steal ideas from other people. And to me the PLC becomes the vehicle, just sharing ideas.

Social Studies teachers also expressed frustration that their department seemed to be split, with "some that are willing to play and some that are not", as stated by SS3, connecting this concern to accountability and pondering whether it was their responsibility as PLC members or their principals' role as administrators to address this problem.

Monitor and Evaluate

Valuable. Overall, teachers described monitoring and evaluating as a positive and necessary principal responsibility that conveyed value and appreciation for the work of their PLCs. E4 expressed that monitoring and evaluating "would be the stuff that would make our PLCs better right now", particularly when combined with intellectual stimulation. M6 compared the role of principals and teachers to that of teachers and students, when stating, "As with any student, you need to assess, monitor, guide, give instruction, and provide all those things ongoing, not just once and just not a few people." In fact, the Social Studies teachers all agreed that Monitor and Evaluate was the most important responsibility, as communicated by SS1 with the statement, "ultimately the whole purpose of our PLCs is to improve our effectiveness and students' learning, the accountability, that that's happening." Teachers generally portrayed this responsibility as a way to authenticate and endorse the work of PLCs. While not directly stated, the tone of the responses indicated that teachers perceived principals who spent time monitoring and

evaluating PLCs as communicating by their actions the importance of PLCs, and this action served as an affirmation of the time and effort teachers put into PLCs.

Challenges. Teachers also discussed several challenges to the principal leadership responsibility of Monitor and Evaluate. E2 wondered whether it was too early in the process to put too much weight on monitoring and evaluating PLCs when saying, “I kind of feel like we’re too early in the process to have a lot of solid monitoring or evaluating for effectiveness.” Again teachers agreed that PLCs were not all functioning at the same level, making this principal leadership responsibility a challenge for principals to implement. Yet participants also questioned how to measure if there was a link between PLCs and student achievement, and suggested the need for monitoring and evaluating as the way to make this determination. M1 asked, “How do you tell if PLCs are affecting the students positively, negatively, or neither?” E3 expressed the same sentiment and elicited agreement from E4. Science teachers articulated frustration with a “status quo mentality” amongst the principals and staff that created a barrier to rising to a higher level of student achievement. This was a significant theme, as teachers generally agreed that PLCs were ultimately about student achievement, and the primary method of measuring progress must involve monitoring and evaluating the impact of PLCs.

Guidance/Goals. Math, Science and Social Studies teachers all connected monitoring and evaluating back to the need for guidance and goals. M6 addressed the importance of monitoring PLCs and the perception that such monitoring was currently lacking in the statement, “right now, I don’t feel that they’re monitored or they don’t

have a grasp on what's going on in the PLCs, in all of them ... Granted, they can't be at every meeting, but there needs to be guidance." S1 and S4 also expressed a need for school wide goals as a necessary step before monitoring, or else teachers were "not sure what they would be monitoring." All three Social Studies participants emphasized a need for objectives and guidance from their principals, which SS2 communicated as follows,

My understanding of PLC is that it's modeled different from the traditional superintendent to principal to department chair to department. It needs to be of a collection of equals who are sharing. But, even so, I would suggest there needs to be, the administration's role is to provide some guidance.

Every teacher focus group interview discussed the weekly PLC reports as an ineffective tool for monitoring and evaluating PLCs, particularly in regards to the current lack of response from principals to what teachers reported. As M1 emphasized, "And those forms aren't effective. Whenever I turn them in I never get any feedback. I'm sure our whole group never gets any feedback on them." M6 and M2 echoed "No" to this assertion. S4 expressed frustration that no action came out of the weekly PLC reports when stating, "when we write down ideas of change, they just stay on the paper and they never come about", supporting the Response Summary Validation, "Some aspects of implementation are missing; only conversations are present, and nothing happens." SS2 clarified that just completing the reports was not enough when sharing, "We give a quick evaluation each week, each Wednesday morning, but it seems to me that it needs to be more than a few sentences about what is done in the hour long PLC." M4 suggested an evaluation of the use of the weekly PLC reports when proposing, "And maybe writing it

down on a piece of paper is not the best, but maybe brainstorming a better way of disseminating information, PLC information”, to which M2 agreed.

Flexibility

Comfortable with Dissent. Marzano, Waters, and McNulty (2005) include the ability of principals to be comfortable with dissent as part of their explanation for the principal leadership responsibility of Flexibility. All of the teacher focus group interviews discussed the aspect of flexibility that was defined as being comfortable with dissent, but not necessarily in the same way. English teachers acknowledged that the principals used previous staff development time to look at HS1 student and staff survey data to examine discrepancies, which they related to dissent, between the perceptions of staff and students regarding various survey questions, but they were not sure that any action took place beyond discussion, as E3 recalled, “we talked about it, but I don’t know exactly what’s being done with it or about it, but at least we’ve acknowledged that there’s a discrepancy”. The Math teachers were critical of the principals’ lack of leadership and involvement in PLCs, and therefore felt they could not attest to any flexibility, as noted by M4 who said, “I don’t even know that there’s been any leadership period. ... I don’t know that there’s a lot of dissent,” primarily due to the leadership coming from their PLC rather than the principals. The Science teachers connected being comfortable with dissent to growth, adaptability, and change, but were up front in their concern that some principals were more comfortable with the status quo than with change, an example of the lack of flexibility on the part of the principals. As S2 shared,

Part of that question that deals with dissent. I am not sure how adaptable the administration is ... it's easier if things are okay to stay kind of the status quo and that may be preventing growth in the leadership program to be more flexible to adapt ... we certainly have talked about in faculty council meetings things that aren't working and yet, [there] doesn't seem to be willingness or really wanting to dig deeper to find a way to change, to be flexible.

Social Studies teachers discussed the positive and negative aspects of being comfortable with dissent, noting that while it is healthy to be able to disagree on ideas, such dissent becomes unhealthy when it becomes a roadblock to progress. SS2 expressed this point of view and SS1 agreed to the statement, "Dissent is an interesting word in this sentence, in the sense of, there should be nothing wrong with disagreeing on ideas but if dissent is simply throwing roadblock, then it becomes an issue."

Different Interpretations. Overall, the different departments had varying descriptions of the principals' flexibility as well as the impact or intent of principals' flexibility. Math teachers claimed to see no leadership and therefore no flexibility. English teachers reflected that when ideas arose in their PLC, principals often did not act on those suggestions, or else responded by saying they were not feasible, such as when E2 said, "it makes it frustrating that as a PLC, you come up with some potential ideas that help students and they aren't feasible, according to the administration." Both examples of teacher perceptions regarding a lack of flexibility led to frustration for the teachers, even though the English participants acknowledged that some ideas were not implemented due to legitimate barriers outside of the principals' control. They also reported more flexibility from principals in responding to requests for help than in implementing new ideas, as found when E2 stated, "I feel like the administrators are willing to come in and

help, but I don't know if they are flexible in finding solutions that work for individual PLCs, or individual teachers." Science and English teachers shared concerns that some principals may be more theoretical than practical, which was indicated in an Response Summary Validation for the English teachers, as well as S2's concerns that "readings in educational theory really get in the way of being more open to listening to what's actually been field tested by this individual that has really worked." Science teachers gave credit to the principals for implementing PLCs, which required commitment, flexibility, and leadership, but could not provide another example of principals' flexibility. S1 described flexibility as, "to be open-minded, to be flexible, to be willing to really listen to what we want to be doing in our classrooms ... being supportive, and if they don't know how they can be supportive, listen to us and how we need them to be supportive." Science teachers not only saw flexibility as one of the most important principal leadership responsibilities moving forward, but they also connected flexibility with implementation and taking action, wanting the principals to support them in putting their ideas into practice. S1 articulated this when sharing,

... as we come up with ideas of things we would like to do differently in our department, I would really like to see the flexibility of the administration to say, 'Go for it. Let me know how it turns out,' or 'I think that's an awesome idea. How can I support you?'

Social Studies teachers expressed appreciation for the principals' responsiveness when asked for help, connecting that experience to principal flexibility. SS3 articulated this sentiment when stating, "I think they have responded when we have asked for help ... I do think they are flexible."

Consistency. The Math teachers introduced the theme of consistency when they discussed the principal leadership responsibility of flexibility. While they expressed a desire for leadership and made the connection between leadership and flexibility, they also saw the importance of consistency throughout the school in a variety of areas, including goals, expectations, teaching practices, and accountability. One example was in the area of assessment, when M2 stated, “I think we are at a point where maybe we need to look at assessment practices at every classroom level ... So we need to have a discussion, I think school-wide, on assessment practices.” Leading and monitoring this was a responsibility that they ascribed to their principals. English teachers touched on this theme when they saw too much flexibility as indicating a lack of leadership, such as when E4 referred to how too much “open-endedness” could become a problem. Social Studies teachers also discussed limits on flexibility, such as when SS2 said, “but then there needs to be the flexibility to be able to move from point to point” in regards to principals holding teachers accountable for making progress.

Ideals and Beliefs

Vision. When initially asked how the responsibility of Ideals and Beliefs contributed to the functioning of their PLCs, the most common response was that the teachers could not articulate the beliefs of the principals. In their Response Summary Validations, three of the four teacher groups addressed principals’ shortcomings in this area. English teachers stated, “Would like to know more about the administrations’ thoughts. What is the goal for the year? Unsure what is important to learn?” Math

teachers asked, “What are the beliefs? Student learning, but what does it look like?” Science teachers listed five significant points in their Response Summary Validation, and all five addressed the importance of having a true vision, with such statements as, “Haven’t heard the administration articulate a vision for the future; just keep things okay” and “No vision at HS1; what can be done to work toward goals?” The Social Studies teachers addressed this in a different way, talking about the strong but contradictory beliefs within their own department. SS2 agreed with SS1’s description of their PLC members as, “I feel those ideals and beliefs are very contradictory to one another”, further adding, “people who have felt they were successful in what they were doing for 20 plus years have difficulties sometimes listening to alternative viewpoints and that presents a challenge for the PLC and for the administration.” The implication appeared to be that a shared vision or common set of ideals and beliefs from the principals would help their PLC when faced with contradictory beliefs within the group. E2 articulated the connection between Ideals and Beliefs and successful PLCs as follows:

Well, I had previous experience just through talking to others and seeing in other schools how it (PLCs) worked, and I was really excited about it. And then it just, it didn’t have direction and goals and leadership. We could take it to the next level where I’ve seen it work in other schools, where it’s aligned to teaching, aligned to evaluation. It’s just not happening here.

Different Levels of PLC Functioning. Here again, the theme that PLCs were functioning at different levels arose. English teachers agreed in their Response Summary Validation that, “Some PLCs are working and some are not.” Math teachers concurred that “Everyone is not on the same page” in their Response Summary Validation. In fact,

M2 expressed concern about the PLC being “stagnant”, while M1 reflected on the PLC being in a “rut”, even though most of the Math participants self-assessed their PLC functioning as rather high. The Science teachers saw their desire to rise to a “higher level” being in direct contradiction with the principals, who they described as content with the “status quo”. SS1 and SS2 agreed that they were “a group very convicted in our beliefs,” but that those beliefs “are very contradictory to one another”, which created significant challenges for the functioning of their PLCs.

Most Important. English, Math and Science teachers rated Ideals and Beliefs as the most important, while Social Studies ranked it second behind Monitor and Evaluate. It was significant to note that comments related to mission, vision, goals, and the beliefs of the principals occurred in almost every question asked in the focus group interviews. This principal leadership responsibility was described as providing purpose to all of the other responsibilities and as necessary to lay the foundation for the successful implementation of PLCs. As E3 expressed,

To me it kind of works backwards and it’s weird because that’s where I think we have the biggest gap. If you don’t have a clear ideal or belief, all of the other stuff you’re doing, really, it’s not consistent. Hopefully if you have a clear idea of what you want to do, then the flexibility will come next, will make the flexibility in the schedule or whatever it is, to make that happen. Then you can monitor and evaluate how things are going, and maybe magically knowledge of curriculum, instruction, and assessment, and intellectual stimulation will happen. But I really think it starts with the ideals and beliefs.

Support. The teachers shared freely regarding what they thought they needed from their principals in the responsibility of Ideals and Beliefs to support them in their PLCs.

S2 made the case for “a real mission statement that deals with knowledge and learning and the importance of that.” While E4 acknowledged getting positive principal response from the Weekly PLC Reports early on, E1 declared, “If we wanted any response we had to have a member actually go see the administrator face to face in order to have any type of response,” especially as time went on. This was also reflected in the English Response Summary Validation with “Needs of the PLCs are written down; however, the administration does not respond,” and “Minimal response from the admin team”. In fact, two out of their four Response Summary Validation statements covered the lack of response from the principals. SS2 relayed, “the administration’s role is to provide some guidance.” The six Math participants spent most of their focus group interview conversation on this principal leadership responsibility. M6 emphasized the need for working together with a “we” mindset that included students, parents, teachers, and principals to improve student success. M1 suggested that principals’ ideals and beliefs be “communicated consistently and repeatedly.” M2 and M6 expressed a desire for more “guidance” from principals, while M1 called for actions that they could see as “demonstrating” principals’ ideals and beliefs. M6 also called for “training on how to ... cooperatively do that” in regards to the work of a PLC on assessments. The Math teachers expressed their own beliefs as well, particularly in regards to remediation, attendance, and Response to Intervention, ideas that they wanted the principals to support. M4 summed up the need for this principal responsibility when stating,

In my opinion, the last one is the most important. If you have a strong belief system, then you’re actually going to do something about it. And communicate that belief system well, and then to me, it’s a beacon everyone can head towards. All the rest can fall into place but, I would just

like it, I would just like one thing, or three at the most, but just one thing that okay, we all strongly believe in this, and we're going to go in that direction.

Evidence of PLC Understanding. While each group was openly critical in what they described as a lack of ideals and beliefs on the part of the principals, there were also several responses that relayed specific principal beliefs the teachers were able to articulate. M2 and M4 both agreed that the second and third critical questions of a PLC, how will we know if students have learned and what will we do if they don't, were frequently communicated by the principals as important goals for PLCs. M5 recalled a school-wide emphasis over the past few years on rigor, relevance, and relationships as being consistently promoted by the principals. And while Math teachers agreed in their Response Summary Validation that PLC beliefs were focused on student learning, they asked, "What does that look like?" M1 recalled the principals sharing their pledge at the beginning of the year, but felt that was not sufficient to convey true ideals and beliefs by saying,

That has to be something that's communicated consistently and repeatedly. You don't just say, here's my pledge at the beginning of the year and then, like are we going to remember that and really believe that unless you come around and you're demonstrating that to us, that you're dropping in and you are saying, 'Are you guys working on this? I just think this is important to your group or the school in general.'

Even though teachers provided examples of principals' ideals and beliefs, they still saw this as an area of both significant weakness and extreme importance to the success of their PLCs.

Principals' Description of the Influence of
Leadership Responsibilities on PLCs

In their focus group interview, principals were asked to describe how they believed the five principal leadership responsibilities that are the focus of this study contributed to the current functioning of PLCs at HS1 over the past two years. Later in the interview, principals were asked to share their perspectives as to which of the principal leadership responsibilities were needed most at this time and in the near future to improve the functioning of PLCs. The results are reported here and organized by responsibility.

Knowledge of Curriculum,
Instruction, and Assessment

Most Important. The principal leadership responsibility of Knowledge of Curriculum, Instruction, and Assessment is the area that principals saw as most important and identified as their highest area of concern for PLCs, particularly in regards to the implementation of Common Core. When asked what their PLCs needed the most, the entire Response Summary Validation section for the principals focused entirely on Knowledge of Curriculum, Instruction, and Assessment. There was general agreement that this was a weakness for the principals, due in part to the size of the staff, various grade levels, and numerous curricular areas. P2 started the interview by saying, "Well, it is my belief, my opinion, that probably knowledge of curriculum, instruction, and assessment is the area that probably we're weakest at right now", a statement with which P1 and P3 nodded in agreement. Despite this acknowledged weakness, they also saw this

area as important to an agreed-upon viable curriculum and common formative assessments, both of which are intrinsic to the four critical questions of PLCs. P2 described this responsibility as, “that’s why we are doing it ... My question is how knowledgeable of the curriculum regarding best teaching practices, I think that’s probably the most important for me”, to which P3 agreed and added, “I see the knowledge of instruction, I think that encompasses everything of the whole PLC.”

Different Levels of PLC Functioning. The principals acknowledged that PLCs at HS1 were not all in the same place in terms of how well they were functioning as a PLC. As P3 stated,

I think it’s really different from department to department ... some of them are doing a great job with PLCs from what I’ve seen and are using it to teach to the same standards, the same core. I think others might be struggling with it, still in the early stages.

Principals also discussed the issue of trust, however their concerns about trust were different than those expressed by the teachers. Principals were concerned about how the level of trust between teachers impacted their level of functioning in their PLCs, whereas teachers referred to trust between the teachers and the principals. The impact of trust was first introduced by P4, and was reinforced by P2 who shared,

I agree with what participant D said, the trust factor amongst staff. I believe that in the PLC ... they’ve had oral discussions about what they think is most important and how they’ve shared their opinions on whether their students have mastered or learned, but I don’t know if I can honestly say that they have actually shared specific data with each other to validate whether the kids in their grade level have mastered it.

In this conversation, the principals focused on trust concerns between teachers rather than between principals and teachers. The principals expressed their views that

teacher-to-teacher trust was important to the PLCs' ability to make progress on a viable agreed-upon curriculum, and then to start working on formative assessments.

Intellectual Stimulation

Training. Principals described intellectual stimulation as referring to the significant opportunities provided for PLC staff development training at both the building and district level. But they also broadened this responsibility to include ongoing staff development that was meaningful and purposeful. P1 and P3 agreed with P2, who said,

We have spent a great deal of time in providing staff development as a district, and we have provided opportunities for some staff to actually go to a, say a three day workshop where it's intense, but our staff development has been hit and miss in regard to that stimulus piece, and sometimes it needs to be frequent and ongoing. And so I think that's probably an area that we have an area of improvement of providing that on-going, meaningful, purposeful staff development rather than just two or three times a year.

The principals also acknowledged a need to understand where teachers wanted more training and guidance, as when P3 asked, "Do they need more guidance, more training?" The principals' discussion on this principal leadership responsibility was rather brief, with a consensus that PLC training opportunities had been provided, and that they needed to know what their teachers required at this time in order to address this principal leadership responsibility in a more meaningful manner.

Monitor and Evaluate

Challenges. The principal leadership responsibility of Monitor and Evaluate generated the most conversation of all of the principal leadership responsibilities during

the principals' focus group interview. Challenges in this area for the principals included the reality of five administrators supervising 95 teachers participating in PLCs, acknowledgement that PLCs were functioning at different levels, supporting teachers to share and use data, expecting progress on formative assessments, and how to respond to those who were struggling to do the "right work" of a PLC.

An additional challenge discussed was the reality that students were in the building during PLC time. This meant some of the principals were needed for student supervision and therefore could not regularly visit PLCs. P2 shared a desire "for us to have a schedule where all stakeholders had the opportunity to be involved", a statement with which all principals agreed. This overlapped with the concern for PLCs functioning at different levels, with P2 accepting responsibility for this when stating,

From my observations, everybody's at different levels, different places. Some departments are very, very involved, very interactive, whereas others, they're focusing on things that have little impact on instruction or student achievement, and I think largely due to the lack of monitoring and support that we've been able to provide.

Valuable. Principals agreed that it was their goal to support teachers to be successful in PLCs, and the principal leadership responsibility of Monitor and Evaluate could be an appropriate way to accomplish that. As P2 expressed, "You want everybody to be contributing members to the PLC ... so I think our role as administrators is to help those non-contributing members to become contributing members within their group," to which PC agreed.

The principals referenced the Weekly PLC Reports as a primary source of monitoring and evaluating the effectiveness of PLCs. This was mentioned briefly as a

statement of fact, with no discussion as to the effectiveness of this report other than P2 declaring, “I enjoy reading their write-ups.”

Flexibility

Highest Rating/Comfortable with Dissent. The principals rated themselves the highest in the responsibility of Flexibility. In their Response Summary Validation, the principals started by stating, “Comfortable with dissent – admin and staff in different places in regards to levels of training and background”, and later on added, “Rate admin team highest here”. P2 said, “I would probably rank highest on flexibility. I think we’ve been very flexible over the last two years, allowing the departments to massage, discuss, and try different things.” The principals were clear in connecting their level of comfort with dissent to an understanding that PLCs are not all functioning at the same level, as reflected in the Response Summary Validation, “Wide range of teachers”, and “Some departments are stronger than others.” P1 connected this flexibility with trust, stating,

And maybe the process is that the first couple years are more about trust building, and after that you start working on results. You know, you do have to have that trust in place before you can move forward, and that’s hard to do.

Trust was important enough for the principals to list it in their Response Summary Validation as, “Trust has to come first.”

Change. The theme of change was strongly connected to flexibility in the principals’ responses. They agreed that “Change is a process, not an event” in their Response Summary Validation. The principals acknowledged how difficult change could

be, as seen in P3's comment, "they've taught the same way for so long, they have a hard time changing the way they teach to get to that place, and I think that's a barrier maybe for some departments, or some individuals, being flexible enough to change the way you do business."

Ideals and Beliefs

Beliefs. When it came to discussing Ideals and Beliefs, the principals were able to clearly articulate their beliefs as an administrative team. In their Response Summary Validation, they listed "serve, provide leadership, support staff in PLCs." In regards to their mission, they all agreed, "It's about the students." They pointed to the district level emphasis of providing PLC training for professional development over the past few years as evidence of a consistent belief in the importance of PLCs. P1 articulated this belief with,

I think as a district, we really have pushed that PLCs are important, you know, they've geared all of our professional learning opportunities toward PLCs, they've offered training, even out of state at one point to try to get people on board. So I think that message has been consistent. ... So I think that the belief is there, that the commitment is there, we rarely interrupt that PLC time on Wednesday mornings so teachers are consistently afforded the opportunity to work in the PLCs. So I think that's been communicated.

Support. The principals also connected Ideals and Beliefs with supporting teachers. P2 said,

Our focus as an admin team needs to be, how do we better serve, how do we provide leadership, and I mean all five of us, to be able to provide that leadership that I think they need because, I mentioned it earlier, it can't be hit and miss. If teachers, if they don't have the support behind them

ongoing, then it's going to be really difficult for us to provide the support that they need.

While there was not a lot of discussion on this principal leadership responsibility, what was stated was affirmed by all of the participants. Principals shared the perspective that the beliefs of the district and themselves had been well communicated in an ongoing manner to teachers, particularly in regards to the importance of PLCs as a way to improve student learning. P3 communicated the belief that this was the principal leadership responsibility where the principals were strongest, by saying, "I think we portray the importance of this, you know I think we all understand the validity of this, and I think we portray that to not only ourselves but ... all of the teachers that we work with."

Points of Convergence and Divergence

Focus group interview participants appeared to be open and honest in what they shared. Responses were in depth with examples provided to explain and support the comments shared. While praise and positive feedback were given, teachers readily disclosed areas of frustration and concern, and principals acknowledged areas for improvement as well as perceived strengths. All participants contributed to the discussion.

Most Important: First Two Years of PLC Implementation

In their focus group interviews, teachers and principals were asked which principal leadership responsibilities they would describe as most important over the last

two years. Table 2 illustrates the principal leadership responsibilities identified as most important for each group.

Table 2. Most Important Responsibilities During the First Two Years

Focus Group	Most Important Responsibility in the First Two Years
English	Ideals and Beliefs first; ultimately Knowledge of Curriculum, Instruction, and Assessment
Math	Ideals and Beliefs first; then Monitor and Evaluate
Science	Ideals and Beliefs
Social Studies	Monitor and Evaluate first; Ideals and Beliefs also important
Principals	Knowledge of Curriculum, Instruction, and Assessment

English teachers identified Ideals and Beliefs as most important, with Knowledge of Curriculum, Instruction, and Assessment as the end goal. One of the English Response Summary Validations listed, “Lack of direction, need more leadership, goals, aligned teaching and evaluations.” There was a clear consensus with the Math teachers that Ideals and Beliefs needed to come first, but once the principals identified such beliefs, those beliefs should be acted upon and communicated to teachers, as reflected in M4’s statement, “If you have a strong belief system, then you’re actually going to do something about it.” Math teachers added that Monitor and Evaluate was also important, and that principals should not rely on the Weekly PLC Reports but rather attend PLCs to understand what they were doing and what they needed in order to provide that guidance. Science teachers also reached consensus on a desire for a mission and vision beyond mediocrity, with goals that kept the focus on the learning process and teaching, a reflection on the principal leadership responsibility of Ideals and Beliefs. S2 relayed this concern when saying, “We can get so focused on graduation and graduating on time ... it fosters mediocrity as opposed to excellence ... I don’t think that should be the goal.”

Social Studies teachers agreed that Ideals and Beliefs needed to be connected to learning with an emphasis on respect, the latter being connected to all five principal leadership responsibilities, but felt that what their PLC needed most of all was Monitor and Evaluate due to the discord in their department. SS1 succinctly said regarding what was most important, “I would say monitoring and evaluating,” but agreed that was primarily due to the problems they have experienced in their PLC. Principals identified Knowledge of Curriculum, Instruction, and Assessment as the most important, primarily as a foundation for PLCs to address a viable and agreed-upon curriculum. According to P2, “That’s why we are doing it”, a statement which P3 supported. The principals then agreed that Monitor and Evaluate was important in order to bring teachers along who were struggling in their understanding and implementation of PLCs because “ultimately the kids are the ones that miss out because it’s not about the adults, it’s about learning, it’s about students” as stated by P2.

It is significant to note that each group had unique reasons for selecting which principal leadership responsibility was most important. While every teacher group included Ideals and Beliefs somewhere in their response, the principals did not include it at all. Yet the teachers’ emphasis on the importance of Ideals and Beliefs did not mean that this was an area of strength for the principals. In fact, the teachers clearly called for leadership and goals to keep them moving in the same direction. In regards to how PLCs worked at HS1, E2 flatly stated, “it didn’t have any direction.” The principals emphasized Knowledge of Curriculum, Instruction, and Assessment, but the only teacher group to even mention this responsibility was English, and those teachers described it as their end

goal, which implied importance but also indicated this was a responsibility dependent upon the other items to be present first. Math, Social Studies, and principals all included Monitor and Evaluate, with Social Studies declaring it most important and Math and principals seeing it as secondary to other principal leadership responsibilities.

Although this focus group interview question asked teachers which principal leadership responsibilities were most important during the first two years of PLC implementation at HS1, much of the discussion in each department focused on what they needed but did not receive from principals. Math again affirmed their concern that the “Weekly reports don’t work” in their Response Summary Validation. M6 connected Ideals and Beliefs to guidance by stating,

I know that there should be some sort of standard, there should be some sort of expectations, there should be some sort of goals that’s provided to us so that we have guidance in our own meetings ... there needs to be guidance.

S3 echoed the importance of Ideals and Beliefs when sharing,

If we had a mission and a goal for the future, where we are going. If we had a really clear vision, some of this other stuff would fall into place, aligning with the vision of the school and a really strong mission statement.

Despite an emphasis on what was missing, E4 summed up an optimistic perspective moving ahead with, “I look forward to the future”, which was supported by E2 who said, “I feel in the future, with direction and goals and leadership, we could take it to the next level where I’ve seen it work in other schools.”

Most Important: PLCs Now and in the Future

In their focus group interviews, teachers and principals were asked which principal leadership responsibilities they would describe as the ones they needed most now and into the future. Table 3 illustrates the responsibilities identified as most important for each group at this time and moving into the future.

Table 3. Most Important Responsibilities Now and in the Future

Focus Group	Most Important Now and In the Future
English	Ideals and Beliefs; Intellectual Stimulation; Flexibility; Monitor and Evaluate
Math	Ideals and Beliefs; Monitor and Evaluate; Intellectual Simulation
Science	Flexibility; Ideals and Beliefs; Knowledge of Curriculum, Instruction, and Assessment; Monitor and Evaluate
Social Studies	Monitor and Evaluate
Principals	Knowledge of Curriculum, Instruction, and Assessment; Monitor and Evaluate

Three of the four English teachers identified Ideals and Beliefs as most important, especially at the beginning of the school year, with E1 adding Flexibility and E4 including Intellectual Stimulation and Monitor and Evaluate. The Response Summary Validation for English listed Intellectual Stimulation twice but did not include Knowledge of Curriculum, Instruction, and Assessment at all. Math teachers strongly emphasized the need for Ideals and Beliefs to provide direction for PLCs, but they also included Monitoring and Evaluating, Intellectual Stimulation, and Knowledge in their Response Summary Validation, with the latter referring to knowing what PLCs needed rather than curriculum. While Math teachers did not discuss Flexibility at all, Science teachers achieved a clear consensus that Flexibility is what they needed most, followed by Ideals and Beliefs. They also discussed needing Knowledge of Curriculum,

Instruction, and Assessment prior to Monitor and Evaluate, otherwise as S4 stated, “What are you monitoring and evaluating if we don’t know what we’re doing and what’s coming?” in regards to the principals’ knowledge of the Next Generation Science Standards. The Science teachers did not discuss Intellectual Stimulation at all. Social Studies discussed only Monitor and Evaluate in order to promote collaboration and prevent PLC members from “holding everyone back” as reflected in their Response Summary Validation. Principals still saw Knowledge of Curriculum, Instruction, and Assessment as the most needed principal leadership responsibility moving forward, especially in regards to a “common agreed-upon curriculum” according to P2. P3 added a reference to Monitor and Evaluate by saying, “And holding teachers accountable for what they are teaching and what kid are learning. I think that’s a fear for some.”

The responses from each group as to what is needed most now and in the future were not the same. English, Math, and Science each identified more than one principal leadership responsibility as needed, but the responsibilities were not in the same order of importance, let alone the same responsibilities. Social Studies only discussed the single responsibility of Monitor and Evaluate. Principals spent most of their discussion on one principal leadership responsibility, Knowledge of Curriculum, Instruction, and Assessment, but that was not the first choice of any of the teacher groups. Intellectual Stimulation was discussed by teachers as important to help address gaps in teachers’ understanding of PLCs, such as when M6 said, “There’s a lack of understanding how it needs to be implemented.” The tone of the teachers’ responses to the question of what they needed now and in the future was more positively focused on what principals could

do, as opposed to what was missing from principals. Every teacher comment reflected upon one or more principal leadership responsibilities and how principals could use those to support PLC success.

Document Analysis Results

A document analysis was conducted to explore the process through which PLCs communicated with principals in regards to their needs and concerns. Throughout the two school years under study at HS1, PLC members completed Weekly PLC Reports that followed a generalized format. These forms were submitted to the principals on a weekly basis for two purposes: to provide communication between the PLCs and the principals, and as a means of holding PLCs accountable for meeting and reporting the activities taking place in each PLC. The single question from the Weekly PLC Report that was analyzed was, “Do you have any concerns or needs for our administrative team?”

Responses to this question were analyzed by department and organized into nine topics. The weeks for which a report was not submitted were assigned to the topic No Report. Another topic was No Needs, which reflected a variety of responses such as “No Needs”, “Nothing”, “Not at this time”, “Not Applicable”, or other similar expressions that indicated no concerns or needs for the principals. The five principal leadership responsibilities were each designated as a topic. For example, the statement “We need to see how our district is impacted by the Next Generation Science Standards” was written by the Science PLC on February 6, 2013 and was assigned to the topic Knowledge of Curriculum, Instruction, and Assessment. When the Social Studies PLC wrote, “Support for training” on October 23, 2013 it was assigned to the topic Intellectual Stimulation.

The Math PLC's communication, "Team SMART Goal-Setting Plan submitted", on September 4, 2013 was designated as belonging to the topic Monitor and Evaluate. There was only one response that was related to the topic of Flexibility and it as from the English PLC on January 22, 2014, which stated,

The overall high school system is not optimal for students, and we have no alternatives. While Transitions is an option, its effectiveness I smutted because not many people are able to attend. Many students have no other place to go that would improve their learning, and they simply do not learn in this type of setting.

The Social Studies PLCs comment on November 27, 2012 was listed under the topic Ideals and Beliefs as it asked, "What are we doing and why? We have an attendance issue (problem) in our opinion. What is our philosophy as a department and school?"

After comments pertaining to the five responsibilities, No Needs, and No Report were allocated to their corresponding topic, the few remaining responses were analyzed. These statements fell into two groups that were titled as the topic Management or the topic Student Related. An example of a PLC request for general management would be, "Barcodes for Chromebooks for checking them in and out" from the English PLC report dated September 4, 2013. The Social Studies PLC report on September 19, 2012 contained the comment, "Can we send special needs students for help on reading/writing tests?" and was assigned to the topic Student Related.

Once the responses on the Weekly PLC Reports were assigned to topics, the responses per topic were tallied by department and by year. Table 4 displays the results for Year 1. As you can see, the topic with the highest number of responses was No Needs, which had more than twice as many comments as the next topic of Ideals and

Beliefs. There were no remarks under Flexibility, and only 2 under Intellectual Stimulation for the entire year. It is also easy to compare departments and topics for frequency. For example, the Math PLC only expressed No Needs 4 times in Year 1, while the other three departments expressed No Needs from 18 to 26 times each.

Table 4. Year 1 Weekly PLC Reports: Needs and Concerns for Principals

Topics	English	Math	Science	Social Studies	Total
Knowledge of Curriculum, Instruction, and Assessment	5	8	6	3	22
Intellectual Stimulation	0	1	1	0	2
Monitor and Evaluate	5	11	8	4	28
Flexibility	0	0	0	0	0
Ideals and Beliefs	4	11	13	6	34
No Report	1	11	4	4	20
No Needs	26	4	23	18	71
Management	2	2	0	2	6
Student Related	3	2	0	4	9

Table 5 displays the results for Year 2. No Needs was again the topic with the greatest number of responses at 86, even higher than the 71 in Year 1. Some items remained similar to Year 1, such as the minimal comments assigned to the topics Intellectual Stimulation or Flexibility, while responses related to the other three principal leadership responsibilities all decreased. The number of times there was No Report from a PLC increased from 20 in Year 1 to 28 in Year 2.

Table 5. Year 2 Weekly PLC Reports: Needs and Concerns for Principals

Topics	English	Math	Science	Social Studies	Total
Knowledge of Curriculum, Instruction, and Assessment	5	5	3	1	14
Intellectual Stimulation	0	0	0	1	1
Monitor and Evaluate	4	3	12	1	20
Flexibility	1	0	0	0	1
Ideals and Beliefs	5	9	3	0	17
No Report	8	11	1	8	28
No Needs	24	12	29	21	86
Management	4	2	3	0	9
Student Related	2	1	0	0	3

The previous tables allow for an examination of changes across the first two years of PLC implementation at HS1, as well as between departments. Table 6 displays the combined data from Year 1 and Year 2 to show the total number of times teachers reported to principals on the identified topics in their Weekly PLC Reports.

Table 6. Two-Year Total Weekly PLC Reports: Needs and Concerns for Principals

Theme	English	Math	Science	Social Studies	Total
Knowledge of Curriculum, Instruction and Assessment	10	13	9	4	36
Intellectual Stimulation	0	1	1	0	2
Monitor and Evaluate	9	14	20	5	48
Flexibility	1	0	0	0	1
Ideals and Beliefs	9	20	16	6	51
No Report	9	22	5	12	48
No Needs	50	16	52	39	157
Management	6	4	3	2	15
Student Related	5	3	0	4	12

The most significant result is the number of times PLCs expressed that they had no needs or concerns from their principals. In the focus group interviews, all departments consistently verbalized a variety of needs. It is clear that a statement of No Needs on the Weekly PLC Report is not a true indication that a PLC does not have any needs for their principals. In addition, the number of times No Report was submitted increased in Year 2, even though some departments were more consistent in turning in their reports than others.

In looking at the five principal leadership responsibilities, the document analysis supports the teachers' statements in their focus group interviews. Ideals and Beliefs had the most responses, with Monitor and Evaluate a close second. It is interesting to note that, while the teachers did not overall identify Knowledge of Curriculum, Instruction, and Assessment as either the most important or most needed principal leadership responsibilities in the focus group interviews, the principals rated it as very important. From the Weekly PLC Reports, the topic Knowledge of Curriculum, Instruction, and Assessment was indeed third out of the five principal leadership responsibilities, which may explain the basis for the principals' rating on that responsibility. It is also significant to note that Science reported Flexibility as the most important principal leadership responsibility from principals moving forward, yet their PLC never had a comment on their report under the responsibility of Flexibility.

Collective Efficacy Results

Goddard and Hoy's (2005) Collective Efficacy Scale, or CE-SCALE, was first administered at HS1 in November of 2010. The results of the 2010 CE-SCALE were

disaggregated by department (subgroup) as well as examined overall for the entire school (population). These results provided a baseline measure of collective efficacy prior to the staff at HS1 being introduced to the concept of PLCs at a district level training in January of 2011. The CE-SCALE was administered again at HS1 in November of 2012, three months into PLC implementation and after a year and a half of PLC preparation and staff development. In November of 2013, the CE-SCALE was again administered to the staff at HS1, three months into the second year of PLC implementation.

Collective efficacy data was not examined in this study for statistical significance over time or between subgroups. Rather, this archival data was used primarily to describe the PLCs, which are organized by department. This data allowed the PLCs to be situated in terms of how they compared with the greater school population in terms of collective efficacy, as well as to further the researcher's understanding of HS1 teacher perceptions, beliefs, and collaborative functioning in their PLCs. It was also interesting to note changes in collective efficacy over time as PLCs were implemented at HS1.

Descriptive statistics for the CE-SCALE data from 2010, 2012, and 2013 were calculated and are presented in Table 7 for the population HS1 and the subgroups English, Math, Science, and Social Studies.

Table 7. Descriptive Statistics for HS1 Collective Efficacy Overall and By Department

	2010		2012		2013	
	M	SD	M	SD	M	SD
English	3.74	0.58	3.99	0.54	4.03	0.56
Math	4.28	0.54	4.27	0.41	4.18	0.33
Science	4.04	0.57	4.11	0.24	3.95	0.38
Social Studies	4.11	0.35	4.12	0.40	4.03	0.32
HS1	4.06	0.57	4.09	0.50	4.03	0.49

Overall, collective efficacy at HS1 appears to have increased slightly as the principals and staff prepared to implement PLCs and through the first three months of PLC implementation. However, three months into the second year of PLC implementation, collective efficacy for HS1 declined to a level lower than prior to the introduction of PLCs. English is the only department to see a sustained increase in collective efficacy over time as PLCs were implemented. Even though collective efficacy for the Math department declined over time, their ending CE-SCALE score was still higher than any other group.

During the teacher focus group interviews, participants were asked to rate the current functioning of their PLC on a six-point scale, which is the same range used for the CE-SCALE. While standard deviations were not calculated for these scores, the minimum, maximum and mean scores for each department are listed in Table 8. No discernable pattern or trend is evident when comparing the self-described level of PLC functioning with the collective efficacy scores for the departments in this study.

Table 8. Self-Assessed Level of PLC Functioning

Department	Mean	Minimum	Maximum
English	3.56	1.00	6.00
Math	3.58	2.00	5.50
Science	5.38	5.00	5.50
Social Studies	2.33	2.00	3.00

Points of Convergence

Throughout the focus group interviews and the document analysis, the results indicate several areas in which teachers agreed with one another, as well as when perspectives were shared between principals and teachers. These areas centered on the

themes of support, a consensus that PLCs were functioning at different levels, different interpretations of principal leadership responsibilities by PLCs, and most of all the responsibility of Ideals and Beliefs as reflected in themes of guidance, vision, and beliefs. Table 9 shows the themes from the focus group interviews. Items in bold are reflective of the areas of convergence under the same principal leadership responsibility for teachers and principals. Items in italics are reflective of areas of convergence listed under different principal leadership responsibilities whether for teachers or principals or both.

Table 9. Themes from Teacher and Principal Focus Group Interviews

PLR	Teachers	Principals
KCIA	<i>Support</i> <i>Guidance</i> <i>Different Interpretations</i>	Most Important <i>Different Levels of PLC Functioning</i>
IS	Training <i>Vision</i> Professional Responsibility	Training
Mon/Eval	Valuable Challenges <i>Guidance/Goals</i>	Challenges Valuable
Flexibility	Comfortable with Dissent <i>Different Interpretations</i> Consistency	Highest Rating/ Comfort with Dissent Change
I/B	Vision Most Important <i>Different Levels of PLC Functioning</i> Support	Beliefs Support

Teachers in every PLC expressed a desire for ongoing support from their principals. This support was mentioned in some way under almost every principal leadership responsibility. Principals could support teachers by understanding their curriculum, through providing opportunities for professional development, by caring

enough to participate in their PLCs and provide guidance and feedback, in listening and providing encouragement for the implementation of new ideas, and most of all through establishing a mission and vision that is communicated and acted upon school wide.

Teachers and principals acknowledged that PLCs were not all functioning at the same level. This assertion was supported by the responses in the focus group interviews as well as the data from the document analysis and the CE-SCALE. Even within PLCs, teachers did not always self-assess their PLC functioning the same, although they were consistent in acknowledging that there were variations in PLC understanding and implementation.

The theme of trust was discussed by the principals as well as by some of the PLC departments. While this may be ascribed to the responsibility of Ideals and Beliefs, it was clear that participants felt it was necessary to build trust in order for PLCs to be successful. Whether the trust was between teachers within a PLC or between teachers and principals, it was perceived as playing a positive role in PLC functioning.

Every group also discussed the Weekly PLC Reports. From the document analysis of the topics teachers shared with principals under the questions, “Do you have any concerns or needs for our administrative team?”, teachers frequently expressed frustration that principals did not always read and respond in a timely manner to their written concerns and needs. The fact that every group, both teachers and principals, mentioned these reports supported their use in the document analysis as an important part in understanding how principals can support teachers in their PLCs.

Last but certainly not least is the theme of Ideals and Beliefs. This principal leadership responsibility was mentioned in every PLC as important. It was also frequently discussed under other principal leadership responsibilities with such related terms as mission, vision, goals, expectations, objectives, and being on the same page. This responsibility was also often connected to leadership and guidance, and described as a way to help struggling PLCs.

Points of Divergence

While many areas of agreement arose during this research study, there were also a number of areas of divergence. In fact, some of the areas for agreement above started as such, but through further discussion in the focus group interviews differences in terms of their interpretation, application, or need became evident. The four primary findings here are: understandings and descriptions of support, the effectiveness of the Weekly PLC Reports, teacher understanding of PLCs, and the differences between how teachers and principals described the principal leadership responsibilities.

All of the teachers expressed a desire for support, yet they did not all describe the support they needed in the same way. Teachers and principals used the word “support” during the focus group interviews, as well as in the document analysis of the Weekly PLC Reports. Math teachers were adamant in their need for principal’s time and presence at PLCs, as well as expecting principals to have a better understanding of their curriculum and what takes place in the classroom. Science teachers were more concerned with the flexibility of principals, which they defined in terms of being supportive of their new ideas. The Science teachers were concerned over what they perceived as a “status

quo” mentality in the principals, as they sought support and leadership to aim higher in setting goals for teaching and learning. Both English and Social Studies were overall pleased to have principals stop by upon request to answer specific questions or needs. Some PLCs saw support in Flexibility, while others related Monitor and Evaluate to providing support in their PLC.

Teachers and principals also described the effectiveness of the Weekly PLC Reports differently. The principals saw the reports as a tool for accountability to help them Monitor and Evaluate PLCs, and expressed enjoyment in reading them. Teachers consistently described the reports as an ineffective means of communicating with principals. This was primarily due to their perception that the reports were not read in a timely manner, if at all, and that principals rarely responded to requests written on them. This may be a factor in the increase in the number of times a PLC report was not submitted from Year 1 to Year 2. This displays a significant disconnect in the perceptions of principals and teachers in regards to how this report is being utilized.

Another area of contrast can be found in regards to teachers’ understanding of PLCs. During the focus group interviews, teachers often described being unsure as to the principals’ goals related to PLCs, or even of understanding what a true PLC was. Yet there were numerous statements made throughout the interviews when teachers used solid PLC concepts to describe either the principal leadership responsibilities or the functioning of their PLC. For example, SS1 was able to state the fundamental goal of PLCs when stating, “Ultimately the whole purpose of our PLCs is to improve our effectiveness and students’ learning.” In addition, all staff knew the four critical questions

of a PLC, and even had on their Weekly PLC Reports a framework for what was expected during PLC time, but they did not always see this in light of a school-wide goal or even in supporting their own understanding of PLCs. It is possible that some teachers did not recognize concepts and beliefs regarding PLCs as ones that had already been internalized, as they were able to use them without ascribing them to being part of their PLC training or goals.

Although there was overall agreement as to the importance of the principal leadership responsibilities and their role in supporting PLCs, it is significant to note that each department described the impact of principal leadership responsibilities on their PLCs in different ways. For example, the Science PLC felt that a lack of principal presence during their PLC time conveyed a sense of trust in their ability to function as professionals and take care of business, noting that if there was a problem a principal would let them know. However, the Math PLC was critical of the lack of principal presence during their PLC time, interpreting this as a reflection of an absence of importance and little investment principals had in what they were doing. Both English and Social Studies felt like the principals responded well to their requests for assistance and presence. Between teachers and principals, the former spent the most time discussing Ideals and Beliefs, which was the least addressed by the principals, the latter relaying they felt they were all on the same page and it had been clearly communicated to the staff.

Summary

Principal leadership responsibilities influence the functioning of PLCs in a variety of ways. Through the analysis of teacher and principal focus group interview data, as well as a document analysis of Weekly PLC Reports that teachers submitted to principals, the results of this study show that there are some similarities in how teachers and principals describe the influence of principal leadership responsibilities on PLCs, but there are also important differences.

Knowledge of Curriculum, Instruction, and Assessment is a central component of the four critical questions of a PLC. Principals in this study described this principal leadership responsibility as the most important, while most teachers expressed that, at the high school level, they were primarily responsible for understanding their curriculum, yet they still wanted their principals to know enough to be supportive of what they were doing in their classrooms and PLCs. Intellectual Stimulation is crucial to training and professional development in PLCs. Both teachers and principals in this study agreed that the foundational PLC training was strong, and principals expressed a desire to identify what teachers' need at this time and provide further training. Monitor and Evaluate impacts PLCs through supporting teachers, whether in a high functioning or struggling PLC, by participating and offering feedback for improvement as well as holding teachers accountable for their work during PLC time. Both teachers and principals described the practice of monitoring in a helpful light and could distinguish it from a strictly evaluative lens. Flexibility is important to PLCs, as no two PLCs function at the exact same level, and therefore principals need to recognize and support PLCs where they are and in ways

that are meaningful and aligned with each PLCs views of support. While principals in this study saw this as their greatest area of strength, teachers briefly discussed the importance of maintaining consistency while still allowing for flexibility to meet the needs of individual PLCs. Overall, the principal leadership responsibility of Ideals and Beliefs was described by teachers as providing the foundation for PLCs to be successful. Teachers expressed the need to know and understand the mission, vision, and goals to provide guidance and ensure they were doing the right work of a PLC.

CHAPTER FIVE

DISCUSSION

Introduction

In the face of today's rapidly changing global society and era of accountability, a product of No Child Left Behind (NCLB) and federal requirements for Adequate Yearly Progress (AYP), principals look to improve student achievement through a meaningful process of continuous school improvement. This process, which includes a focus on improving both student achievement and graduation rates, is reflected in schools throughout our nation as educators strive to improve teaching and learning to positively impact student success. As in states across the country, the Montana Office of Public Instruction (OPI) requires local school districts to report standardized test results and graduation rates. In addition, schools are required to develop a comprehensive plan for improving student results in both of these areas. Through the adoption of the Graduation Matters Montana initiative, the OPI has emphasized the need for districts to meet these challenges in a targeted and deliberate manner that improves student achievement and thereby increases graduation rates.

While today's technology has made educational resources and research readily available, principals must first identify the needs of their staff in order to focus their leadership efforts on the resources that will improve teaching and learning in their buildings. The concept of Professional Learning Communities (PLCs) has been

identified as a structure in which to achieve these goals. DuFour, DuFour, Eaker & Many (2006) offer as a guiding definition that “A PLC is composed of collaborative teams whose members work *interdependently* to achieve *common goals* linked to the purpose of learning for all” (p. 3). Implementing PLC time at the high school level can provide the opportunity for teachers to work together to improve teaching and learning. By using current student data, small groups of teachers are able to analyze student performance to determine who is learning and who is not, and collaboratively design interventions and share best practices in teaching to improve student learning. The challenge for principals lies in guiding and supporting teachers in the implementation and growth of PLCs.

Purpose

Leading large high schools in a meaningful school improvement process focused on improving student achievement is a daunting but necessary responsibility for high school principals. The purpose of this study was to understand how principals can best lead teachers in the implementation of PLCs and support them through the changes that must take place in order to properly prepare students for success during and after high school. PLCs provide a structure and a focus for ongoing staff development opportunities that allows for a level of responsiveness to change that is crucial in today’s technological and interconnected world. It is the responsibility of high school principals to support and lead their staff in this journey.

Study and Methodology Overview

Marzano, Waters and McNulty (2005) identified 21 principal leadership responsibilities that are correlated to student achievement. Five of these responsibilities were selected as the research base for this study due to their association with second order change as well as their alignment with the concepts of PLCs. The five principal leadership responsibilities were: Knowledge of Curriculum, Instruction, and Assessment; Intellectual Stimulation; Monitor and Evaluate; Flexibility; and Ideals and Beliefs. A focus on principal leadership responsibilities that correlate with student achievement provides a research-based foundation to guide principals to determine how best to support their staff in PLCs. Principals must first understand how these principal leadership responsibilities impact PLC implementation and growth. Therefore, this study set out to examine how principal leadership responsibilities influence the functioning of PLCs. In order to investigate this topic, the following two questions guided this study:

1. How do teachers describe the influence of principal leadership responsibilities on PLCs?
2. How do principals describe the influence of principal leadership responsibilities on PLCs?

An embedded case study was conducted to explore how principal leadership responsibilities influence the functioning of PLCs. Focus group interviews were completed, a document analysis of Weekly PLC Reports submitted throughout the first two years of PLC implementation was completed, and archival data from the administration of the Collective Efficacy Scale was examined.

Discussion of Key Findings

Throughout the analysis of the data, specific themes emerged regarding how principal leadership responsibilities influence the functioning of PLCs. Although a great volume of data was collected, the findings are discussed here in light of how the data answered the research questions as well as the contributions to the body of literature and knowledge regarding how principals can positively impact the functioning of PLCs in their school.

Teachers' Descriptions of Principal Leadership Responsibilities

Principal Leadership Responsibilities. While most participants had previous experience with the concepts of collective efficacy and PLCs at High School 1 (HS1), the principal leadership responsibilities had not been introduced to the staff prior to the focus group interviews. Participants were able to read and understand the descriptions of the principal leadership responsibilities (Appendix H) and discuss them in response to the questions asked. It was interesting to note that each focus group was able to understand and apply the five principal leadership responsibilities to the functioning of PLCs without any apparent difficulty. There was not a single participant response that challenged the selection of the five responsibilities and their use in this discussion. This appears to support the selection of these principal leadership responsibilities as an appropriate research base for this study.

It was also interesting to note that, even though each focus group interview question was deliberately framed to ask how the principal leadership responsibilities helped PLCs, teachers often responded by exploring not only how the responsibilities helped, but also addressed what was missing or had not been done by the principals regarding specific responsibilities. This indicated an honesty and completeness in their reflections on how they viewed the principal leadership responsibilities in action, or in the lack of action. It is important for principals to note that if they ask for teacher perceptions, they should be prepared to hear not only what is working, but perhaps more important, what is not working as well. The implementation of any school improvement plan, particularly one that introduces a new concept such as PLCs, will contain both successes and struggles. While these challenges can be barriers, true progress cannot be made unless principals are able to recognize and address these issues. A “work in progress” understanding will help teachers and principals identify areas of strength as well as areas for improvement as they undertake and lead significant change.

To answer the first research question, teachers were able to understand and articulate how the five principal leadership responsibilities worked together to provide support in their PLCs. Knowledge of Curriculum, Instruction, and Assessment allowed principals to understand teachers’ work, content, and classroom practice; this background knowledge permitted principals to recognize and perhaps anticipate teachers’ strengths and needs in this area. Intellectual Stimulation that was deliberate, purposeful, ongoing, and met the needs of their PLC was described as supporting teachers in their continued professional growth. Monitor and Evaluate was portrayed as a way for principals to spend

time and make it a priority to know what PLCs were doing, to hold them accountable for their PLC work, and to redirect them as necessary to support and promote PLC development. Flexibility allowed principals to respond to the unique needs and functioning of each PLC, with the added benefit of exhibiting trust and respect for the differences across PLCs. Ideals and Beliefs was expressed as being foundational to all of the principal leadership responsibilities, as it provided a focus for the work on curriculum and instruction, supplied a direction for training and intellectual stimulation, established expectations and work that could be monitored, and set guidelines for flexible boundaries to meet the needs of each PLC.

Support. Teachers chose to use the word “support” frequently in their responses to the focus group interview questions. However, the definition for the term itself was not always clear or expressed in the same manner. Some teachers acknowledged that they felt supported by their principals when they received responses to the Weekly PLC Reports, while others saw support when principals spent time visiting them in their PLCs. Support was also connected with giving teachers’ permission to pursue their ideas, or when the principals carried those ideas forward at the district level. Communication, time, and training were all expressed as evidence of principal support, particularly when all three were ongoing and designed to meet the specific needs of teachers. Support was also frequently connected to leadership, especially when teachers spoke of the need for Ideals and Beliefs, a clear vision and common goals toward which they could all work. These goals were described as providing not only foundational but also ongoing support and guidance for the work of their PLCs. The challenge here for principals lies in the finding

that, while every PLC expressed a sincere desire for support, they did not all define the support they needed as being the same.

Leadership Behaviors. As teachers discussed the five principal leadership responsibilities, they frequently described them as behaviors. Marzano, Waters, and McNulty (2005) addressed such an interpretation. Their meta-analysis that resulted in the 21 responsibilities of a school leader examined studies “looking for specific behaviors related to principal leadership” (p. 41) that they identified as responsibilities. Teachers in this study often interpreted the principal leadership responsibilities as actions, which was noted in the Researcher’s Journal. When they described an example of a principal leadership responsibility, the depiction was consistently relayed in terms of behaviors or action steps. This is extremely important for principals to understand. Being able to theoretically comprehend or describe an educational concept is important, but if it cannot be translated into a visible behavior it loses the power to have a positive impact. Conventional wisdom acknowledges that, “Actions speak louder than words.” Evidence from this study suggests that principals who espouse beliefs or theories *and* put them into practice increase their ability to lead successfully. Teachers described these principal behaviors as building trust – trust that principals will do what they say, and trust that the vision and knowledge they promote has been both internalized and implemented. Evidence suggests that these actions must also be ongoing and consistent. In this study, teachers responded very positively to the action steps that principals took that displayed their commitment to teachers working in PLCs. Yet the residual impact of a single action did not last forever. If the action stopped, it was easy for teachers to forget or doubt the

concept or philosophy being espoused. Thus, it is clear from this study that principals need to consistently and repeatedly follow up their beliefs and expectations with behaviors that are ongoing and visible to teachers in order to see continued improvement.

Different Interpretations of Principal Responsibilities and Behaviors. Just as teachers sometimes described the principal leadership responsibilities differently, the same behavior by principals could be viewed in opposite or even contradictory ways. For example, in this study the Science teachers described the lack of principal visits to their PLC meetings as a sign of trust and confidence in their ability as professionals to stay on track and do the right work of a PLC. Yet the Math teachers interpreted the lack of visits by principals as an indication that their work was not important to the principals and therefore not worthy of their time. This same principal behavior resulted in vastly different interpretations by the PLCs. In another example, the principal leadership responsibility of Flexibility was described by one PLC as a way to allow for the individuality of PLCs, but it was also viewed as a reflection of inconsistency by another PLC. For example, if one PLC was allowed to pilot a program that included allowing students free reign to use their cell phones in the classroom, another PLC might see that as not consistently enforcing the school rules for electronic devices during class time. Such inconsistency was described as problematic for teachers in the same school.

An important implication of this finding is the need for principals to provide clear and consistent communication, especially related to ideals and beliefs. Teachers will interpret every action principals undertake, and each elucidation may not be the same. Principals can take steps to alleviate misinterpretations by being deliberate and

purposeful in their communication as to why they are, or are not, taking a specific action. This could include an explanation for the intent of their actions as well as their decisions not to act. For example, if principals explained that their lack of visits to PLCs were intended to provide teachers the opportunity to take ownership and leadership in the implementation of PLCs, teachers would have the opportunity to understand the intended trust rather than interpret the action on their own. This would allow teachers to frame the principals' behavior and the subsequent results in a manner that aligns with the intent behind the action. It is further recommended that this communication occur face to face, possibly during PLC time, to provide the opportunity to identify and address misconceptions on the part of either principals or teachers. The same is true when principals follow up on teachers' questions, concerns, or suggestions. The evidence from this study suggests that principals need to communicate with teachers regarding the action taken, or the reason for a decision not to act. Marzano, Waters and McNulty (2005) address this issue of communication as one of the 21 responsibilities of a school leader that is negatively affected when leading second order change, and the findings from this study support their assertion. The lack of such communication can create a void that will be filled, and ensuring that void is filled with accurate information is important to avoid misunderstanding and frustration.

Ideals and Beliefs. The principal leadership responsibility of Ideals and Beliefs was identified as important to all of the teachers in the focus group interviews. They expressed the need to both hear and see the mission, vision, goals, and beliefs of the principals and the school throughout the school year. Most of the PLCs considered Ideals

and Beliefs to be the most important principal leadership responsibility during the first two years of PLC implementation as well as what they needed most going forward. Even when discussing the other responsibilities, teachers frequently talked about the need for school-wide goals based on common ideals and beliefs. Other recurring terms teachers used to refer to ideals and beliefs included mission, vision, objectives, being on the same page, and guidance.

Teachers also expressed a need to know and understand the beliefs of the principals. They described Ideals and Beliefs as foundational to working collaboratively to improve teaching and learning, as well as the structure upon which all of the other principal leadership responsibilities should be established. Clear common beliefs provide a filter through which to problem solve any situation. For example, if teachers suggested a creative way to address a problem, the ability to discuss the idea in light of its alignment with the school-wide goals could assist in determining whether it was the right step to take.

The value of Ideals and Beliefs is strongly supported in theory and literature. Senge's (2006) work on teams emphasized the significance of aligning vision and purpose to focus the work of a learning community. The role of shared beliefs and common goals in creating and sustaining successful PLCs has also been researched and found to be important (Barton & Stepanek, 2012; Oliver & Hipp, 2006; DuFour, DuFour, Eaker, & Many, 2006). The Interstate School Leaders Licensure Consortium (ISLLC) standards also emphasize the principals' responsibility for creating and sustaining a vision for learning (Council of Chief State School Officers, 2008). Transformational

Leadership Theory also emphasizes the importance of mutual goals for the entire organization rather than simply individual goals (Burns, 1978; Bass & Avolio, 1990; Northouse, 2010). In addition, Bennis and Nanus (2003) address the significance of promoting a clear vision and shared meaning. The results of this study not only support those findings, but also elevate the principal leadership responsibility of Ideals and Beliefs to the level of critical in establishing a foundation upon which all of the other leadership responsibilities can be implemented to support PLC implementation and growth.

Teachers' Understanding of PLCs. It was interesting to note that, while teachers expressed concerns over a lack of a clear consensus on the beliefs and goals necessary for PLCs, they frequently made statements that articulated just such an understanding. For example, most participants were able to list and describe the four critical questions of a PLC, as well as the belief that the purpose of PLCs was to improve teaching and learning. It is a significant point for principals to remember that, while implementing change, principals must take care to continually reflect upon the connections between the beliefs and the action steps. In this case, teachers learned these concepts as part of their PLC training and could recall the statements being discussed, but over time seemed to not recognize the association between that knowledge and the goals and beliefs of the principals. Particularly as new staff members are hired over the years, principals must continue to look for opportunities to reinforce primary concepts and articulate those ideals in action. What is not discussed or observed tends to get lost or overlooked. Kouzes and Posner (2007) connected this inspiration that results from a shared vision and

action as important in turning beliefs into visible behaviors, a connection supported by this study. Acknowledging such teacher statements and actions when they occur, either in PLC meetings or in the classroom, keeps those concepts alive and connected for all staff. This reinforcement can be a powerful tool for affirming teachers, as well as a means of keeping the primary vision and goals front and center in the implementation of PLCs.

Principal's Descriptions of Principal Leadership Responsibilities

To answer the second research question, principals were able to understand and articulate how the five principal leadership responsibilities worked together to support PLCs, although their interpretations varied in many ways from the teachers. Knowledge of Curriculum, Instruction and Assessment was described by the principals as most important, as it encompassed the heart of primary goal of PLCs, which was learning, while they also acknowledged that this was their area of weakness. The principals referenced the strong emphasis on PLC training as the best example of addressing Intellectual Stimulation, but agreed that there was an ongoing need for staff development, particularly related to research based best practices in teaching. Monitor and Evaluate was described as challenging due to the small number of principals and large number of teachers, as well as the timing of being somewhat early yet in the PLC implementation process. Yet the principals were able to see how valuable this responsibility was, particularly when supported with data. The principals viewed flexibility as their greatest area of strength, especially during PLC implementation, but they anticipated being less flexible moving forward as the need for data and results to be produced increased. When

it came to Ideals and Beliefs, the principals felt they had communicated well with the staff in regards to the importance of PLCs, further describing the implementation of and support for PLCs as encompassing their beliefs and goals related to teacher collaboration and improved teaching and learning.

Importance. The principals described the level of importance of each of the five principal leadership responsibilities differently than the teachers. While the teachers clearly saw Ideals and Beliefs as important but lacking, the principals were able to readily articulate with one another what their beliefs were and felt those beliefs had been clearly communicated to the staff. Principals described the responsibility of Knowledge of Curriculum, Instruction, and Assessment as most important due to the need to lay the foundation for what is being taught. The principals also agreed that the size of the school made it a challenge to be as knowledgeable in curriculum and teaching practices as they felt they should be. Teachers overall agreed that they did not expect the principals to be experts in every curricular area, accepting that as their own professional responsibility, but concurred that principals needed to have a basic understanding of what they were teaching and the practices that took place in their classrooms.

Principals saw themselves as strongest in the area of Flexibility, interpreting their willingness to allow PLCs to find their own path and establish their own priorities as a reflection of this principal leadership responsibility. Teachers, however, did not spend a great deal of time discussing Flexibility. When they did, there was a lack of uniformity as to how the flexibility of the principals was interpreted, some describing it as an act of trust while others viewed it as inconsistency. And while the principals thought it was

perhaps still too early in the PLC implementation process to place much focus on Monitor and Evaluate, the teachers expressed a distinct need in this area to help guide and direct them in doing the right work of a PLC. The principal leadership responsibility on which the most agreement existed was Intellectual Stimulation, as both teachers and principals referenced the previous PLC training and support provided at the school level to all staff in general and more in-depth training for principals and teacher leaders as a positive example of Intellectual Stimulation.

The lack of alignment regarding which principal leadership responsibilities were perceived as most important is noteworthy. While both teachers and principals acknowledged that the various PLCs were functioning at different levels, each PLC had specific feedback in regards to what they felt they needed most from their principals. If the priorities and understanding of the principals are not aligned with the needs and priorities of the teachers, false assumptions can be made and acted upon that will not achieve the desired results. This finding underscores the importance of principals finding a way to determine the needs of their teachers. Good intentions are nice, but they are not productive if they fail to match teacher needs. Principals must have an action plan in place to continually check for understanding with their PLCs. If principals are spending their time studying all of the curriculum guides for the content areas while teachers need them to focus on determining and communicating school wide goals and vision, a disconnect occurs that can be detrimental to the growth of PLCs. This reflects the concepts of Team Leadership Theory that emphasize the need to analyze and change as part of the continual improvement process (Northouse, 2010; Hill, 2010). The

responsibility for identifying those needs belongs to the leader (Northouse, 2010), in this case is the principals, which is consistent with the premise of this study as well as in the findings where teachers repeatedly share what support and leadership they want and need from their principals. Participants seemed to ascribe good intentions and an appreciation for the hard work put forth by all members of the high school, but such intentions alone did not alleviate need. Everyone may be working hard, but if those efforts are not aligned to common goals and an accurate understanding of teacher needs, PLCs will not be able to achieve the results for which they are striving, and the positive impact on student achievement they seek may not be realized.

Change and Trust. The principals articulated a clear understanding of the need to support their teachers through the changes that accompanied the implementation of PLCs. Yet the definition of exactly what that support looked like was not discussed as frequently or as in depth by the principals as it was in the teachers' focus group interviews. While the principals espoused beliefs that were aligned with team leadership and distributed leadership -- empowering teachers to set their own PLC goals and find their paths through PLC implementation -- the teachers expressed a desire for more direct leadership through this time of transition and change. As discussed in the previous section, the PLCs did not describe the support they needed in the same way. This creates a distinct challenge for principals. Even though they have the desire and understand how important it is to support their teachers, they need to ensure that they are providing the support that the PLCs perceive as important.

It is interesting to note that while the concept of trust was discussed in some of the teacher focus group interviews as well as in the principal focus group, it was described in different ways. Teachers referred primarily to trust between teachers and principals, while principals were concerned about the trust level between teachers as either hindering or fostering PLC growth. While trust is a significant factor in successfully leading change in schools (DuFour & Fullan, 2013; Bryk & Schneider, 2002; Tschannen-Moran & Wookfolk Hoy, 2001), it is not specifically listed as one of the 21 principal responsibilities correlated to student achievement (Marzano, Waters, & McNulty, 2005). Yet here it seems to play an important role in helping teachers work collaboratively together in PLCs, as well as impact the supportive relationship between principals and teachers. An emphasis on fostering trust (Tschannen-Moran, 2003) and a systems approach to leading change (Sergiovanni, 2001; Fullan, 2005; Fullan, 2006) connects well with the findings of this study that PLC implementation requires specific support and leadership, while also reflecting Organizational Theory's focus on enhancing people's strengths to take action toward common goals (Owens, 1998; Tompkins, 2005). As trust was not a targeted focus of this study, it is difficult to draw more conclusions at this time, making this is an area ripe for further study.

Points of Convergence and Divergence

Weekly PLC Reports. The document analysis of the Weekly PLC Reports revealed some noteworthy findings. Principals described these reports as enjoyable to read and an important tool in monitoring PLCs and holding them accountable for their work each week. Yet every teacher focus group interview brought up these reports and

described them as ineffective, primarily due to the lack of principals' response to their written concerns. This reflected a significant discrepancy in how principals and teachers viewed the same practice. The document analysis itself provided data to support each interpretation. The single largest category of responses to the question, "Do you have any concerns or needs for our administrative team?" was the PLC response that expressed "No Needs", which could lead the principals to feel confident in the level of support they were providing. Yet when teachers were asked in the focus group interviews what they needed from principals, every PLC expressed needs that were specific and ongoing. When PLCs recorded a need or concern on their Weekly PLC Report, they often repeated the same concern several weeks in a row, leading teachers to express in the focus group interviews their frustration with the lack of principal response.

Conclusions and recommendations to alleviate this discrepancy are fairly simple yet significant for principals to note. Findings from this study indicate that it is easy to get a false negative; teachers may report that they have no needs, indicating their PLC is doing well, but that does not necessarily mean they do not have any needs. On the other hand, it is unlikely to have a false positive; if teachers express a need or concern, it is important to them and must be addressed by the principals. It is therefore important for principals to read and respond to the Weekly PLC Reports in a timely and appropriate manner. Having such a tool can and should be a positive part of monitoring and communicating with PLCs, but if it is not utilized appropriately it can have a decidedly negative impact and subvert the purpose for which it was designed. If PLCs put something in writing, principals can have a high degree of confidence that it honestly and

accurately reflects what the teachers need. However, principals must not make the assumptions that a lack of expressed questions or concerns truly indicate that the PLC does not have any needs at that time.

Another step that should accompany the Weekly PLC Reports is regular principal participation in and visits to the PLC meetings themselves. All PLCs responded positively in their Reports to the presence of an administrator at their PLC meetings. This was also echoed in the focus group interviews as teachers described such principal visits in an encouraging manner. While a form can help with tracking PLC activities and concerns, it is not a substitute for face-to-face dialogue. The Weekly PLC Reports are primarily a one-sided communication tool, letting principals know the topics, questions, and concerns for each week. They are not, however, a complete communication format wherein clarifications and explanations can be addressed. Findings from this study would support the conclusion that meaningful conversation between teachers and principals is most constructive when it occurs in person.

It is also interesting to note that the Weekly PLC Reports were not mentioned at all when teachers were asked what they needed most moving forward. As this is an accountability and documentation step required at the district level, principals at this high school cannot discontinue its use. However, they should take a serious look at how to make it more valuable. An initial step would be to clarify the purpose of the reports. When the forms include written reminders as to the focus of PLCs, they can serve as a tool to communicate goals and guide the “right work” of a PLC. They should not be considered as a sole method of communicating with principals when teachers have needs

or concerns. The next step would be for the principals to commit to a plan for reviewing and responding to the reports in a timely manner, with any follow up requested by teachers handled in person whenever possible.

Collective Efficacy and PLCs. While intuitively it seems that the concepts of collective efficacy and PLCs are well aligned, the Collective Efficacy Scale (CE-SCALE) scores from this school were primarily utilized in this study to help understand and describe the PLCs rather than serve as a basis for a quantitative statistical analysis. It is worth noting that collective efficacy increased from 2010, prior to the introduction of the concept of PLCs, to 2012, after over a year and a half of staff development and training focused on preparing for PLC implementation. However, CE-SCALE scores declined overall in 2013. This suggests that teacher collective efficacy increased through PLC training but declined a year later, after PLC implementation. Since this study did not set out to examine a statistical correlation between PLCs and collective efficacy, drawing conclusions from this change would not be appropriate. However, it appears that while the idea of a new concept, in this case PLCs, may be hopeful and promising, the reality of implementing such change is hard work. In fact, when asked to self-assess the functioning of their PLCs, the English teachers described a recent shift in their department PLC organization from grade level to vertical teaming. In their assessments, most of the participants rated their “old” PLCs lower than their “new” PLCs, reinforcing the need for ongoing support to avoid the risk of stagnation within PLCs. The important finding for principals is to maintain the understanding that change is hard work, and accept that it is their job to support their teachers through that journey, an implication

supported by Organizational Change Theory (Sergiovanni, 2001; Fullan, 2005; Fullan, 2006). A previous pilot study (Hehn, 2013) examining PLCs and collective efficacy found similar results; change and improvement requires hard work, which can lead to stress and even frustration as part of the growth process, but both are easier for teachers to handle with strong leadership and a system of positive supports. Teachers rightly look to their principals to supply that leadership and support.

In using collective efficacy scores to understand and describe PLCs, there was no notable connection between collective efficacy and either PLC functioning or the need for support. The Math department had a relatively high self-assessment of their PLC functioning as well as an initially high level of collective efficacy, yet their department collective efficacy score declined throughout PLC implementation. They were also critical of the principals and firm in their requests for leadership, goals, and support. On the other hand, the Social Studies department had the lowest self-assessed PLC functioning and relatively moderate collective efficacy, but they described the behaviors of the principals in a more positive and responsive light while still clearly expressing a desire for more guidance and monitoring. Further studies focusing more directly on collective efficacy and PLCs would be required prior to drawing any conclusions regarding a direct relationship or correlation regarding changes in collective efficacy during the implementation of PLCs.

Response Summary Validation. One method of assuring the accuracy of the data from the focus group interviews was the Response Summary Validation. As the moderator facilitated the focus group interviews, a document camera and projector were

used to write and display a summary of the significant points made by participants in response to each question. This served as an immediate method of member checking the responses to ensure that the moderator captured the key points, and all participants were asked to verify and validate the accuracy of what was written. The researcher created this step as a new method of member checking, and it served to increase the reliability of the data. Particularly since the researcher did not conduct the interviews, and therefore did not have the tone of participants to aid in determining the points about which members believed were most important, the Response Summary Validation provided the opportunity for the members to immediately clarify, summarize and validate their answers while remaining anonymous to the researcher. It is a method that the researcher will employ in future studies, as it provided another way to triangulate the data from within the focus group interviews by allowing for comparison and reinforcement between the transcriptions and the Response Summary Validation during the data analysis stage. It also allowed participants to know their voice was represented accurately in the data.

Principal Leadership Responsibilities During PLC Implementation and Moving Forward. Although all of the PLCs described the principal leadership responsibility of Ideals and Beliefs as important during the first two years of PLC implementation as well as moving forward, there was no further discernable pattern in regards to the importance of the principal leadership responsibilities. Some PLCs stated they needed the same responsibilities moving forward that they felt were most helpful the first two years, while others saw a need for a different focus. Principals identified Knowledge of Curriculum, Instruction, and Assessment as

most important in both situations, and Social Studies stayed the same with Monitor and Evaluate as the principal leadership responsibility they needed most. For teachers in the English, Math and Science PLCs, they saw a combination of responsibilities as important moving forward, although the three PLCs did not articulate the responsibilities in the same order of importance. The findings of this study support a method of identifying these needs, whether they remain the same or change as part of a continual process of improvement focusing on change and growth, a reflection of Argyris's (1999) work on Organizational Learning.

Teachers and principals in the focus group interviews were able to see how all five principal leadership responsibilities worked together to support PLCs in the future. Ideals and Beliefs were necessary as the "beacon" to light the way for not only the other responsibilities, but for the entire school. Intellectual Stimulation would help teachers understand not only the vision and goals, but also provide information and ideas to help them achieve those goals. Monitor and Evaluate would then be important to ensure teachers understood their work, as well as to provide feedback and guidance from the principals to maintain alignment with the Ideals and Beliefs. Once these were in place, teachers could address the first critical question of a PLC, "What do we want students to learn?", through their implementation of Knowledge of Curriculum, Instruction, and Assessment, with the support and guidance of their principals. Overall, principals would use the principal leadership responsibility of Flexibility as the key to meeting their teachers where they were at and moving them forward in the PLC process, bearing in mind the need to maintain a balance between flexibility and consistency.

PLCs at Different Levels. In every focus group interview, teachers and principals agreed that PLCs were not all functioning at the same level. No common descriptor of PLC functioning emerged from this research study. Assumptions or conclusions could not be made as to levels of PLC functioning by examining collective efficacy data, self-assessed PLC functioning, or through discussions of how each PLC described the influence of principal leadership responsibilities on PLC functioning. Even PLCs with high levels of collective efficacy and self-assessed PLC functioning expressed the need for support and experiences of frustration. All PLCs desired leadership and support from their principals, but they did not describe the support they needed in the same manner.

One way this study is unique in the existing research in that it disaggregates collective efficacy data by department. This is beneficial for educational leaders as it helps to focus the need for training and support to specific PLCs, organized by departments, rather than only looking at the school as a whole. Such data supports a case against using a one-size-fits-all approach to staff development, as different PLCs clearly have different needs in regards to improvements in the areas of teaching and learning. Having PLC time each week for teachers within departments to meet, analyze data, and design interventions for improved student achievement allows teachers to focus on their own students and their own areas of teaching. It also informs principals regarding which PLCs may need more support.

Implications for Practice

There are many implications for practice indicated in the findings from this study. A “work in progress” understanding for principals is important, as the principal leadership responsibilities for which a PLC expresses a need one year may or may not be the same in subsequent years. Certainly the findings from this study suggest that those needs are not the same across PLCs. It is important for principals to meet their PLCs where they are at, identify what each PLC needs at the current time, and then develop a leadership plan to utilize principals’ time, resources, and talents to meet those needs. Principals must communicate not only their ideals, beliefs, and expectations, but also ensure that their own actions are visible and aligned with those beliefs. Teachers in this study clearly expressed a desire for principal behaviors and actions that were consistent and ongoing, not just a statement of knowledge or ideology. It is also significant for principals to communicate the connection between their actions and their beliefs to ensure clear and accurate understanding on the part of teachers as to why the principals chose to take specific actions, and even why they chose not to act, in order to avoid false assumptions that can undermine the work of PLCs and the school improvement process. Such communication is most effective when conducted face to face, which allows for conversations and dialogue to accurately address concerns and needs. In addition, if principals require communication or documentation from teachers, such as the Weekly PLC Reports, it is vital that principals read and respond in a timely manner in order to validate the process as well as the work of PLCs.

It is clear that there is no one-size-fits-all approach to supporting teachers in the implementation and growth of PLCs. Assumptions are dangerous and likely to be inaccurate. While teachers and principals in this study all described the influence of the five principal leadership responsibilities on PLCs as positive and important, they did not all ascribe the same level of importance to each responsibility, nor did they describe the impact of each one in the same manner. In order for teachers to feel authenticated and supported in their PLCs, principals must approach each PLC individually. Just as teachers are expected to differentiate instruction in the classroom to meet the varying educational needs of their students, principals must provide *differentiated leadership* to meet the diverse professional development needs of their PLCs. They cannot assume a common definition or understanding of what needs to be done unless those goals and needs are clarified, verified, and repeated both on a school-wide level as well as for each PLC. There is a great deal of literature and research to help principals respond to the needs of their PLCs, but those needs must first be identified and confirmed before the most appropriate and meaningful action plan can be designed and implemented. While the concepts of PLCs and collective efficacy are well aligned with Organizational Learning Theories (Owens, 1998; Argyris, 1999; Tompkins, 2005; Senge, 2006; Collinson & Cook, 2007), teachers still need positive leadership and support to strengthen their belief that they can learn and grow together, a finding that is strongly supported by Transformational Leadership Theory (Burns, 1978; Bass & Avolio, 1990; Bennis & Nanus, 2003; Tschannen-Moran, 2003; Kouzes & Posner, 2007; Northouse, 2010). When a staff development action plan is designed to meet the particular needs of each PLC,

principals and teachers will see a continuous school improvement plan that results in PLC growth. Over time, such a plan implemented with fidelity should lead to improvements in teaching and learning that will benefit our students.

Recommendations for Future Study

This study revealed multiple areas for future research. As an embedded case study focusing on academic PLCs and principals at a single high school, replicating the study in other schools across the nation would be a logical next step to confirm, contradict, or expand upon the findings discussed here. For example, teachers in this study described Ideals and Beliefs as the most important principal leadership responsibility in influencing PLCs. This may be due to the fact that they also perceived that responsibility as lacking. Further research could investigate whether a high school with clearly articulated and communicated agreed-upon vision and school-wide goals would still identify Ideals and Beliefs as the most important principal leadership responsibility. Principals identified Knowledge of Curriculum, Instruction, and Assessment as the most important, but also as their greatest area of weakness. Further studies could help to determine whether teachers and principals tend to identify as important what they feel they is lacking. These types of issues cannot be addressed through the study of a single school but would require a larger-scale research study involving multiple schools implementing PLCs.

Findings from this study suggested that some of the needs articulated by PLCs are well aligned with the theory of Transformational Leadership. A study designed to more specifically address the role of Transformational Leadership in supporting PLC

implementation and growth would be valuable. The intent would not be to simply label principals on a continuum of Transformation Leadership, but rather to identify and possibly correlate the needs of teachers with the leadership behaviors of their principals. This study used principal leadership responsibilities, but it might be possible to use the Multifactor Leadership Questionnaire (Avolio & Bass, 2004) as a research base for examining the influence of principal leadership on PLCs.

In regards to collective efficacy, it would be interesting and potentially informative to break down the CE-SCALE by question through an item analysis in order to specifically examine questions that reflect PLC beliefs and track changes over time as PLCs are implemented. This data could be used to address areas of need, especially if the collective efficacy data were disaggregated by PLC. This would provide further data to inform principals as to how best to tailor staff development opportunities to the specific needs of each PLC.

The greatest area of interest for future study for this researcher is in the arena of differentiated leadership. Findings from this study support the need for principals to identify, understand, and meet staff where they are in order to move them forward. Even within a PLC, not all teachers are on the same page, but if they are to function as a PLC they will need the support and leadership of their principals to function as a learning community. Determining more ways to study effective means for principals to understand their PLCs, rather than label or judge them, would be helpful to principals everywhere. It might be possible to design a survey instrument to ask questions of all staff regarding the influence of principal leadership responsibilities on PLCs, then follow up with focus

group or individual interviews to further illuminate the data from the survey. It would be important to keep the focus on identifying PLC needs rather than labeling or judging PLCs as to their level of functioning. This was an important researcher perspective in this study in order to communicate the intention of supporting staff in their growth. It would be difficult to get teachers or principals to participate in a study where they were simply tested and identified as to their level of PLC functioning or leadership. Understanding where they are currently functioning is helpful, but it is more important to determine how to use that information to promote continual improvement.

Limitations

One factor that was unaccounted for in this study was the implementation of the Common Core State Standards (CCSS) in Math and English at the start of Year 1 of PLC implementation. This may have impacted either the collective efficacy scores or the PLC reflections as teachers in both of these departments expressed feeling overwhelmed with the workload during this time. Yet the teachers also expressed appreciation for the time that PLCs provided to address these curriculum changes in a collaborative manner. No specific conclusions can be drawn, as collective efficacy scores for Math declined slightly while English collective efficacy increased from 2010 through 2013. The implementation of the CCSS can possibly be substantiated as a reason for the decline in Math by examining some of the teacher responses to the focus group interview questions as well as the Weekly PLC Reports, but it does not account for the increase in English. It is simply a factor for which the current study cannot completely account.

Conclusion

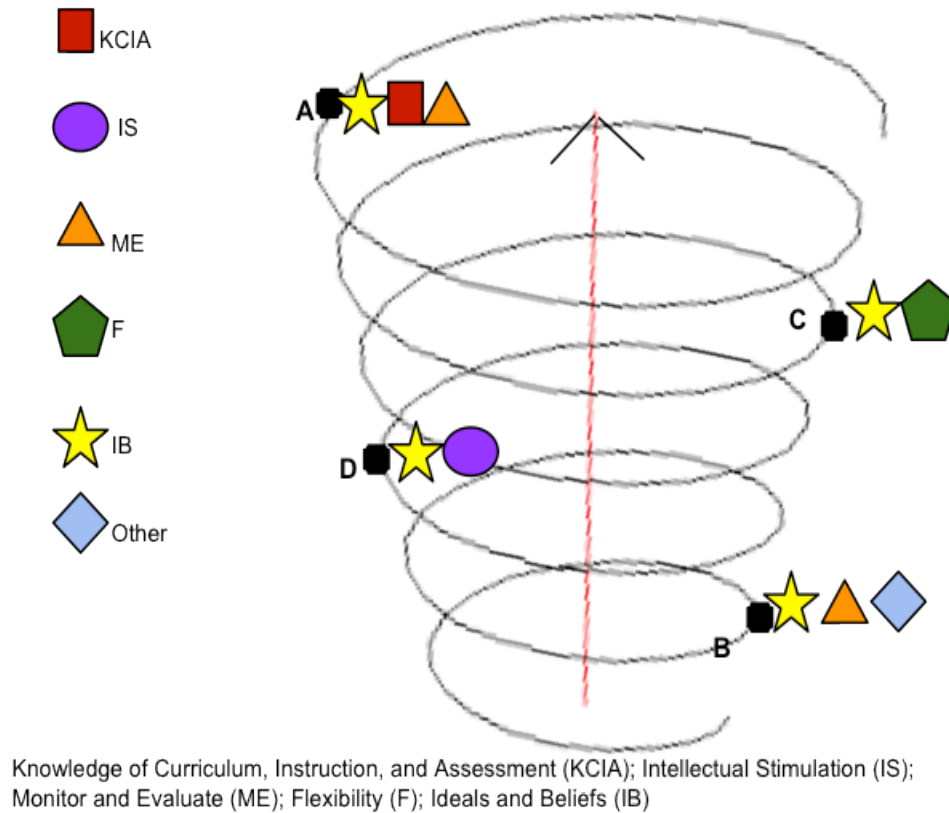
As large high schools across the country strive to meet the demands of accountability in today's global and technological society, having data to guide and support their school improvement plan is crucial. Not only will this data help determine the professional development teachers need most to improve teaching and learning, but it will also aid principals in monitoring the effectiveness of their action plan. Implementing PLCs can impact teaching schedules and student contact time, and having data to support the positive impact on students will help garner staff and community support for PLCs.

The primary finding of this study is that principals need to employ differentiated leadership to most effectively meet the needs of their PLCs. To accomplish that goal, principals must accurately identify the most pressing needs of their PLCs in order to meet them where they are at and support them through the changes necessary to improve teaching and learning. This study demonstrated that teachers can clearly articulate what they think they need when asked, but it is still the responsibility of the principals to respond appropriately. Teachers will also acknowledge that their PLCs are not all functioning at the same level, an observation shared by both teachers and principals in this study. An awareness of the strengths and challenges in the functioning of their PLCs can be as important as an understanding of what PLCs identify as their areas of need. Just as a one-size-fits-all approach does not work for students, principals must not make the mistake of thinking such a school improvement process will produce the highest gains. Gathering data to identify specific needs for PLCs and then designing action plans to support growth in those areas can be a powerful approach to school improvement that has

the potential to significantly impact student achievement. Examining ways in which to use this data to help educational leaders design school improvement plans and staff development activities to specifically target areas for improvement within their own schools by PLC is a worthy endeavor from which all schools can benefit.

Findings from this study indicate the importance of understanding that not all PLCs in a school are functioning at the same level, nor do they all have the same needs from their principals at the same time. Through the application of the concept of differentiated leadership, principals can strive to lead their PLCs for growth by meeting them at their current level of functioning and targeting the specific responsibilities that will enhance their PLC functioning. Figure 1 is a graphic representation of this finding. PLCs may be functioning at various levels of the spiral, but the goal is to move them in a positive direction. By determining and applying the principal leadership responsibilities PLCs need most, principals can help their PLCs improve teaching and learning for the benefit of students.

Figure 1. Differentiated Leadership: Influencing PLC Functioning



One specific challenge is for principals to find and maintain balance when implementing differentiated leadership. Teachers want and need a clear, unified vision and school-wide goals to guide their work. Principals must lead in this process, not just understand themselves what their ideals and beliefs are and communicate them once a year. This leadership must be ongoing, with clear communication that is supported through actions to guide and lead teachers in common goals. Yet all PLCs and departments do not function the same, nor do they have the same needs. When teachers

discussed flexibility, they also talked about consistency, which may at first appear to be a contradiction. What they expressed was a need for clear expectations and goals, but the flexibility to be supported in their ideas and pathways to reach those goals. Each PLC may interpret the principal leadership responsibilities differently. Therefore it is important that principals listen to and interact with teachers on a regular basis to determine their specific PLC needs and respond to those needs. Teachers want principals to support rather than dictate, to provide guidance and build trust. They also desire to be treated as educational professionals working together for the benefit of their students. Finding the balance here is difficult because what one teacher interprets as flexibility, another may define as inconsistency. Clear, consistent, and ongoing communication and actions regarding beliefs, goals, intentions, and decisions will help alleviate some of these challenges.

The results of this study have implications for principals across the state of Montana and throughout the country as they strive to meet the ever-increasing demands of NCLB, AYP, CCSS, and their own state educational authorities. Beyond the politics of accountability and the realities of our changing society, working to improve student achievement is always the primary goal of educators, within our state and across our nation. Data and research to support positive steps that educational leaders can take to improve teaching and learning is beneficial to all schools.

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APPENDICES

APPENDIX A

INTERSTATE SCHOOL LEADERS LICENSURE CONSORTIUM STANDARDS

Educational Leadership Policy Standards: ISLLC 2008

STANDARD 1: An education leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders.

FUNCTIONS:

- A. Collaboratively develop and implement a shared vision and mission.
- B. Collect and use data to identify goals, assess organizational effectiveness, and promote organizational learning.
- C. Create and implement plans to achieve goals.
- D. Promote continuous and sustainable improvement.
- E. Monitor and evaluate progress and revise plans.

STANDARD 2: An education leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.

FUNCTIONS:

- A. Nurture and sustain a culture of collaboration, trust, learning and high expectations.
- B. Create a comprehensive, rigorous, and coherent curricular program.
- C. Create a personalized and motivating learning environment for students.
- D. Supervise instruction.
- E. Develop assessment and accountability systems to monitor student progress.
- F. Develop the instructional leadership capacity of staff.
- G. Maximize time spent on quality instruction.
- H. Promote the use of the most effective and appropriate technologies to support teaching and learning.
- I. Monitor and evaluate the impact of the instructional program.

STANDARD 3: An education leader promotes the success of every student by ensuring management of the organization, operation, and resources for a safe, efficient, and effective learning environment.

FUNCTIONS:

- A. Monitor and evaluate the management and operational systems.
- B. Obtain, allocate, align, and efficiently utilize human, fiscal, and technological resources.
- C. Promote and protect the welfare and safety of students and staff.
- D. Develop the capacity for distributed leadership.
- E. Ensure teacher and organizational time is focused to support quality instruction and student learning.

STANDARD 4: An education leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources.

FUNCTIONS:

- A. Collect and analyze data and information pertinent to the educational environment.
- B. Promote understanding, appreciation, and use of the community's diverse cultural, social, and intellectual resources.
- C. Build and sustain positive relationships with families and caregivers.
- D. Build and sustain productive relationships with community partners.

STANDARD 5: An education leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner.

FUNCTIONS:

- A. Ensure a system of accountability for every student's academic and social success.
- B. Model principles of self-awareness, reflective practice, transparency, and ethical behavior.
- C. Safeguard the values of democracy, equity, and diversity.
- D. Consider and evaluate the potential moral and legal consequences of decision-making.
- E. Promote social justice and ensure that individual student needs inform all aspects of schooling.

STANDARD 6: An education leader promotes the success of every student by understanding, responding to, and influencing the political, social, economic, legal, and cultural context.

FUNCTIONS:

- A. Advocate for children, families, and caregivers.
- B. Act to influence local, district, state, and national decisions affecting student learning.
- C. Assess, analyze, and anticipate emerging trends and initiatives in order to adapt leadership strategies.

APPENDIX B

FOCUS GROUP INTERVIEW INFORMED CONSENT

IMPORTANT INFORMATION FOR THIS FOCUS GROUP INTERVIEW:

Collective efficacy is “the shared perceptions of teachers in a school that the efforts of the faculty as a whole will have positive effects on students” (Hoy & Miskel, 2008).

Professional Learning Communities (PLCs) are “composed of collaborative teams whose members work interdependently to achieve common goals linked to the purpose of learning for all” (DuFour, DuFour, Eaker & Many, 2006, p. 3)

In order to measure levels of collective efficacy, Hoy’s CE-SCALE was implemented at your high school in November 2010, which was prior to any discussion of PLCs; November 2012, three months into PLC implementation; and November 2013, 15 months into PLC implementation.

Your department has been identified as an academic area that is required for graduation and therefore student success in your classes has an impact on their ability to graduate. In addition, your department has participated in the training and implementation of PLCs over the past two years. This focus group interview will allow for further data collection regarding the connections between PLCs, collective efficacy, and the principal leadership behaviors that support PLC growth.

Results of the data collected for this study will be used to complete a research study as part of my Educational Leadership doctoral studies at Montana State University. In addition, results will be shared with your school and district administration in order to utilize current data as part of our PLC process. This data analysis will help inform our PLC implementation as well as assist your principals understand the leadership behaviors you identify as most important to PLC growth.

Participation in this study is voluntary and confidential and you may withdraw from the interview at anytime. You may choose not to participate without fear of penalty or any negative consequences. Individual responses will be treated confidentially. No individually identifiable information will be disclosed or published beyond the identification of your department. If you wish, you may request a copy of the results of this research by writing to the researcher at:

Jeril L. Hehn, hehnj@xxxxschools.org

Thank you for your participation in this study.

Jeril L. Hehn, Administrator, XXXXX Public Schools, and Doctoral Student, Montana State University

By signing below, you agree to participate in this focus group interview:

Participant Consent Signature: _____ Date: _____

APPENDIX C

CE-SCALE

CE-Scale

Form L

Directions: Please indicate your level of agreement with each of the following statements about your school from **strongly disagree** to **strongly agree**. Your answers are confidential.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. Teachers in the school are able to get through to the most difficult students.	1	2	3	4	5	6
2. Teachers here are confident they will be able to motivate their students.	1	2	3	4	5	6
3. If a child doesn't want to learn teachers here give up.	1	2	3	4	5	6
4. Teachers here don't have the skills needed to produce meaningful student learning.	1	2	3	4	5	6
5. If a child doesn't learn something the first time teachers will try another way.	1	2	3	4	5	6
6. Teachers in this school are skilled in various methods of teaching.	1	2	3	4	5	6
7. Teachers here are well-prepared to teach the subjects they are assigned to teach.	1	2	3	4	5	6
8. Teachers here fail to reach some students because of poor teaching methods.	1	2	3	4	5	6
9. Teachers in this school have what it takes to get the children to learn.	1	2	3	4	5	6
10. The lack of instructional materials and supplies makes teaching very difficult.	1	2	3	4	5	6
11. Teachers in this school do not have the skills to deal with student disciplinary problems.	1	2	3	4	5	6
12. Teachers in this school think there are some students that no one can reach.	1	2	3	4	5	6
13. The quality of school facilities here really facilitates the teaching and learning process.	1	2	3	4	5	6
14. The students here come in with so many advantages they are bound to learn.	1	2	3	4	5	6
15. These students come to school ready to learn.	1	2	3	4	5	6
16. Drugs and alcohol abuse in the community make learning difficult for students here.	1	2	3	4	5	6
17. The opportunities in this community help ensure that these students will learn.	1	2	3	4	5	6
18. Students here just aren't motivated to learn.	1	2	3	4	5	6
19. Learning is more difficult at this school because students are worried about their safety.	1	2	3	4	5	6
20. Teachers here need more training to know how to deal with these students.	1	2	3	4	5	6
21. Teachers in this school truly believe every child can learn.	1	2	3	4	5	6

(Copyright© Goddard & Hoy, 2003)

APPENDIX D

CE-SCALE INFORMED CONSENT

IMPORTANT INFORMATION REGARDING THIS SURVEY:

Collective efficacy is “the shared perceptions of teachers in a school that the efforts of the faculty as a whole will have positive effects on students” (Hoy & Miskel, 2008).

All high school teachers in XXXXX Public Schools are being asked to participate in a pilot study. By administering the Collective Efficacy Scale (CE-SCALE) to all high school teachers, our district will be able to establish baseline data regarding teacher collective efficacy as we implement Professional Learning Communities (PLCs) this year. This survey data will be anonymous. Teachers are asked only to identify their school (HS1, HS2, HS3, HS4) and their primary department (English, Math, Science, Social Studies, Health Enhancement, Special Education, World Languages, Electives). These categories are large enough to ensure anonymity for participants. Be assured that this information will not be used for evaluative purposes.

Results of the data collected for this study will be used to complete a research project as part of my Educational Leadership doctoral studies at Montana State University. In addition, results will be shared with district administration in order to utilize current data as part of our PLC process. Collective efficacy scores by department will be compared to student course failure rates in order to identify areas for improvement. This data analysis will not only help support and inform our PLC implementation, but also provide important data for our Graduation Matters initiative as well.

Participation in this pilot study is voluntary and anonymous. However, a significant participation rate is necessary in order to validate the survey results and therefore render the data useful to our district. By completing and returning this questionnaire you are giving your voluntary consent for the researcher to include your responses in the data analysis. Your participation in this research is strictly voluntary and you may withdraw from completing this survey at anytime. You may choose not to participate without fear of penalty or any negative consequences. Individual responses will be treated anonymously. No individually identifiable information will be disclosed or published, and all results will be presented as aggregate summary data, disaggregated by department only. If you wish, you may request a copy of the results of this research by writing to the researcher at:

Jeril L. Hehn, hehnj@xxxxxschools.org

Thank you for your participation in this study.

Jeril L. Hehn, Administrator, XXXXX Public Schools, and Doctoral Student, Montana State University

APPENDIX E

CE-SCALE PROTOCOLS

Protocol for Administering the CE-Scale

Thank you for agreeing to administer the CE-Scale to your high school department. Please follow the steps listed below to ensure the integrity and validity of the survey.

1. Hand out the Informed Consent (*Important Information Regarding this Survey*) to all teachers. Please briefly review the information provided. Teachers may keep their copy in case they have questions. Please emphasize the purpose and use of the survey:
 - a. Anonymous research for use in a pilot study
 - b. District use to help us utilize data to support PLCs and Graduation Matters initiatives
 - c. Greater participation levels will increase validity for our learning as educators in our district, but teachers have the right to opt-out
2. Distribute the CE-Scale to all teachers in your department. Instructions:
 - a. This survey is to be completed individually
 - b. Either pen or pencil may be used
 - c. Please ensure all answers are clearly indicated
 - d. All questions, 1-23, must be completed with one response per question in order to be valid
 - e. In appreciation of the time spent on this survey, your teachers will be allowed to leave 15 minutes early (after students are dismissed) one day of their own choosing within the next week
3. Collect all surveys and place them back in the envelope.
4. Seal the envelope once all surveys are inside.
5. Return all envelopes to your Associate Principal, Jeril Hehn, by 3:30pm on Wednesday, November 7, 2012

APPENDIX F

WEEKLY PLC REPORT SAMPLES



BILLINGS WEST HIGH SCHOOL

HOME OF THE GOLDEN BEARS



PLC Meeting Notes

Team: _____

Date: _____

Members Present (including guests):

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

Areas of Work and/or Discussion:

- ☐ Shared class practices
- ☐ Shared best practice research
- ☐ Created/reviewed team norms
- ☐ Assessed current reality
- ☐ Set long-term SMART goals
- ☐ Clarified essential learning
- ☐ Set short-term SMART goals
- ☐ Created common assessments
- ☐ Analyzed common assessments
- ☐ Analyzed district or state assessments
- ☐ Shared successful teaching strategies
- ☐ Planned interventions or enrichment
- ☐ _____

Describe what you worked on and/or discussed?

How and when will you apply this to the classroom (action plan)?

Do you have any concerns or needs for our administrative team?

What are your plans for the next meeting?

2201 ST JOHN'S AVENUE, BILLINGS, MT, 59102, (406) 261-3600

APPENDIX G

FOCUS GROUP INTERVIEW PARTICIPAN HANDOUT

Focus Group Interview Participant Handout

Collective Efficacy is “the shared perceptions of teachers in a school that the efforts of the faculty as a whole will have positive effects on students” (Hoy & Miskel, 2008, p. 188).

Professional Learning Communities (PLCs) are “composed of collaborative teams whose members work *interdependently* to achieve *common goals* linked to the purpose of learning for all” (DuFour, DuFour, Eaker & Many, 2006, p. 3).

Four Indicators of a PLC at Work (DuFour et al., 2006, p. 47)

- **Shared Mission** – It is evident that learning for all is our core purpose.
- **Shared Vision** – We have a shared understanding of and commitment to the school we are attempting to create.
- **Collective Commitments** (Shared Values) – We have made commitments to each other regarding how we must behave in order to achieve our shared vision.
- **Common School Goals** – We have articulated our long-term priorities, short-term targets, and timelines for achieving those targets.

Five Principal Leadership Responsibilities related to leading second-order change (Marzano, Waters & McNulty, 2005).

- **Knowledge of Curriculum, Instruction, and Assessment** – Is knowledgeable about current curriculum, instruction, and assessment practices ($r = .25$). Understanding the impact of the proposed change on curriculum and instruction and providing support for teachers in understanding the impact and implementing the change.
- **Intellectual Stimulation** – Ensures faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of the school’s culture ($r = .24$). Understanding the research and theory supporting the innovation and leading the staff in learning the research base.
- **Monitoring/Evaluating** – Monitors the effectiveness of school practices and their impact on student learning ($r = .27$). Continually monitoring the impact of the change.
- **Flexibility** – Adapts his or her leadership behavior to the needs of the current situation and is comfortable with dissent ($r = .28$). Being able to respond appropriately as the innovation is implemented.
- **Ideals/Beliefs** – Communicates and operates from strong ideals and beliefs about schooling ($r = .22$). Consistency in action and beliefs.

(r = correlation with student academic achievement; Marzano et al., 2005, p. 42-43, 72)

APPENDIX H

MODERATOR'S GUIDE FOR TEACHERS' FOCUS GROUP INTERVIEWS

Moderator's Guide – Teacher Focus Group Interviews

Logistics:

- Date and time of focus group interview: _____
- Location: Business Conference Room 165, XXXXX High school
- Participants for this session: _____ (department)
 - A = _____
 - B = _____
 - C = _____
 - D = _____
 - E = _____
 - F = _____

Welcome (5 minutes)

- Thank you for your willingness to participate in today's focus group interview for the _____ department.
- My name is Erin Mohr and I will serve as your moderator today. I would also like to introduce Siobhan Flynn, who will serve as our recorder.
- I need to take a minute to confirm that I have a signed Informed Consent for each participant. *(If you do not have one, participants can sign a copy at this time).*
- Today we are going to talk about the principal leadership responsibilities that you identify as supporting PLC functioning and development. Our session should last about 45 minutes.
- Before we get started, I would like to share a few guidelines:
 - This session will be audio recorded to ensure accuracy. I will be responsible for the transcription, so please be assured that responses will be referenced by pseudonyms (A-F) to protect participant anonymity.
 - Siobhan Flynn is here to manage the recording and note respondents.
 - What is said here stays here – in order to maintain the confidentiality and respect of all participations, I ask that we all agree to not repeat what others share during this focus group interview. Is that OK with everyone?
 - There are no right or wrong answers – the intent is to hear your honest perspectives. Therefore I ask that you respond openly and honestly so that we may accurately understand the needs of your PLC.
 - We also want to hear from everyone – please don't be shy, but also allow the opportunity for others to participate as well.
 - One person should talk at a time so that we can clearly hear and understand what each of you has to contribute.

Introduction (5 minutes)

- *Moderator will distribute the handout to be used in the discussion.*
- On your handout, there are two distinct sections that we will also use in our discussion today:
 - The five principal leadership responsibilities upon which we will focus

- The four indicators of a PLC at Work.
- The definitions of collective efficacy and PLCs overlap in their emphasis on teachers working collaboratively together to improve student learning. The four indicators of a PLC at work help us determine if our PLC is focused on the “right work”. The five principal leadership responsibilities listed are supported in the research as having a positive impact on student achievement; they are also well aligned with the concepts of PLCs and collective efficacy.
- Are there any questions about the handout or process before we proceed?
- One last reminder – as we discuss the following questions, please keep in mind that the focus is NOT evaluative – regarding either teachers or administrators. The questions focus on what has been helpful in the past or is needed in the future, including an honest self-description of your current PLC functioning.

Focus Group Interview Questions: (10 minutes per question)

1. Please take a look at the five principal leadership responsibilities listed on your handout. I would like you to describe how you believe each one has contributed to the functioning of your PLC over the past two years.
 - a. *Moderator will facilitate a discussion on each leadership responsibility, one at a time, and probe for examples.*
 - b. *Moderator will use a new blank sheet of paper under the document camera to write down responses for each principal responsibility and ask for participant affirmation to ensure responses are represented accurately.*
 - c. *When all five responsibilities have been discussed, follow up by asking: Which behaviors, from your perspective, were most important these past two years of PLC implementation?*
2. Now please take a look at the four indicators of a PLC at work on your handout. On a scale of one to six, with six being high, how would you describe the current functioning of your PLC? Take a moment to quietly think about the score you would assign your PLC and why. Then we will discuss your scores and reasons.
 - a. *Moderator will allow about a minute for quiet reflection; ask participants if they have had enough time to reflect before proceeding.*
 - b. *Moderator will then ask participants to share their scores and rationale.*
 - c. *Again, using a new blank sheet of paper under the document camera, write significant responses and reasons to help ensure that you understand participant reasons and have recorded their responses accurately.*
3. Let’s look back at the five principal leadership responsibilities listed on your handout again. Reflecting on where your PLC is now, identify which leadership responsibilities you believe your PLC needs most at this time and in the immediate future (next school year) to improve the functioning of your PLC.
 - a. *Moderator will facilitate the discussion in a manner similar to the previous questions, using a new blank sheet of paper and the document camera to write significant responses and check for accuracy of interpretation with the participants.*

- b. *Focus will be on not only which principal leadership responsibilities but also probe for why participants think specific responsibilities are important as well as what that specifically looks like in their perception.*

Conclusion

- Does anyone have any additional comments to add to our discussion today?
 - Thank you for your time and participation today. Please remember that in order to maintain confidentiality and anonymity, what has been said here needs to stay here. I may contact you again if needed for follow up to this interview. If you have any questions, please feel free to contact me at the email address through which we have already communicated regarding this focus group interview.
-

Probing Examples:

- What did/does that look like to you?
- Can you describe that to me?
- Can you tell me more about that?
- Can you rephrase that in a way that makes it clear what you would like your administrative team to do? (You can use this if a participant states something purely in the negative)

Materials Needed:

- Handouts
- Placards with A, B, C, D, E, F to identify participants
- Document Camera, projector, screen
- Blank sheets of paper, markers, pens, pencils, highlighters
- Bottled water for participants
- 2 laptops with recording devices
- Grid for recorder to track participant responses (note time of recording)

APPENDIX I

MODERATOR'S GUIDE FOR PRINCIPALS' FOCUS GROUP INTERVIEW

Moderator's Guide – Principals' Focus Group Interviews

Logistics:

- Date and time of focus group interview: Principals
- Location: Business Conference Room 165, XXXXX High school
- Participants for this session: _____ (department)
 - A = _____
 - B = _____
 - C = _____
 - D = _____

Welcome (5 minutes)

- Thank you for your willingness to participate in today's focus group interview for the administrative team.
- My name is Erin Mohr and I will serve as your moderator today. I would also like to introduce Siobhan Flynn, who will serve as our recorder.
- I need to take a minute to confirm that I have a signed Informed Consent for each participant. *(If you do not have one, participants can sign a copy at this time).*
- Today we are going to talk about the principal leadership responsibilities that you identify as supporting PLC functioning and development. Our session should last about 45 minutes.
- Before we get started, I would like to share a few guidelines:
 - This session will be audio recorded to ensure accuracy. I will be responsible for the transcription, so please be assured that responses will be referenced by pseudonyms (A-F) to protect participant anonymity.
 - Siobhan Flynn is here to manage the recording and note respondents.
 - What is said here stays here – in order to maintain the confidentiality and respect of all participations, I ask that we all agree to not repeat what others share during this focus group interview. Is that OK with everyone?
 - There are no right or wrong answers – the intent is to hear your honest perspectives. Therefore I ask that you respond openly and honestly so that we may accurately understand the needs of your PLC.
 - We also want to hear from everyone – please don't be shy, but also allow the opportunity for others to participate as well.
 - One person should talk at a time so that we can clearly hear and understand what each of you has to contribute.

Introduction (5 minutes)

- *Moderator will distribute the handout to be used in the discussion.*
- On your handout, there are two distinct sections that we will also use in our discussion today:
 - The five principal leadership responsibilities upon which we will focus
 - The four indicators of a PLC at Work.

- The definitions of collective efficacy and PLCs overlap in their emphasis on teachers working collaboratively together to improve student learning. The four indicators of a PLC at work help us determine if our PLC is focused on the “right work”. The five principal leadership responsibilities listed are supported in the research as having a positive impact on student achievement; they are also well aligned with the concepts of PLCs and collective efficacy.
- Are there any questions about the handout or process before we proceed?
- One last reminder – as we discuss the following questions, please keep in mind that the focus is NOT evaluative – regarding either teachers or administrators. The questions focus on what has been helpful in the past or is needed in the future, including an honest self-description of your current PLC functioning.

Focus Group Interview Questions: (10 minutes per question)

4. Please take a look at the five principal leadership responsibilities listed on your handout. I would like you to describe how you believe each one has contributed to the current functioning of PLCs at your school over the past two years.
 - a. *Moderator will facilitate a discussion on each leadership responsibility, one at a time, and probe for examples.*
 - b. *Moderator will use a new blank sheet of paper under the document camera to write down responses for each principal responsibility and ask for participant affirmation to ensure responses are represented accurately.*
 - c. *When all five responsibilities have been discussed, follow up by asking: Which behaviors, from your perspective, were most important these past two years of PLC implementation?*
5. Please look again at the five principal leadership responsibilities on your handout. On a scale of one to six, with six being high, how would you describe how well your administrative team has performed or fulfilled those responsibilities as PLCs have been implemented? Take a moment to quietly think about the score you would assign your PLC and why. Then we will discuss your scores and reasons.
 - a. *Moderator will allow about a minute for quiet reflection; ask participants if they have had enough time to reflect before proceeding.*
 - b. *Moderator will then ask participants to share their scores and rationale.*
 - c. *Again, using a new blank sheet of paper under the document camera, write significant responses and reasons to help ensure that you understand participant reasons and have recorded their scores accurately.*
6. Let’s look once more at the five principal leadership responsibilities listed on your handout. Identify which leadership behaviors you believe PLCs in your school need most at this time and in the immediate future (next school year) to improve PLC functioning.
 - a. *Moderator will facilitate the discussion in a manner similar to the previous questions, using a new blank sheet of paper and the document camera to write significant responses and check for accuracy of interpretation with the participants.*

- b. *Focus will be on not only which behaviors but also probe for why participants think specific behaviors are important as well as what that behavior specifically looks like in their perception.*

Conclusion

- Does anyone have any additional comments to add to our discussion today?
 - Thank you for your time and participation today. Please remember that in order to maintain confidentiality and anonymity, what has been said here needs to stay here. I may contact you again if needed for follow up to this interview. If you have any questions, please feel free to contact me at the email address through which we have already communicated regarding this focus group interview.
-

Probing Examples:

- What did/does that look like to you?
- Can you describe that to me?
- Can you tell me more about that?
- Can you rephrase that in a way that makes it clear what you would like your administrative team to do? (You can use this if a participant states something purely in the negative)

Materials Needed:

- Handouts
- Placards with A, B, C, D, E, F to identify participants
- Collective Efficacy graph
- Document Camera, projector, screen
- Blank sheets of paper, markers, pens, pencils, highlighters
- Bottled water for participants
- 2 laptops with recording devices
- Grid for recorder to track participant responses (note time of recording)

APPENDIX J

PROTOCOL FOR INTRODUCING FOCUS GROUP INTERVIEWS

Protocol for Introducing Focus Group Interviews to PLCs

1. **Introduction** – Thank you for allowing me a few minutes during your PLC time this morning to provide information regarding a research study that will be conducted in order to answer the research question: How do principal leadership responsibilities influence the functioning of Professional Learning Communities (PLCs)?
2. **Background** – As most of you are aware, XXXXX staff have participated in collective efficacy research through the implementation of Goddard & Hoy's (2005) Collective Efficacy Scale (CE-SCALE) in November of 2010 (prior to the introduction of the concept of PLCs); in November of 2012 (after a year of staff development preparation and three months in to the implementation of PLCs); and in November of 2013 (fifteen months in to the implementation of PLCs). As the definitions for both collective efficacy and PLCs are centered on teachers working collaboratively and interdependently together to improve student achievement, this data has provided an insight into the functioning of our PLCs.
3. **Current Research** – Now that we are coming close to the end of our second year of PLC implementation, I am interested in exploring not only the connection between collective efficacy and PLCs, but also the principal leadership responsibilities that most impact PLC growth. Therefore, I plan to gather and analyze data from five focus group interviews in order to explore teacher and principal perspectives regarding the principal leadership responsibilities that influence PLC functioning and growth.
 - a. Five focus group interviews will focus on the academic areas most related to high school graduation (English, Math, Science, and Social Studies) as well as the administrative team here at XXXXX High.
 - b. *Participation will be anonymous!*
 - i. *I will not conduct the focus group interviews*
 - ii. Erin Mohr, a graduate assistant from MSU-B and a student/colleague of Dr. David Snow (former XXXXX High teacher) will be distributing the Informed Consent; collecting the Informed Consent; identifying participants for the focus group interviews; conducting the focus group interviews; recording and transcribing the focus group interviews.
 - iii. As the researcher, I will receive hard copies of the transcribed focus group interviews, but I will not know who participated, who chose not to participate, and I will not listen to the actual recording.
 - iv. XXXXX High will be identified by a pseudonym as will participants in the focus group interviews.
 - c. Erin Mohr will send an electronic copy of the Informed Consent to each member of your department. Please send your form back to her electronically to assure anonymity. She will select four to six participants per PLC from those who returned a completed Informed Consent form, selecting members that represent a cross-section of teaching assignments

within each PLC. Selected participants will be notified by the moderator as to the date, time, and location of the focus group interview.

- d. Focus group interviews will be scheduled on the afternoons of May 5 & 6, 2014 in room 165 (Business Conference Room). Students will be dismissed at 12:40 p.m. both days due to Smarter Balance testing.
 - i. Monday, May 5:
 1. English from 1:30 p.m. to 2:15 p.m.
 2. Social Studies 2:30 p.m. to 3:15 p.m.
 - ii. Tuesday, May 6:
 1. Math from 1:30 p.m. to 2:15 p.m.
 2. Science from 2:30 p.m. to 3:15 p.m.
4. **Assurances:**
 - a. Participation will remain anonymous – only PLC identification will be included.
 - b. Data collected will not be used as evaluative in any way in regards to staff performance.
 5. **Risks and Inconveniences** – will be covered in the Informed Consent but include:
 - a. Participants will be asked to express their opinions in a group setting, which may produce some stress on their part to honestly express their opinions.
 - b. Participation in the focus group interview will require participants to take time out of their workday and may therefore result in some inconvenience. In acknowledgement of this, participants have permission from our Principal, XXXXX, to leave work at 2:45 p.m. *on the day opposite* their focus group interview.
 6. **Use of Data:**
 - a. Results of the data collected from this study will help support and inform PLC implementation and generate empirical knowledge to fill a gap in the research literature regarding leadership for effective PLC implementation.
 - b. The results, using pseudonyms to maintain anonymity, may be disseminated to other researchers studying PLC functioning, principal leadership, and collective efficacy, and may be shared with district administration as part of an ongoing assessment of the PLC process.
 - c. This research will be part of my dissertation research for my Doctorate in Educational Leadership from MSU.