PROFESSIONAL LEARNING COMMUNITIES: AN EXAMINATION OF TEACHERS’ PERSPECTIVES ON PROFESSIONAL CONVERSATIONS AND STUDENT LEARNING

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PROFESSIONAL LEARNING COMMUNITIES: AN EXAMINATION
OF TEACHERS’ PERSPECTIVES ON PROFESSIONAL CONVERSATIONS
AND STUDENT LEARNING

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PROFESSIONAL LEARNING COMMUNITIES: AN EXAMINATION OF TEACHERS’ PERSPECTIVES ON PROFESSIONAL CONVERSATIONS AND STUDENT LEARNING

Elizabeth Spencer-Johnson, Ed.D.
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Abstract
Professional Learning Communities (PLCs) have emerged in the last 20 years as a popular professional development initiative. However, despite a wealth of PLC literature available, researchers have found that forming teacher communities does not automatically result in improved teaching practices that support student learning. This qualitative study was used to explore the ways in which humanities teachers perceive their work in existing PLCs. Specifically, it examined the ways teachers experience their work together related to subject knowledge, pedagogical knowledge, and the influence the work within the PLC has on changing instructional practices. Using an embedded unit case study design with each PLC representing a unit, data were gathered from a sample of 19 English, social studies, and world languages teachers who belonged to five PLCs that met regularly during the school day in a Connecticut high school. The researcher completed an interview with each teacher, the high school principal, and the high school assistant principals (n = 23) and each of the five PLCs were observed three times for the duration of a full meeting block (81 minutes). Interview transcripts, participant observations, and field notes were coded to allow themes to emerge within and across cases, triangulation of the data was essential for developing themes. The researcher concluded that although the feelings about peer collaboration in PLCs were positive, teachers believed their work was limited because they needed training in several areas. This was communicated through interviews and supported by observations that identified several areas of insufficiency.
To increase the likelihood that the PLCs make an impact on improving teaching practices and student achievement, it is recommended that the district develop a shared vision about PLC work, increase the participation from school leaders around the PLC work, and provide teacher training on the use of data and on the dynamics of group discourse.
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PROFESSIONAL LEARNING COMMUNITIES: AN EXAMINATION OF TEACHERS’ PERSPECTIVES ON PROFESSIONAL CONVERSATIONS AND STUDENT LEARNING

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CHAPTER ONE: INTRODUCTION TO THE STUDY

Historically, teachers have spent the hours of the school day following a rigid schedule inspired by the 19th century factory model that emphasized procedures over results and provided little opportunity to have professional conversations with other educators (DuFour & Eaker, 1998). Increasingly, the education profession has recognized that isolating teachers in classrooms for long periods of time can stall teachers’ professional growth. In fact, this belief that students can benefit from the practice of teacher collaboration is not a new idea. John Dewey asserted almost 100 years ago that community-based teacher reflection would benefit the entire school system (Dewey, 1933). Progressively through the late twentieth century, researchers and practitioners suggested that bringing educators together for collaborative work was a worthy practice (DuFour & Eaker 1998; Hord, 1997; McLaughlin & Talbert, 1993). Awareness that teachers should be actively involved in the curriculum development process developed in the 1970s and evolved into seeing teachers as reflective practitioners in the 1980s (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). Later, researchers formally identified the “professional community” in schools as a work environment that supported educators in the development of practices to better teach students by the mid-1990s (Stoll et al., 2006). The term “professional learning community” (PLC) emerged as the name for groups of teachers and leaders who meet to collaborate outside of the classroom in order to adopt programs and practices that help students and to support the professional development of teachers (Hord, 1997).

The idea of community is central to the definition of PLCs. The focus of school-based collaborative work extended beyond an individual teacher’s learning to include “professional learning within a community context – a community of learners, and the notion
of collective learning” (Stoll et al., 2006, p. 225). Studies have found that teacher collaboration improves schools and provides an environment for teachers to improve their practice (Long, Labone, & Nicholson, 2009; Poulos, Culberston, Piazza, & D’Entremont, 2014). Researchers and practitioners in education agree that collaboration is a positive undertaking, but perspectives about the priorities and purpose of PLC work differ (Grossman et al., 2001; Stoll et al., 2006; Vescio, Ross, & Adams, 2008). As the practice of bringing teachers together was becoming popular, the limited understanding about the nature of this work worried experts. “Using the term PLC does not demonstrate that a learning community does, in fact, exist” (Vescio et al., 2008, p. 82). DuFour (2004) was concerned that the PLC movement could become another failed effort to reform education because “the term has been used so ubiquitously that it is in danger of losing all meaning” (p. 6). Similarly, competing interests of district, state, or national agendas that exist separate from the daily concerns of student learning were another factor that could infringe upon the important tasks of a PLC. In response to increasing apprehensions about the credibility of PLCs, Vescio et al., (2008), identified the importance of generating proof that collaboration is worthwhile:

Ultimately, however, educators must critically examine the results of their efforts in terms of student achievement. To demonstrate results, PLCs must be able to articulate their outcomes in terms of data that indicate changed teaching practices and improved student learning, something they have not yet established as common practice. (p. 82)

While other educators preferred to determine teaching practices as the main focus of PLC work and emphasized that teachers feel invested in the PLC because “... change in instructive practice does not occur unless faculty become involved in leadership, including
professional development and professional learning communities” (Smith, 2011, p. 1). In contrast, Nelson, Deuel, Slavit, & Kennedy (2010), found that the most important feature of PLCs was the nature of the interaction:

Critical to the impact of collaborative inquiry groups on improving student learning is teachers’ willingness to engage in conversations that are less about sharing activities, information, and student anecdotes and more about raising and pursuing questions about learning goals, instructional practices, and all students’ attainment of their agreed-upon goals. (p. 176)

The generation of student learning data, the decision to alter instructional practices, and the questioning of issues related to student learning goals all share the common interest of examining important topics about the work of teachers and the achievement of students through a focus on collaboration (DuFour & Eaker, 1998). It is encouraging that the educational community formally recognizes the importance of allocating time regularly for the purpose of collaboration. However, educational collaboration is a complex process for the members of collaborative groups to navigate (Grossman, Wineburg, & Woolworth, 2001; Hord & Sommers, 2008). The many elements and decisions that are inherent with their work impose potential complications that deter from the collaborative focus on student learning (Darling-Hammond, 2009).

Without knowing more about how communities of practice ultimately enhance the educational experience for students, the valuable time dedicated to PLCs risks becoming unproductive, wasteful, and trivialized. Although many school districts recognize the benefits of teacher collaboration and provide time for this professional work, a concern exists that “community” has lost its meaning in education (Grossman et al., 2001). For instance,
the inclusion of PLCs into district professional development plans has become common practice, but there is a confusion about “what, if anything, the construct of community adds to existing accounts of schooling” (Grossman et al., 2001, p. 943). While acknowledging that common themes have emerged around what constitutes teacher community, Westheimer (1998) concluded, “Researchers could benefit from a stronger conceptualization of communities based on empirical research” (p. 148). The criteria to distinguish a community of teachers from a group of teachers coming together for a meeting is undetermined (Grossman et al., 2001). Although, a longitudinal study on teacher community found that teachers need an “essential tension” that involves both a focus on professional practice (such as curriculum writing, assessment development, or benchmark identification) and the continued intellectual development of teachers relating to the subjects they teach (Grossman, et al., 2001). Mixing the learning of subject area topics and pedagogy can seem incongruous since professional learning opportunities for teachers often focus on either teaching techniques or on replicating the experience of a college seminar, but not on both (Grossman, et al., 2001). Increasing teacher learning about pedagogy and content knowledge is important, and the presence of tension this blending creates is desired for a teacher group to become a professional community that is able to grow and create positive change for student learning and teacher professional practice.

In order to further examine collaboration and the ways in which experiences of teachers align with the features of professional communities of practice, this qualitative study observed professional learning communities in a suburban school district in the Northeast. Along with observations, teacher and administrative interviews were conducted to further understand teachers’ perceptions of PLC work with respect to how it stimulates learning
about teaching practices, learning in the humanities, and the ways that they believe the work done in PLCs relates to student learning.

**Rationale for Selecting the Topic**

The education community is in agreement that teacher collaboration is a professional practice that helps schools improve and increases student achievement (Louis & Marks, 1998; Supovitz, 2002; Supovitz & Christman, 2003). However, a critical finding related to this belief requires acknowledging that only “communities that did engage in structured, sustained, and supported instructional discussions and that investigated the relationships between instructional practices and student work produced significant gains in student learning” (Supovitz & Christman, 2003, p. 5). This is important because it speaks to the nature of effective collaboration for moving forward the essential work that teachers do of educating students. Teacher communities that have functioned without an intense focus on student learning have not seen compelling gains in student learning (Vescio, Ross, & Adams, 2008). Although many theories about what an educational community means have been published (Little & McLaughlin, 1993; Perry, 1997; Westheimer, 1998; Wineburg & Grossman, 1998), additional research is needed to provide a stronger understanding about what community means situated in the educational setting (Grossman et al, 2001). In fact:

Relatively little research examines the specific interactions and dynamics by which professional community constitutes a resource for teacher learning and innovations in teaching practice. In particular, few studies go “inside teacher community” to focus closely on the teacher development opportunities and possibilities that reside within ordinary daily work. (Little, 2003, p. 913)
Therefore, it is important that this qualitative research study explore teachers’ understanding of collaborative practice and the ways they utilize PLCs to collectively improve their practice. One published review of PLC literature that examines how teacher communities make an impact on teaching practices and student learning expresses a need for additional qualitative case study research specific to how PLCs support changes in teacher’s practices, how PLC work changes teacher practices and impacts student achievement, and documentation about the nature of the work that teachers do as they analyze student work (Vescio et al., 2008). A better understanding of the intricate dynamics that occur in teacher communities is critical so that districts can recognize how to support this important professional learning system.

**Statement of the Problem**

Education frequently introduces new trends that come into popular practice and are widely embraced, but these are often dropped when they are not perceived as valuable to improving education. This can lead educators to feel challenged by new processes because their experience with innovations is finite. Little (2003) warns that teacher groups can be limited by their “horizons of observation,” a term she uses to explain “the extent to which elements of a work environment are available as a learning context” (p. 217). Put another way, this horizon of observation can limit teachers in improving their own practices because they are restricted by their own pattern of thinking (Little, 2003). One way to break up this dynamic is to move beyond isolation in teaching. DuFour observes that teachers come together for many different reasons. In his work, he distinguishes between congenial groups that meet for consensus or operational procedures and the PLC in which educators participate in professional dialogue that can transform a school. He believes that for educational
transformation to occur, PLC groups must make instructional practices the focus of their work instead of more generalized, collegial discussion (2004).

Understanding the implications of PLCs on teacher practices is not well-documented by current professional learning communities’ literature (Riveros, Newton, & Burgess, 2012). Riveros et al. (2012) suggest that a greater insight about teacher practices is required if collaboration is going to be perceived as effective:

Much less developed is the description of what improved teacher practice looks like. It is assumed that the collaborative approach will result in improved practice, which, in turn, leads to improved results. In this sense, professional learning communities have the tendency to trivialize the notion of teacher practice. Teacher practice is likely the most significant element of the professional learning communities model, and because it is theoretically under-developed, the usefulness of the professional learning communities model is severely limited. (Riveros et al., 2012, p. 204)

If the understanding of how teacher practices improve within the professional learning community is overlooked, then educators may not fully assess the potential benefits of collaborative learning. Riveros (2012) writes that the benefit of PLC initiatives is that they clearly articulate “what it means to be a professional, what professional learning is, and why communities are the best scenarios for professional learning beyond romantic and trivial claims about group learning and community life” (p. 610). PLCs that are well-defined provide the foundation for the type of growth that occurs in the highest functioning of teacher collaboration with student improvement at the core. It is important for the education profession to have a more comprehensive understanding about how teachers work in PLCs.
Potential Benefits of Research

The findings from this study provide insight into how teachers who are no longer in the formative stage of PLC implementation work to engage in professional dialogue about improving instructional practices with the goal of improving student learning. The conclusions identify the extent to which a collaborative group engages in focused work to improve student learning, and the conditions that hinder their efforts. These findings can assist future researchers who want to learn more about the structural components and adult actions and behaviors most important for teacher professional collaboration. Although this study focuses on secondary humanities teachers, the results of this research provide information that will be relevant to other content areas, regardless of grade levels.

Definition of Key Terms

1. Common Core State Standards (CCSS), “a set of high-quality academic standards in mathematics and English language arts/literacy (ELA). These learning goals outline what a student should know and be able to do at the end of each grade.” (Common Core State Standards Initiative, 2018)

2. Collaboration in education is broadly defined as "a style of direct interaction between at least two co-equal parties voluntarily engaged in shared decision making as they work toward a common goal.” Features of collaborative work include that it is voluntary, equally values the work of all group members, a shared goal, shared responsibility for key decisions, shared accountability, shared resources, and a growing trust and respect among participants (Friend & Cook, 1992, p. 5).

4. *Depth of Dialogue* refers to discourse that extends beyond the norms polite exchanges to those that include a tenacious probing of their own and others ideas and interpretations. It features doubt, skepticism, intellectual aggressiveness, risk taking, and humility about the incompleteness of their own ideas as a part of group conversation (Ball & Cohen, 1999).

5. *Distributed Leadership* is school leadership that is composed of the interaction between school leaders, followers, and the situation (Spillane, Halverson, & Diamond, 2004).

6. *Essential Tension* represents “The two aspects of teacher development—one that focuses teachers’ attention on the improvement of student learning, the other focused on the teacher as a student of subject matter—that do not always mix harmoniously” (Grossman et al., 2001, p. 952).

7. *Group Formation* refers to a hypothesis that all groups—regardless of purpose, goal, location, demographics, culture, or membership—go through the states of “forming,” “storming,” “norming,” and “performing” (Tuckman, 1965).

8. A *Professional Learning Community* is a group of educators who work collaboratively and interdependently to achieve common goals, to establish a guaranteed curriculum, to develop common formative assessments, to creative systems of intervention, to use evidence of student learning to inform improved
practices, and to serve as the central organization structure of the school (DuFour, 2015).

9. *Shared Leadership* rejects the idea that the principal is the sole leader of a school and instead asserts that schools should build leadership capacity about learning from all community members. “Instructional leadership must be a shared, community undertaking. Leadership is the professional work of everyone in the school” (Lambert, 2002, p. 37).

10. *Student Learning Objectives (SLOs)* measure Student Growth and Development and are used in order to measure a teacher’s contributions to student academic progress at the classroom level (Connecticut State Department of Education Student Learning Objectives Handbook, 2014).

11. A *Teacher Community* consists of teachers who work as a group to improve professional practice for the well-being of students and to continue their intellectual development in the subject matters of the school curriculum (Grossman et al., 2001).


**Overview of the Study**

This dissertation is organized into five chapters. The first chapter provides a brief introduction to the implementation of PLCs in schools and describes researcher concerns with the implementation of PLCs overtime this educational reform initiative that intends to enhance student learning. Chapter one also establishes a need to examine teachers’ experiences in PLC work to increase understanding about the
nature of the work that occurs in these groups. The primary and sub-research questions for this qualitative case study are also included.

Chapter Two is a literature review that situates this study among prior research that has been done that relates to understanding professional learning communities. The section opens by establishing the theoretical foundation about group formation in teacher community and the distributed perspective on leadership that guides this study. Discussion focuses on a comprehensive examination of empirical studies that investigated the implementation and effectiveness of PLCs in the areas of PLC models, group development and discourse, leadership, and the use of data.

Chapter Three focuses on the methodology of the study. It describes the study context of a suburban high school in the Northeast. It also provides the process used for data collection through observations, interviews, and field notes. It then provides details on data analysis and concludes with the timeline for the research that took place from the beginning of the dissertation process through the end of it.

Chapter Four shares the findings of the study. Thick description and participant quotations are used to support an in-depth account of teachers’ experiences of working in PLCs around the themes of PLC models, group formation, leadership and data use.

Chapter Five applies the findings of this study to answer the research questions and make recommendations for educators and for future research. Implications include a call for districts to establish a shared vision about PLC work,
to provide teachers with training in the areas of group discourse and data use, and to
develop the capacity to increase the involvement of school leaders in PLC work.

**Research Questions**

This study is guided by the overarching research question: *In what ways does an established Professional Learning Community support the work of teachers?* It also seeks to address the following sub-questions:

1. How do teachers perceive the relationship between the work of the Professional Learning Communities and their classroom practices?
2. What perspective do teachers have about the impact of Professional Learning Communities on student learning experiences?
3. In what ways does an established Professional Learning Community support the professional learning of teachers?
4. How do teachers view their roles and the roles of others in a Professional Learning Community that is no longer in the formative period of development?
5. What perspective do administrators have about the impact of Professional Learning Communities on student learning experiences?
CHAPTER TWO: REVIEW OF THE RELATED LITERATURE

In conducting this study, the researcher witnessed the dynamic and complex processes that occur in teacher communities. In order to comprehensively ground the critical elements that comprise the findings of this qualitative research study, this literature review examines frameworks from the Model of the Formation of Teacher Professional Community (Grossman et al., 2001) and the Distributed Perspective on School Leadership (Spillane et al., 2004) as theoretical references. Discussion about research relating to professional learning communities, leadership, depth of dialogue, and data are also included as significant areas important for understanding the intricate nature of school-based professional collaboration. This literature review ends with a summation of the types of empirical studies that have been conducted on Professional Learning Communities.

Relevance of Professional Learning Communities

The notion that students can benefit from the practice of teacher collaboration is not a new idea. More than 100 years ago, John Dewey asserted that community-based teacher reflection would benefit the entire school system (Dewey, 1933). The focus on teacher collaboration as a critical component of improving schools is as old as the history of education reform (Joyce, 2004). Systems scientist Peter Senge described learning organizations as systems “where people continually expand their capacity to create the results they truly desired, 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” (2006, p. 3). In fact, the skills inherent to collaboration, such as understanding others and making sense of differences are linked to the development of an engaged democratic society (Grossman et al., 2001). In advocating for professional development that
avoids a one-shot workshop model that is fragmented, unsupported, and unrelated to the specific contexts of teachers’ work, Darling-Hammond and Richardson (2009) recommended the professional learning community model as one that provides teachers with a sustained, job-embedded, and collaborative professional development experience. Educators widely accept that collaboration promotes teacher learning, which improves teaching practices and ultimately enhances student learning (Riveros, 2012). “The idea that teachers working together can improve their practice is almost a truism in the school change literature. In general, authors on school reform “do not tend to argue in favour of isolated practices” (Riveros, 2012, p. 605). Today, PLCs are “one of the most prominent features of teacher organization in schools,” and they have ”become nearly ubiquitous in the K-12 environment” (Kruse & Johnson, 2017, p. 589).

In education, the idea of the professional learning community eventually emerged from the field of professional development and as an adapted version of the business principle that organizations can learn (Vescio, Ross, & Adams, 2008). McLaughlin and Talbert (1993) found that teachers who were a part of strong professional communities felt more successful in adapting practice to student needs than were teachers who did not have the support of colleagues. The researchers concluded that teacher professional communities are “the most effective unit of intervention and powerful opportunity for reform” (McLaughlin & Talbert, 1993, p. 18). They specifically criticized traditional staff development models as “episodic, decontextualized injections of knowledge and technique” and recommended that “the path to change in the classroom core lies within and through teachers’ professional communities: learning communities which generate knowledge, craft new norms of practice, and sustain participants in their efforts to reflect, examine,
experiment, and change” (McLaughlin & Talbert, 1993, p. 18). Other researchers advocating for PLCs include Louis and Marks (1998), who determined from their multi-level quantitative and qualitative research study that students from schools with professional communities achieve at high levels. They found that authentic pedagogy—which includes evidence of higher order thinking, substantive conversation, depth of dialogue, and making connections to the world beyond the classroom—was supported by the presence of professional communities (Louis & Marks, 1998). Later work by Poekert (2012) similarly concluded that high-quality collaborative professional development can improve instructional practices. This mixed-methods study found improvement in instructional practices from teachers who participated in PLCs (Poekert, 2012).

**Models of a Professional Learning Community**

While educators acknowledge the importance of teacher collaboration, the challenge is determining what kind of PLC model can best engage teachers in deep conversations that result in changes that positively impact students. Shirley Hord (1997) initially identified supportive and shared leadership, collective creativity, shared values and vision, supportive physical conditions, people capacities, and shared personal practices as the core attributes of an effective professional learning community. Hord’s later work with Sommers reduce the essential characteristics to five and focus on what constitutes an effective PLC:

1. **Shared beliefs, values, and vision** in which the staff consistently focuses on students’ learning, which is strengthened by the staff’s own continuous learning—hence, professional learning community;

2. **Shared and supportive leadership** defined as administrators and faculty holding shared power and authority for making decisions;
3. **collective learning and its application** that includes what the community determines to learn and how they will learn it in order to address students’ learning needs is the bottom line;

4. **supportive conditions** including *structural* factors to provide the physical requirements: time, place to meet for community work, resources and policies, etc. to support collaboration. *Relational* factors support the community’s human and interpersonal development, openness, truth telling, and focusing on attitudes of respect and caring among the members;

5. **shared personal practice** during which community members give and receive feedback that supports their individual improvement and that of the organization. (Hord & Sommers, 2008, p. 9)

After conducting additional studies, Hord (2015) further refined her thoughts around professional learning in education to six research-based attributes of an authentic professional learning community that separated structural conditions and supportive relational conditions into two separate categories. She also renamed “shared personal practice” --“peers supporting peers” in order to emphasize that peer feedback includes opportunities for the visitor to observe, take notes, and conduct a sharing session with the host member. “Peers' visitations provide support as well as assistance to one another in order to operate at their professional peak in service to students” (Hord, 2015). The other three categories of shared values and vision, intentional collective learning, and shared and supportive leadership remain similar to the earlier descriptions found in Hord and Sommers (2008).
At the same time that Hord began researching organizational learning for educational settings, Richard DuFour (1997) was researching teacher collaboration. He found that school personnel need time for collaboration and professional sharing in order to improve student learning outcomes. A subsequent publication from DuFour and Eaker (1998) served the function of bringing the discussion of PLCs into the popular literature. In what became a seminal text on PLCs, DuFour and Eaker (1998) present an argument for why the implementation of PLCs is the cornerstone to school reform and improved learning experiences for students. They state that “each word of the phrase ‘professional learning community’ has been chosen purposefully. A ‘professional’ is someone with expertise in a specialized field…‘learning’ suggests ongoing action and perpetual curiosity…‘community’ suggests a group linked by common interests” (DuFour & Eaker, 1998, xi-xii). Before 1998, and the work of DuFour and Eaker, who laid out the steps and strategies for educators to use when beginning a PLC initiative, widespread use of PLCs was not common in American schools.

As the PLC movement took hold in American schools and became an increasingly popular practice, Richard DuFour and his colleagues published prolifically in response to the need for educators to learn more about the details of how to make PLCs successful in their schools. Many of their works synthesized the fundamental information from earlier publications with new understandings about important considerations for implementing PLCs. For example, Eaker, DuFour, and DuFour (2002) emphasize how important the leadership factor is in making PLCs successful. They cautioned against using PLCs to cover-up the presence of weak leadership: “How well things get done in a professional learning community will depend on the quality of leadership. The leadership is the lubrication that’s
going to make this work or not work” (Eaker, et al., 2002, p. 84). Trust was also a key idea that they addressed. Eaker, DuFour, and DuFour acknowledged that trust evolves over time between PLC members and leadership. They also embraced “collective inquiry” that “will focus on a constant exploration of best practice in our profession” (Eaker, et al., 2002, p. 92), as a cornerstone idea for high functioning PLCs.

Until his death in 2017, Richard DuFour advocated that the PLC structure “provides the best environment for powerful professional development and that the best professional development builds staff capacity to function as members of a high-performing PLC” (2014, p. 31). The power of teamwork was asserted by him as crucial in that, “The best professional development builds staff capacity to function as members of a high performing PLC” (2014, p. 35). In his final major publication, DuFour advanced the discussion about PLCs by emphasizing the importance of a learning-focused culture and that only schools with collaborative teams doing the “right work” have yielded dramatic gains in student achievement (2015, p. 134). He cautioned against allowing teams to practice “collaboration lite” in which

members settle for coordination instead of true collaboration. If team meetings focus on who will make copies of handouts for the upcoming unit, planning field trips, commiserating about students, sharing war stories or discussing personal preferences for teaching a particular concept, there is no reason to anticipate that students will learn at higher levels. (DuFour, 2015, p. 134)

Here, DuFour clearly delineates between the day-to-day interactions of the teachers as not part of the PLC and the authentic work of a PLC that features tough conversations with the focus of student growth. DuFour (2015) continuously emphasizes that high-performing
PLCs that function to make a difference in student achievement must engage in activities that are relevant to student learning context, must focus on planning and improving instruction, and must be teacher driven, interactive, and sustained over time.

The work of Supovitz and Christman (2003) also support the importance of having a substantive focus with the conclusion that teacher communities need to target instructional exploration and professional learning in order for PLCs to make a positive impact on students. In a mixed methods study of schools in Cincinnati and Philadelphia, the researchers found that in “communities that did engage in structured, sustained, and supported instructional discussions and that investigated the relationships between instructional practices and student work produced significant gains in student learning (Supovitz & Christman, 2003, p. 5). The teams with higher performing students had higher rates of teachers using group instructional practices, leading Supovitz and Christman to reason that “well-implemented communities provided important and necessary conditions for teachers to engage in the types of instructional practices that improve student learning” (2003, p. 6).

Similar case study research discussed how teachers collectively work to improve teaching and learning and cautions that the thinking of teachers can be restricted by the limits of their own thinking and professional experiences. Little’s work found that teachers “express a felt responsibility to student success, an orientation toward instructional innovation, and a commitment to close and supportive collaboration with colleagues” (2003, p. 938). In essence, the practices of the professional community open up some opportunities for learning while simultaneously closing off others because the learning of the group is restricted by member background. Therefore, Little advocated for more research on the
nature of teacher interaction in professional communities, noting the challenges inherent to this effort since accounts of classroom events tend to be blurred, selective, and compressed compared to what actually transpires (Little, 2003). Little’s case study research spoke to the need for researchers to observe and report on what actually occurs in PLCs as opposed to relying on the foggy memory of self-reporting.

Another research team (Riveros, Newton, & Burgess, 2012) argued for the need to incorporate a method for identifying areas of improvement, and that simply establishing PLCs does not automatically lead to school improvement. Riveros et al. (2012) emphasized “that past initiatives of peer collaboration have overlooked the fact that teachers’ capacity for creating meaningful and supportive relationships is an essential component of their professional practices” (p. 207). They also took the position that since teachers are situated within the context-bounded school environment, professional learning models could be enhanced if they included a method for identifying targeted areas of improvement. Their work supported DuFour’s assertion and claim that “professional learning communities are not a goal in and of themselves, they are means for school improvement” (Riveros et al., 2012, p. 211). DuFour (2015) recommended that PLC teams establish a goal that is Strategic, Measurable, Attainable, Results oriented and Time bound (SMART), but he did not recommend a specific method for doing this while taking the situated context into consideration. Riveros, Newton, and Burgess (2012) extended the conversation to include the importance of place in PLCs by emphasizing that context matters.

In a review of PLC literature, Jones and Thessin (2015) classified definitions of PLCs into three categories based on: “(a) what a PLC is, (b) what a PLC does, and (c) what the
components of a PLC are” (p. 195). They synthesized the many complex definitions of PLCs into the following:

A PLC is a group of professionals in a learning organization continuously collaborating to learn, achieve school improvement, and work toward shared and common goals through the collection and analysis of data. By engaging teachers in effective professional development, providing time for the creation and modification of student assessments, and allowing analysis of student data, PLCs provide job-embedded, context-based professional learning opportunities. (Jones & Thessin, 2015, p. 195)

While no singular definition of a PLC exists that is universally utilized, the Jones and Thessin (2015) summary encapsulates the most salient points from the research, which suggests that the presence of PLCs in schools afford educators an opportunity to engage in collaborative professional learning that has the potential for teachers and, as a result, students to experience rich incidences of understanding. Based on the reviewed PLC literature, this study utilizes an operational understanding of PLCs that embraces the findings from prominent researchers in the field and aligns with the synopsis articulated by Jones and Thessin (2015).

**Group Formation**

Although teacher collaboration is widely accepted as a practice that benefits teachers and therefore enhances the educational experience of students, much less is understood about the specific factors that develop communities of practice. Although the previously mentioned studies support the use of shared leadership and deep dialogues, more understanding about the dynamics of collaborative groups is needed. Therefore, a need
exists to look at the journey collaborative groups experience in order to become functional and productive. Mulford (1998) classified the stages of group development in PLCs as “forming” (polite), “storming” (conflict over power), “norming” (social cohesion and willingness to share), “performing” (increase in task orientation and feedback), “transforming” (group learning from feedback and may change tasks or ways of doing them), “dorming” (resting to prevent burnout), and “mourning” (group dissolution) (p. 619).

Something important, and often overlooked, in group development is that each time a new member enters a group, the group must go back through each of these stages. Mulford also emphasized the important role of the school leader in helping groups to move past the early stages and into the stages of “performing” and “transforming” (p. 619). Grossman et al. (2001) sought to research the process by which a teacher community forms bonds and differentiates itself from a teacher group. “We have little sense of how teachers forge the bonds of community, struggle to maintain them, work through the inevitable conflicts in social relationships, and form the structures needed to sustain relationships over time” (2001, p. 943). Grossman et al. (2001) brought together 22 English and social studies teachers for a longitudinal qualitative 2 ½ year study and used the discourse between teachers as the basis for developing their Model of the Formation of Teacher Professional Community. The Model of the Formation of Teacher Professional Community has four stages of teacher community and assigns three levels of growth to each stage: (a) “Formation of Group Identity and Norms of Interaction,” (b) “Navigating Fault Lines,” (c) “Negotiating the Essential Tension,” and (d) “Communal Responsibility for Individual Growth” (p. 988). Similar phases of group formation were also identified by DuFour (2008) as “pre-initiation,” “initiation,” “developing,” and “sustaining,” (p. 1), while Caine and Caine (2010) prefer four
stages and refer to these as (a) “forming,” (b) “norming,” (c) “storming,” and (d) “reforming” (p.141). The common element present among models of group formation is that a group will go through a process of bonding and addressing conflict before evolving into a mature stage that functions as a community. Owen (2014) expanded the work of Grossman et al., (2001) by examining PLCs in three innovative schools and found that negotiating the essential tension at a mature level required “robust debate and challenge” to support “collegial learning, professional growth, and rethinking to build the ongoing transformative educational practices” (p. 73). Owen adds that distributive leadership and a shared responsibility for substantive teacher discourse and professional learning are essential components for mature group functioning.

Not all groups easily form, and from the early work of Hord (1997), Caryn Wells (2008) developed a survey to identify PLC concepts that were used and those that were resisted during the initial implementation of PLCs in six high schools. From this work, Wells (2008) was able to identify major areas that are challenging and susceptible to resistance during a PLC implementation phase. Wells (2008) also made recommendations about what actions to take to help move PLC groups toward becoming a community of collaborative learners; these were that:

- school leaders need to articulate vision for the PLC work and support teacher leadership
- teachers need to engage in deliberate learning, have candid conversations about best educational practices, maintain a focus on student learning and achievement
• PLC members must accept that conflict is inevitable when superficial topics are confronted in order to advance to deeper conversations

• resistors to PLCs need their voices heard

• issues connected to school culture need to be respected since they are a critical component in the entire process. (Wells, 2008)

Since the movement from immature to mature groups is not a fixed process, it requires committed participation from teachers and administration, a resilience toward enduring and surpassing conflict, and an insight into how the elements of school culture impact all stakeholders.

Although the level of group formality does not determine the degree to which teachers experience professional learning, following an organized routine does support group maturation. Thacker (2017) used the belief that learning is a social activity (Wenger, 1998) as a basis for examining the professional learning experiences of social studies teachers in formal and informal environments and found that teachers placed greater value on informal professional learning experiences than on formal ones. While formal learning was structured and mandated, informal professional learning had the characteristics of being unrestricted to a particular environment, did not follow a specific curriculum, and was voluntary. In formal professional learning activities—such as an in-service event or graduate coursework—shared practice and community were less evident and occurred “in spite of the PD” (p. 49). This was because teachers

embedded informal learning opportunities within the formal trainings they were “forced” to attend. Teacher used the opportunity of being together to pick each other’s brains, get ideas from one another, and ask about shared problems; however,
the content of the formal PD was focused on something entirely different. (Thacker, 2017, p. 49)

Thacker’s exploratory qualitative study included an examination of PLC work that was loosely structured and scheduled but not required. Teachers enjoyed meeting in these casual groups, but their work centered on curriculum pacing and planning for the implementation of common assessments. They did not work on shared tasks, and this “limited the functioning of the PLCs” (Thacker, 2017, p. 50). The casual arrangement of these PLCs lacked the conditions necessary for a group to develop into the mature stages of functioning.

In contrast, groups that have evolved to maturation support professional learning for teachers that results in improved teaching practices. A qualitative study (De Neve & Devos, 2017) of 65 Flemish elementary schools examined how PLCs helped beginning teachers develop their abilities to provide high-quality differentiated instruction to students. They found that the PLCs that aligned with the descriptions for the mature stage in the Stages and Growth in Teacher Community model (Grossman et al., 2001) were characterized by a strong presence for reflective dialogue that focused on pedagogy and content knowledge. These PLCs also had a strong sense of collective responsibility in which the entire faculty took ownership for school improvement outside of their class. In this way, the PLC was not merely a group exercise but a school-wide approach to reform.

**Depth of Dialogue**

The act of bringing teachers together for the purpose of engaging in professional conversation does not guarantee that their work will improve instructional practices. Kruse and Louis’ (1993) early work categorized teacher relationships with respect to the focus on student learning as cooperative (superficial), collegial (students, but not learning, are the
focus), and collaborative in which teachers “discuss the development of practice and process skills related to the implementation of practice. Collaborative efforts are utilized to create shared understandings from complex and confusing data, as well as to enhance the community in which the members work” (p. 14). DuFour (2004) wrote that “Some school staffs equate the term “collaboration” with congeniality and focus on building group camaraderie” (p. 9), while other staffs meet to determine agreement about school operations and procedures. Although these are important matters for professional interaction, according to DuFour (2004) such limited forms of positive communication will not achieve the goals of a professional learning community—continuous professional growth and enhanced student achievement. Instead, DuFour recommended that all teachers in a school ask the questions, “What do we want each student to learn? How will we know when each student has learned it? How will we respond when a student experiences difficulty in learning?” (2004. p. 8).

Teams of teachers worked together to develop interventions for students that are prompt and allocate the extra time and resources that require students to work until they achieve mastery. Ideally, “Teachers work in teams, engaging in an ongoing cycle of questions that promote deep team learning. This process, in turn, leads to higher levels of student achievement” (DuFour, 2004, p. 9). In this manner, teachers developed new understanding and approaches for responding to student learning needs and, in turn, improved teachers’ use of best instructional practices in the classroom.

Unfortunately, both a tradition of congenial communication and the lack of experience with evidence-based dialogue using data, hinder teachers from engaging in collaborative inquiry (Nelson et al., 2010). Changing discussion practices to develop exchanges that are more substantive would require that teachers
learn to be tenacious, to probe their own and others’ ideas and interpretations, to doubt and be skeptical. And they would have to learn to combine intellectual aggressiveness and a willingness to take risks with a humility about the incompleteness and uncertainty of their own ideas. (Ball & Cohen, 1999, p. 27)

Within a PLC, professional conversation must include a depth of dialogue with a willingness to broach difficult topics about existing instructional practices and engage in productive discourse, even if it makes teachers feel uncomfortable. Student performance indicators also need to be a part of the exchange so that the discussion is grounded in learning outcomes and not guided by opinions.

A feature of effective PLCs is the depth of the dialogue that takes place within them, which is characterized by DuFour as teams of teachers who, through “an ongoing cycle of questions that promote deep team learning,” arrive at producing higher levels of student achievement (2004, p. 9). While achieving deep levels of discussion is not something that is quickly attained, having teacher leaders in place who can “lead their colleagues into deep and productive conversations” (Nelson et al., 2010, p. 178) is essential to foster the full honest participation from all members. This can be difficult to facilitate as outside training for supporting PLC development is often unavailable, so the success of PLCs will depend upon all teachers contributing “to deep conversations grounded in a cycle of questioning, reflecting on evidence, and taking action” (Nelson et al., 2010, p. 178). A mixed methods study (Lujan & Day, 2010) investigated how teachers perceived roadblocks to collaboration when implementing the DuFour and DuFour (2006) PLC model. The researchers observed that during observed PLC collaboration, the conversation centered on topics related to the routine logistics of the school day. Initially, teachers reported sharing ideas about instruction outside
of the PLC because the group meeting time was dominated by discussions about superficial topics and housekeeping items. Once an agenda was implemented to focus the group on instructional practices, the discussions about teaching started to occur more frequently during the PLC time (Lujan & Day, 2010). Backing up the importance of Lujan and Day are similar findings by Harris and Jones (2010) who claim that many PLC initiatives around the world have failed because the collaborative network failed to focus on improving learning outcomes. “If too loosely configured, it is easy for professional learning communities to pay attention to everything else except learning and teaching, and in so doing, to significantly reduce the potential impact of their work” (Harris & Jones, 2010, p. 174). Both of these studies echoed the earlier work of DuFour by emphasizing that the “real work” of PLCs is to focus on improving learning and teaching.

Depth of dialogue can be enhanced not only through techniques of questioning and reflection, but also applying conversation or interpersonal norms can “create richer and more productive collaborative dialogue” (Kennedy et al., 2011, p. 23). For genuine conversation to occur, teachers need to learn how to manage the “essential tension” that will manifest in an authentic community and not function merely as a “pseudocommunity” (Grossman et al., 2001, pp. 951-955). Achieving this level of professional interaction is complex and takes an extended time to develop within a group.

While all of the researchers champion the transformative potential of PLCs, they also qualify their endorsement of PLCs with guidelines expressing critical features that are important for a group to make an impact on student learning. The nature of complex and sometimes difficult conversations require trust. Trust between teachers as a critical element that must be in place if teachers are going to share ideas, help each other, and generate more
approaches to take with student learning. “With trust, collegial learning and building communities will happen. Without trust, professionals tend to isolate and go their own way” (Hord & Sommers, 2008, p. 105). They recommend that educators engage in reflective practices as a part of the PLC work in order to have an open exchange of information, expand the use of effective practices, and build trust through improved relationships. Teacher trust seems essential for the difficult work of PLCs to develop through depth of dialogue.

**Distributed Leadership Perspective**

The traits of school leaders have been widely examined (Spillane et al., 2004). “The literature on leadership, regardless of tradition, has focused mostly on those formal leadership positions, chiefly on the school principal, and defines leadership chiefly as a function of individual personality, ability traits, and style” (Spillane et al., 2004, p. 6). One way to examine school leadership is to consider the functions of distributed leadership, given that schools are supposed to operate with a shared-decision making framework in most states. The distributed leadership framework “specifies an integrative model for thinking about the relations between the work of leaders and their social, material, and symbolic situation” (Spillane et al., 2004, p. 28). Spillane, Halverson, and Diamond’s perspective on distributed leadership will be utilized as a key framework for this dissertation because context matters in education. PLC research suggests that looking at an activity as a dynamic is critical to research design and developing understanding. Instead of focusing on the isolated activities or traits of leaders, their work takes into account the social and situation factors that impact task (Spillane et al., 2004).

The importance of examining how the educational situation factors into a leadership dynamic comes from situational factors such as “the clarity and complexity of instructional
technology, district-office support (provision of resources, technical assistance, priorities), and staff composition (age, educational level, stability, and the school’s social or community context)” (Spillane et al., 2004, p. 20). While this perspective from Spillane et al. is focused on how “situation is not external to leadership activity, but is one of its core constituting elements,” this viewpoint is relevant to PLC work since teachers and administrators are also influenced by their situation. The idea that PLCs relate to the theory of distributive leadership is because PLCs are “primarily concerned with the reciprocal interdependencies that shape leadership practice” (Harris & Jones, 2010, p. 173). Leadership practices involving multiple individuals “provides the infrastructure that holds the community together, as it is the collective work of educators, all multiple levels who are leading innovative work that creates and sustains successful professional learning communities” (Harris & Jones, 2010, p. 174). In this way, administrators can play a key role with PLCs. Riveros and his colleagues (2012) also stressed that professional learning communities need to be examined with the understanding that they are situated in a context. They argue that “any implementation of professional learning communities must take into account the way teachers enact teaching practices and learn about their profession in context-bounded school environments” (2012, p. 209). Similarly, Jones and Thessin (2015) found that school culture is a powerful influence of professional communities of teachers. Therefore, principals must also understand and constantly reassess a staff’s readiness for change in order to develop an environment that will support collaboration.

The presence of administrative leadership that supports and holds teacher teams accountable for their collaborative groups is an important factor for their success in and outside of PLCs (Gallimore, Ermeling, Saunders, & Goldenberg, 2009). Gallimore et al.
conducted a qualitative study with focus groups and found teachers advised that principals should build trust between group members and the administration. One participant thought administrators should function to firmly keep teachers focused on the task because teachers have the tendency to move away from the original objective. “With a balance of administrative support and pressure, teacher groups are more likely to persist with addressing problems long enough to make cause connections between instructional decisions and achievement gains” (Gallimore et al., 2009, pp. 544-545). Similar findings were confirmed by Wells and Feun (2013) in a mixed methods study of eight middle schools implementing PLCs across two school districts. The authors noted that although the intent of their research was not to study administrative leadership, “the results of both quantitative and qualitative data point to the importance of the leadership strategies inherent in District B, where the message of change was emphasized, nurtured, and sustained with consistency over a period of several years” (Wells & Feun, 2013, p. 252). The leaders of District B, which experienced a more successful implementation than District A, “built a system that increased capacity of teachers as leaders to work with data analysis, intended to promote self-reflection and growth” (p. 253). In contrast, District A sent a team of administrators off-site for a three-day training at a PLC Institute. When they returned, confusion about how the leaders would train faculty resulted in anger, frustration, and resentment with respect to how “no one seemed to know what he or she was doing” (p. 253). However, Wells and Feun (2013) assert that top-down initiatives were important to establish focus and sustainability of the PLC work in District B. Although, this did not help in District A. As leaders in District B communicated with both support and firmness that they had expectations for results related to growth in student achievement, teachers “slowly began to buy-into” (p. 254) the PLC process.
Teachers saw student learning improve and accepted ongoing administrative expectations that they would fulfill PLC tasks.

Continuing research confirms the important role of school leaders to facilitate ongoing PLC training and to engage in establishing vision and focus for the PLC work in their schools. Participants in a narrative ethnography study (Peppers, 2015) of a suburban high school substantiated the importance of leadership by saying it is the most critical component of a successful PLC. “In order for a PLC to function at its best, there have to be strong team leaders who understand the goals of what their PLCs should accomplish” (Peppers, 2015, p. 28). In another mixed methods study (Thessin, 2015) that examined high and low-functioning PLCs in a mid-sized urban district, the teachers in the high-functioning PLCs “specifically identified the support of school leaders and the provision of direction and clear expectations by school leaders as a key factor in their work” (Thessin, 2015, p. 22).

School leaders in this district reinforced the PLC process designed by the PLC Steering Committee and assisted teachers with creating norms, using protocols, and with the work involved toward achieving an established instructional goal. Teachers at one of the schools “indicated that their principal’s expectation that they follow the district’s PLC process to establish an instructional goal, as well as draft an action plan to guide them in reading that goal, focused their work” (Thessin, 2015, p. 23). Looking at literature across the developing, implementing, and sustaining phases of change that a school experiences when institutionalizing PLCs into a school, Jones and Thessin (2015) found that the importance of the principal was significant. Ideally, a principal shares leadership through decision-making and organizational responsibilities and prepares faculty for change. During the implementation phase of a PLC, principals provide resources and build instructional and
organizational capacity in order to focus on data collection and analysis for student learning outcomes, analysis of instructional practices, and the gathering of research-based best practices that meet the needs of students. In the sustaining phase, principals must preserve “the continuity of the vision, values, and goals of the processes” and facilitate “continuous innovation by fostering instructional and organizational creativity, constantly building leadership capacity, and providing resources necessary to sustain the work of a learning organization” (Jones & Thessin, 2015, p. 205). The impact of school leadership on all phases of PLC implementation is compelling and even crucial if teachers are to realize professional learning that reforms instructional practices.

A school’s principal has a tremendous influence over the culture of a school (Wilson, 2016). In a mixed methods study that focused on teacher leadership at eight high schools in a large, central Florida school district, Wilson concluded that a school’s culture is directly related to a principal’s capacity to empower teachers. When teachers are empowered, they are more successful and this impacts student achievement (Wilson, 2016). However, this study also pointed out that teachers identified deficits in shared leadership and found a need for more collaboration between teachers and administration. “When schools are governed by an autocratic leadership style rather than through shared decision-making, a restrictive school culture is cultivated, which stifles teacher leadership within schools” (Wilson, 2016, p. 56). She recommended that principals work with the faculty to develop and implement models of distributive leadership. This work should include providing support and encouragement for teachers, establishing clear communication and reflection amongst the staff, ensuring that PLC engagement lightens the workload instead of making it more cumbersome, and by cultivating a culture of collaboration in the school (Wilson, 2016).
The work of advancing PLCs is not limited only to educators who hold a formal administrator position; teacher leaders can also assume a guiding role. Enacting a PLC model that trains teacher leaders to guide the collaborative work of teachers has been an effective approach to changing culture and deepening teacher learning (Charner-Laird, Ippolio, & Dobbs, 2016). Researchers investigating a two-year study of teacher leaders facilitating PLCs dedicated to inquiry in disciplinary literacy found that the team leaders played a key role in acting as guides for their group. They functioned as both a leader and a learner, and in maintaining a big picture focus for the group while moving individual teachers forward in their own learning (Charner-Laird et al., 2016). The presence of trained teacher leaders is shown to have positively influenced both the new approaches to literacy instruction in the content areas and in developing new ways of working and learning together. This was summarized as:

If we want small groups of educators to collaborate, not just to adopt and replicate their existing practices but also truly to invent, adapt, and transform instructional practice, then this challenging work much be taken up by engaged educators and led by savvy facilitators over time. (Charner-Laird et al., 2016, p. 993)

Leadership, whether it is from the principal, other school administrators, or teacher leaders, is critically important to implementing PLCs that will result in new and meaningful learning for teachers and students.

The magnitude of teacher collaboration is enhanced when school leaders are involved with supporting the work of PLCs. This is the conclusion from a longitudinal qualitative five-year case study of PLCs at two high performing schools in the southwest US (Hipp, Huffman, Pankake, & Olivier, 2007). Although these schools had significant differences in
student populations and community contexts, both sites were purposely engaged in sustaining PLCs in part because the principals “were resourceful and shared leadership around issues of teaching and learning inclusively” (Hipp et al., 2007, p. 193). The researchers acknowledged that the process by which schools operate PLCs is complex (Hipp et al., 2007). They concluded that teachers and administrators who “define shared visions and values based on student learning” and who “provide a culture where teachers and administrators learn together in an environment that encourages risk and experimentation” will make strong progress in becoming institutions that address important issues concerning student learning (Hipp et al., 2008, p. 193). Not long after this, a three-year qualitative case study in Australia by Long, LaBone, and Nicholson (2009) determined that the school system’s willingness to focus on lateral and distributed leadership, cross-school networks and PLCs, instead of professional development led by the central office administration, was important for enhancing student achievement. “In order to enhance student achievement rather than top down professional development being led by the central organization, alternative models of lateral and distributed leadership, cross-school networks and professional learning communities were promoted” (Long et al., 2007, p. 133). They determined that principals play an important role in orchestrating PLCs and write, “school leaders have the responsibility to facilitate the development of collaborative professional learning which places the teacher at the heart of any change process in order to improve the learning outcomes for all students” (Long et al., 2009, p. 135). This finding suggests that the relationship between school leaders and PLCs is particularly important in the decision-making and implementation of changes to school practices for lasting and sustained change. Since this study found situations when professional development about pedagogy did not
transfer to teachers and change their practices, the researchers recommend that school leaders limit the number of initiatives in which they ask teacher participation and instead establish a “frameworks of practice” (such as the Quality Teaching Framework used in this Australian study) to link professional development back to teacher practices (Long et al., 2009, p. 135).

When educators who serve in leadership or teaching roles in a school setting come together to focus on learning, the outcome is dynamic and effective. Wilhelm (2010) reported that schools benefit when leaders are sitting members of PLC groups. The presence of a principal or other school leaders communicates an interest in the topics addressed by teams and provides guidance and coaching to teachers to help develop their confidence and leadership capacities (Wilhelm, 2010). She described a school where the principal and two assistant principals assumed the responsibility for launching a teacher collaboration initiative that required them to sit with teacher teams, model involvement, troubleshoot problems, and support the teacher team leaders. “Their very presence supported each team leader in the sometimes daunting task of fulfilling this important new role” (Wilhelm, 2010, p. 34). The effort invested by administrators to train teacher leaders was sustained. The PLCs in this school became models for the district and were visited by administrators and teachers from K-12 levels for the purpose of observing the role of teacher leaders and the nature of PLC interactions. Wilhelm reports that, “the strategies that are discussed during collaborations can often be seen immediately in classrooms following the team meetings. Student achievement has improved dramatically, and achievement gaps are closing” (2010, p. 36). Similarly, Kennedy, Deuel, and Nelson (2011) found through a five-year qualitative study of middle and high schools that the shared leadership between teachers and principals benefits adults and students. Shared leadership increases the sense of collective responsibility and
professionalism. In looking at this example of distributed leadership, the researchers found that leaders had a positive impact on PLCs but cautioned that, “leaders must be careful about identifying the team’s learning needs, otherwise PLC work can easily default to implementation of compliance-oriented work sessions doing little to engage teachers, change classroom practices, or enhance students’ learning experience” (Kennedy et al, 2011, p. 23). The research on PLCs suggests that when school administrators participate in PLCs, it is more effective if they assume an equal role to others and refrain from trying to assume a leadership role or even informally lead the group. For example, a mixed methods study (Buttram & Farley-Ripple, 2016) focusing on the role of principals in PLCs found that the school with the most successful PLCs was also the only site where the principal regularly attended PLC meetings. “He used the opportunity to reinforce the school’s vision for instructional quality as well as to answer questions about student data” (Buttram & Farley-Ripple, 2016, p. 212). The other principals in the study “poked their heads in” to confirm that teachers were meeting and support their work, but they did not actually participate in the discussion. While it is important that administrators avoid controlling the PLC group, the broad perspective they bring about the goals of a district coupled with their understanding about specific school initiatives is essential for advancing PLC work.

Data Use

In an effort to understand more about the relationship between effective teaching practices and student achievement, the use of data has increased. Researchers identify this area as one that requires active leadership from school administration. It is essential that school leaders are involved continuously in supporting teachers to develop skills in data collection and analysis in order for data usage to be effective (Cosner, 2012). Using
collaborative data practices allows for “the understanding that progress from novice to more productive forms of collaborative data practices . . . is supported through ongoing assessment” (Cosner, 2012, p. 30). Cosner (2012) emphasized that the actions of school leaders must extend “beyond initiating actions—such as establishing a vision for data-based collaboration—which have tended to be more commonly noted leadership supports for teacher data use” (2012, p. 30). Using data meaningfully in collaborative groups is complex, yet essential. In outlining the conditions necessary for schools to make sustained, systemic change, Fullan (2006) wrote “Deep learning means collaborative cultures of inquiry, which alter the culture of learning in the organization away from dysfunctional and non-relationships toward the daily development of culture that can solve difficult or adaptive problems” (p. 119). To this end, teams of educators can actively use information from collected data as a focal point for engagement and discussion. Fullan (2006) advised that effective data use should avoid excessive assessment demands and use a range of quantitative and qualitative data. He also emphasized school systems “drive out the fear” (Fullan, 2006, p. 119) of looking at data, stating that a system that focuses too much on the individual and not enough on all levels of the system will not experience sustainability.

Examining how teachers use data in a collaborative setting has received only limited attention in scholarly publications (Cosner, 2012). In order to advance understandings about how school leaders can diagnose and intervene with respect to collaborative data practices, Cosner (2012) synthesized literature about teacher work groups, organizational and group psychology, and other empirical research and theoretical perspectives in education. Her findings reveal that using data to make determinations about student learning needs is complicated. “Research suggests that generating knowledge of student learning from the
review of student learning assessments is a complex process that necessitates skilled analysis, content knowledge, and more robust collaborative discussions and debates for the production of actionable information” (Cosner, 2012, p. 34). After Cosner, Sims and Penny (2014) studied what they viewed as failing PLCs in one high school in order to gain insight about what practices to avoid. The PLCs at the study site were referred to as “Data Teams,” and the researchers concluded that a “narrow focus of the discussion on a single data source created blinders that prevented the PLC from serving its more comprehensive function” (Sims & Penny, 2015, p. 44). Similarly, observations of PLCs and participant interviews revealed that the work of the PLCs focused on looking specifically at student failures on high-stakes testing. “The broader collaboration on learning and improving the pedagogical environment was not seen. Work and conversation with regard to teacher learning and collaboration was also missing from the PLC meetings” (Sims & Penny, 2015, p. 44). In particular, the researchers found that administrators were disengaged and unsupportive of the PLC process and the narrow focus of the collected data did not inform teachers about individual student strengths and weaknesses. Sims and Penny (2015) concluded with recommendations for the school district to invest in high-quality training for the administration and teachers so that the entire community is prepared to effectively implement PLCs that are rich and complex.

As the use of data has increased in education for the purpose of measuring student achievement, school quality, and teacher effectiveness, PLCs provide a structure for discussion about empirical results. While many school districts may require PLC groups to include data analysis in their work, more recent work by Kruse and Johnson (2017) was critical about how numerous schools are currently using data. The authors fault what they
see as a causal interpretation of the data because educators are not rooted in a theoretical foundation in shared values of teaching and learning. This is problematic since educators use this causal analysis to make future decisions about teaching and learning:

At the heart of data use in schools is an effort to observe how students perform on any number of tasks and then to predict how they might perform on similar tasks in the future. Simply put, these observations focus on what students are doing rather than why they are doing it. The focus is causal in nature. (Kruse & Johnson, 2017, p. 594)

Kruse and Johnson further explain that the practice of schools—which are data-rich and analysis-poor—attempts to identify patterns in large heaps of data leads educators into thinking that seeks a quick-fix practices. This logic is flawed because it mistakes “data that, at best, can suggest correlations between how well students have performed on a task and what has transpired in school . . . attention to the details data can provide us may distract us from more meaningful issues and actions” (Kruse & Johnson, 2017, p. 595). When teachers use data in this manner during PLC time, the collaborative work becomes contrived and the richness and nuance are lost. Therefore, Kruse and Johnson (2017) recommend a more mindful use of data that seeks nuanced understanding and emphasizes the testing of hypotheses and reflective thought. “We argue that by creating synergistic ties between how we think about our work, what we do in response to our thinking, and the ways in which we employ data in the process, the contributions of meaningful data use in school settings can be established and better understood” (Kruse & Johnson, 2017, p. 600). Data can be useful to inform conversations about the relationship between instructional practices and student
learning. Teachers need to know what data to collect, which data points to examine, and how to interpret the results in order for data use to augment PLC collaboration.

**Conclusion**

The PLC literature is convincing in its finding that a job-embedded, collaborative experience offers teachers an opportunity for professional learning that can reform teaching practices and improve student achievement. The research shows, though, that simply grouping teachers together for meetings will not automatically result in improving the work of educators—even if the collaborative time is deemed for PLCs. It can be a challenging undertaking for a school to establish PLCs and set high expectations for improving instruction and learning. The studies in this literature review illustrate the ways that implementing PLCs that use a shared vision, engage in deep dialogue, include the regular participation of school leaders, and embed proper training in data analysis are important elements for creating PLCs that are truly collaborative and improve the learning experiences for students. However, more research still needs to be completed that will reveal the complex interactions that occur within PLCs. This will provide educators with additional ways to comprehensively support their professional learning. The intent of this qualitative research study is to help fill this gap by closely examining the experiences of teachers working together in PLCs in a setting where they have existed for more than 5 years.
CHAPTER THREE: RESEARCH METHODS

A qualitative case study was used to understand the perceptions of teachers who participate in Professional Learning Communities (PLCs) that have existed for over 5 years. It is concerned with how they view the way that PLCs relate to teacher subject learning, teacher pedagogical learning, and student learning. More specifically, it focused on five PLCs within high school humanities (English, social studies, and world languages) at one high school in Connecticut. Of particular interest were the ways in which organizational structures, both formal and informal, advanced the continuing work of communities of practice. DuFour (2015) believed that PLCs need adequate structured time for weekly collaboration during the contractual day so that educators can participate in high-yielding professional development that “is relevant to their context, helps them plan and improve their instruction, is teacher driven, includes hands-on strategies applicable to their classrooms, is highly interactive, is sustained over time, and recognizes that teachers are professionals with valuable insights” (DuFour, 2015, p. 135). Therefore, the researcher sought to better understand the ways in which frequent and continuing work through a PLC structure is meaningful to teachers and the type of productivity that this type of work yields. An overarching research question guided this study: In what ways does an established Professional Learning Community support the work of teachers? The study also sought to answer the following research questions:

1. How do teachers perceive the relationship between the work of the Professional Learning Communities and their classroom practices?

2. What perspective do teachers have about the impact of Professional Learning Communities on student learning experiences?
3. In what ways does an established Professional Learning Community support the professional learning of teachers?

4. How do teachers view their roles and the roles of others in a Professional Learning Community that is no longer in the formative period of development?

5. What perspective do administrators have about the impact of Professional Learning Communities on student learning experiences?

**Study Context**

The researcher secured permission to conduct a study in the Lincoln School District in Connecticut that was in its sixth year of implementing a Professional Learning Community (PLC) initiative. This district was selected because the high school schedule embeds PLC time for teams of teachers, during the school day, for 80 minutes once every four days, which fits the recommendations found in the PLC literature. Additionally, this school has had PLCs in place for six years and could shed valuable insight on the on-going issues and successes that can be found within PLCs that should be beyond the initial stages of implementation. Although other schools in the region exist that use a similar schedule, those sites were not considered because the schools were either in the initial stages of working in PLCs or employed educators known to the researcher, creating a potential conflict of interest. The researcher had never met any employee working at the chosen study site.

The district is comprised of a large geographic area and the median household income for the town from 2011-2015 was $79,000, which is higher than the Connecticut State mean of $69,999. The school population is also more homogenous, White, than the general population of Connecticut. A comparison of demographics between the Lincoln School District and the State of Connecticut is found in Table 1.
Table 1

Demographics for Lincoln School District and the State of Connecticut

<table>
<thead>
<tr>
<th>Category</th>
<th>Lincoln School District</th>
<th>State of Connecticut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian American</td>
<td>3.7</td>
<td>4.9</td>
</tr>
<tr>
<td>Black</td>
<td>a</td>
<td>12.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>11.8</td>
<td>23.0</td>
</tr>
<tr>
<td>Two or more races</td>
<td>2.9</td>
<td>2.7</td>
</tr>
<tr>
<td>White</td>
<td>79.2</td>
<td>55.9</td>
</tr>
<tr>
<td>Free or reduced-price meals</td>
<td>18.3</td>
<td>38.0</td>
</tr>
<tr>
<td>English language learners</td>
<td>2.3</td>
<td>6.4</td>
</tr>
<tr>
<td>College entrance (2015)</td>
<td>75.7</td>
<td>71.9</td>
</tr>
</tbody>
</table>

Data suppressed by the State of Connecticut to protect anonymity of school districts in CT (CT State Department of Education, 2014)

Although the district had many economic and human capital strengths, regional newspapers have reported on discord within the school system including issues related to funding and teacher evaluation. For instance, in 2015, the president of the teacher’s union announced the formation of a political advocacy group designed to support the school system, and promote respect and transparency, in the district decision making process. The schools within the district consisted of the following grade level configurations: two K-2 elementary schools, one 3-5 intermediate school, one 6-8 middle school, and one 9–12 high school. The high school enrolled 1345 students during the 2015-16 school year, the last year for which data are available.
Participants

The study participants were selected from three distinct PLC groups, English, social studies, and world languages, formed in the school, and also included school-based administrators. The faculty within these three curricular areas for the 2016-17 school year included English teachers ($n = 16$), social studies teachers ($n = 15$), and world languages teachers ($n = 9$). The principal and three assistant principals have building and district administrative roles and were also interviewed ($n = 4$). This resulted in a total of 23 participants, who were interviewed and observed in their roles with PLCs.

The researcher sought a purposive, total population sampling of two English PLC groups, two social studies PLC groups, and one world languages PLC group. Research participant groups included all teachers who have experience working with a humanities PLC and who were willing to share their experiences with the researcher. The researcher also included the views of building administration for the purposes of collecting additional perspectives and for triangulation. PLC membership and more detailed experience of the participants are shown in Table 2. All names reflect pseudonyms for the anonymity and protection of the participants. The Social Studies #2 PLC group has been intact the longest, with three of the four members assigned to the same group for six years. The other PLCs were subject to staff turnover or changes in course assignments, resulting in new hires who joined some PLCs and veteran teachers who rotated to work with colleagues in other groups. For the other PLC groups, all members had been assigned to different teams during the prior year or they were new to the district. This was the first year those teachers were working with each other in a PLC group.
Table 2

*Participant PLC Membership and Experience*

<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>PLC</th>
<th>Years in Current Position</th>
<th>Years in Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dennis</td>
<td>English #1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Larry</td>
<td>English #1</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>Sara</td>
<td>English #1</td>
<td>16</td>
<td>30+</td>
</tr>
<tr>
<td>Alec</td>
<td>English #2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Carmen</td>
<td>English #2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Peter</td>
<td>English #2</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Stacy</td>
<td>English #2</td>
<td>10</td>
<td>30+</td>
</tr>
<tr>
<td>Ellen</td>
<td>Social Studies #1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Carl</td>
<td>Social Studies #1</td>
<td>30+</td>
<td>30+</td>
</tr>
<tr>
<td>Nancy</td>
<td>Social Studies #1</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>David</td>
<td>Social Studies #1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Abby</td>
<td>Social Studies #2</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Ann</td>
<td>Social Studies #2</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Donna</td>
<td>Social Studies #2</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Ben</td>
<td>Social Studies #2</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Joan</td>
<td>World Language #1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Julie</td>
<td>World Language #1</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Megan</td>
<td>World Language #1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Nicole</td>
<td>World Language #1</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Deb</td>
<td>Administrator</td>
<td>30+</td>
<td>30+</td>
</tr>
<tr>
<td>Ed</td>
<td>Administrator</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>Olivia</td>
<td>Administrator</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Todd</td>
<td>Administrator</td>
<td>2</td>
<td>12</td>
</tr>
</tbody>
</table>
Data Collection

Several types of qualitative data collection techniques were employed as part of this case study, including participant interviews, participant observations, and field notes. One of the advantages of multiple points for data collection is that a variety of experiences were explored to better understand the phenomena of participating in a PLC in a district that has had PLCs for a number of years. The researcher provided all study participants with an explicit explanation of the inquiry and the methods that were to be used for data collection and analysis. District level permission was obtained from the superintendent (Appendix A), building level permission was obtained from the high school principal (Appendix B), and individual consent was obtained from all participants for the observations (Appendix C) and interviews (Appendix D). The researcher collected detailed, thick descriptions (Merriam, 2009) about PLC experiences and how the activities of these groups relate to teacher practices in order for readers to transfer this information to other settings.

The overarching research question of the study was: In what ways does an established Professional Learning Community support the work of teachers? The researcher interviewed and observed teachers in five PLC groups in order to collect data that answers the overarching research question. The experiences and voices of the teachers and the observations of PLC activities were important to answering this research question. The perceptions of administrators were also included in this research to examine the alignment of views from teachers and administrators with regards to PLC effectiveness around implementation.

The rationale for including the perspectives of administrators and for interviewing teachers and observing PLCs is twofold. The first is to provide triangulation of the data
through different sources of information—the teacher, the administrator, and the observations of group activities. Per Creswell, triangulation “involves corroborating evidence from different sources to shed light on a theme or perspective” (2013, p. 251). The second purpose for using these sources is to satisfy the goals of the study, which was to understand the work within PLCs that have existed in a district and how these supported teachers. The additional perspectives of the administrators provided details about the role of school leadership in PLCs.

**Interviews**

Interviews are important in qualitative research because they help researchers discover what is “in and on someone else’s mind” (Patton, 2002, p. 341). Patton explains, “We interview people to find out from them those things we cannot directly observe . . . The purpose of interviewing is to allow us to enter into the other person’s perspective” (pp. 340-341). In this study, semi-structured interviews were used because the researcher was interested in details of individual perspectives, which are best gathered through flexibly worded questions intended to allow the researcher “to respond to the situation at hand, to the emerging world of the respondent, and to new ideas on the topic” (Merriam, 2009, p. 90).

Participants were interviewed utilizing a semi-structured interview protocol written by the researcher with the purpose of better understanding the lived experiences of the teachers (Appendix E) and administrators (Appendix F). The interview protocols were expert validated by the researcher’s dissertation committee, and with the University’s Internal Review Board as an additional safeguard for participants. Individual interviews were conducted after the conclusion of field observations. Teacher interviews took place either in the library conference room or an empty classroom. The teachers were relaxed and
comfortable with sharing their PLC work experiences. Participant interviews elicited information about the experiences of teachers in PLCs pertaining to how the community supports their work with students and their own professional learning. Administrator interviews were conducted after all teacher interviews and all field observations had been completed to elicit information about how administrators view the impact of PLCs on teacher pedagogy, student learning, and the overall productivity of PLCs. These interviews were scheduled by contacting administrative assistants and took place in the administrators’ office. During the interviews the administrators were cordial to the researcher. All interviews lasted between 15 to 35 minutes and were digitally-recorded and transcribed verbatim.

**Observations of Professional Learning Communities**

In order to witness what takes place in each of the humanities PLCs, observations of teachers participating in PLCs took place. The researcher observed each PLC group (English #1 and #2, Social Studies #1 and #2, and World Languages) for the duration of the 80 scheduled minutes, on three separate occasions throughout the spring of 2017 for a total of 15 observations. The researcher did not participate in the meeting, nor did she ask questions or seek clarification during the actual meeting time. Instead, researcher questions were reserved for the conclusion of the meeting and asked of one individual participant per meeting. In this way, the researcher kept field notes as an “outsider.” A researcher created observation form was utilized during all of the meetings to ensure consistency across the observation data collection (Appendix G). Along with field notes, the researcher collected copies of any materials that were shared at individual meetings as artifacts.
Research Field Notes

The researcher kept detailed field notes throughout the data gathering process. Descriptive and reflective field notes were maintained on the PLC meeting template recording form (Appendix G). The template included a space for chronological summary of activities in the PLC meetings. These led to highly detailed and functional records of information about the participants, the setting, and the activities and behaviors of the participants. Additional field notes of a reflective nature were recorded immediately after the PLC observations in a separate document and included “the researcher’s feelings, reactions, hunches, initial interpretations, speculations, and working hypotheses” (Merriam, 2009, p. 131). They were distinct from the original descriptive notes collected during the PLC meetings that capture concrete details and direct quotations. The field notes were more of a meta-analysis with a focus on the process, reflection on activities, and summary conclusions about activities for later theme development (Creswell, 2013).

Data Analysis

An embedded case study qualitative research design was used during data analysis. Creswell (2013) defines case study as “a qualitative approach in which the investigator explores a real-life, contemporary bounded system or multiple bounded systems over time, through detailed, in-depth data collection involving multiple sources of information, and reports a cased description and cased theme” (p. 97). The embedded approach to single-case study involves more than one unit of analysis which “occurs when, within a single case, attention is also given to a subunit or subunits” (Yin, 2009, p. 50). The researcher studied two PLCs from the English department, two PLCs from the social studies department, and one PLC from the world languages department. The case is defined as the humanities PLCs
at LHS and each of the five PLC groups represents a subunit, from which the researcher gained an in-depth understanding of teacher experiences in PLCs. Yin (2009) recommends using embedded case study to avoid the problem that can occur with a single case in which “a global approach allows an investigator to avoid examining any specific phenomenon in operation detail . . . in which the entire case may be conducted at an unduly abstract level, lacking sufficiently clear measures or data” (p. 50).

**Description of the analyses**

Yin (2009) advises that embedded case studies incorporate the subunits of analysis, “so that a more complex, or embedded, design is developed. The subunits can often add significant opportunities for extensive analysis, enhancing the insights into the single case” (pp. 52-53). However, he warns against focusing too much on the subunits to avoid a shift in the orientation of the study. Merriam (2009) recommends that qualitative analysis begins with a process of category construction, sorting categories and data, and naming the categories. Next, the researcher is ready to move into a more theoretical phase in which the categories are linked together in a meaningful way. Once this process has been followed for each case, cross-case analysis can begin that seeks “to build abstractions across cases” (Merriam, 2009, p. 204). Data were analyzed following the structure put forth by Merriam (2009). The ideas that emerged from this practice informed the conclusions of the study.

The interview transcripts and the research field notes were analyzed following Merriam’s (2009) three-step process of category construction, sorting categories and data, and naming the categories. As the analysis process evolved within-case and then cross-case analysis of themes to inform the overall findings. The researcher created 30 codes and used NVivo 11 software (QSR International, 2017) to organize the data, develop themes, and work
across data. These themes were then aggregated to identify common findings across cases. This involved several rounds of coding and theming. Themes emerged from the observed patterns identified in the data, a process that “can be very productive” when the researcher is managing a significant amount of information (Miles, Huberman, & Saldaña, 2014, p. 278). In addition, minutes spent on various, observed PLC activities were counted to identify the “essential qualities” of how teachers spent the collaborative time (Miles et al., 2014, p. 282). Triangulation of the data from the teacher interviews, administrator interviews, and the field observations was then used for the purposes of corroboration. When conflicting findings were identified, the researcher further analyzed these instances to develop an explanation for why such occurrences exist (Miles et al., 2014). The initial themes were synthesized into major themes, confirmed by the data, and checked by the dissertation advisor.
**Research Timeline**

The research for this qualitative case study followed the timeline outlined in Table 3.

Table 3

*Dissertation Timeline*

<table>
<thead>
<tr>
<th>Objective</th>
<th>Process</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Review Board (IRB) obtained</td>
<td>Applied to Institutional Review Board (IRB) for approval of study</td>
<td>December, 2016</td>
</tr>
<tr>
<td>Sought participants with completed assent and consent forms</td>
<td>Identified potential participants by emailing the high school principal and department chairs who asked for PLC groups to volunteer</td>
<td>January through February, 2017</td>
</tr>
<tr>
<td>Conducted PLC observations and participant interviews</td>
<td>Set dates and conducted 15 observations and 23 interviews</td>
<td>March through May, 2017</td>
</tr>
<tr>
<td>Transcribed interview data</td>
<td>Transcribed</td>
<td>May through June, 2017</td>
</tr>
<tr>
<td>Coding of participants’ responses</td>
<td>Analyzed responses for identifiable patterns</td>
<td>July 2017 through August 2017</td>
</tr>
<tr>
<td>Coding of observations</td>
<td>Analyzed field notes to identify how observations confirmed or refuted emerging themes</td>
<td>September, 2017</td>
</tr>
<tr>
<td>Completed and published research</td>
<td>Wrote summary of research</td>
<td>September through January, 2018</td>
</tr>
</tbody>
</table>

**Limitations of the Study**

This study satisfies the requirements for prolonged engagement with participants to build their trust and learn the culture, and for triangulation by using information from teacher interviews, administrator interviews, and PLC observations to corroborate evidence. The limitations of this study are that the humanities focus may increase the possibility that
teachers are more familiar and accustomed to working together and are more social than teachers in other disciplines (i.e., math, science). In addition, the specific district initiatives that are mentioned by participants in the study may bias teacher experiences with PLC work because they associate their PLC experiences with having a particular focus (i.e., data collection work). Finally, the participants may not represent the experiences and opinions of the entire faculty since study volunteers are more likely to embody cooperativeness (Miles et al., 2014).

**Positionality**

The researcher has taught English for 22 years and supervised and evaluated teachers for 11 years in the past. She has also worked with teachers for PLC groups in a district other than the one under study. There is always a potential for researcher bias. However, to address this issue, the researcher closely followed the research plan and treated all participants with respect and impartiality. The researcher continuously reflected on her role throughout the research process to assess that bias was not present. She was transparent in her communications with participants so that they had a clear understanding of what to expect from their cooperation with the study. In addition, the presence of the researcher at the school may have influenced the sharing and actions of the participants. However, the researcher visited the study site over a period of three months and, over time, she became a familiar presence in the building. It is believed that her familiar presence in the school mitigated any initial discomfort or anxiety that may have been felt by the participants. Consent was obtained by the researcher from the district leadership and from all participants. Pseudonyms have been used for the district and each participant to protect the identities of the participants. All collected data were secured and kept confidential.
Trustworthiness

The trustworthiness of this study is established by examining how the methodology of the research meets the standards for the quality of conclusions in qualitative research which are based on the review of 26 tactics for drawing and verifying conclusions (Miles et al., 2014)

Confirmability

The primary concern here is that the study has “relative neutrality and reasonable freedom from unacknowledged researcher biases—at minimum, explicitness about the inevitable biases that exist” (p. 311). This has been established by the explicit descriptions of the study procedures in Chapter 3, including the explanation of how data were collected, processed, and represented in order to draw conclusions. The conclusions of this study are clearly supported by the data presented in Chapter 4. The researcher has been self-aware about the potential of bias and used a reflexive journal during the study to minimize the effect of such beliefs. The researcher also met with and sought guidance from her dissertation chair during various stages of analysis, including using NVivo (QSR International, 2017) and talking through and revising themes including through the last stages of analysis that are based on the writing of the findings for sense-making.

Dependability

Establishing that the study was conducted with reasonable care and utilized a stable process are the core features of this standard (Miles et al., 2014). The criteria for this standard was met, as demonstrated by a study design that corresponds to clear research questions, clear description of the researcher’s role at the study site, parallelism across the
data sources of PLC observations and participant interviews, a connection between the analysis and the theoretical foundation, and the collection of data across appropriate settings and times.

Credibility

Miles et al. (2014) refer to this standard as having the “That’s right” (p. 313) factor, meaning that when the findings of the study are orally presented, the audience members are nodding their heads in agreement to acknowledge the truth of what they are hearing. This study is credible because the descriptions or thick, rich, and context based; the accounts from participants are realistic and convincing; and the triangulation of participant observations, participant interviews, and researcher field notes produce converging conclusions. When these sources contradicted each other, such as the differing perspectives on the data showcase, the differences were explained in the findings.

Transferability

Experts have disagreed on whether the responsibility for determining the transferability of a study is that of the researcher or of the reader (Miles et al., 2014). Characteristics for either party to consider when making this determination include the fullness of descriptions about the sample, setting, and processes; reported limits on sample selection, the diversity of the sample; the presence of thick description in the findings; and the level of connectedness between findings and prior theory (Miles et al., 2014). The study presented here does provide the required detailed information so that a reader could make a supposition about whether the findings could be generalized to other school districts.

Application
It is important that the conclusions of a study can be used for taking positive and constructive actions that will benefit a community, a field, or future researchers (Miles et al., 2014). The study was intended to examine the perceptions of teachers about their experiences in PLCs in order to reveal whether or not this professional development system improves teaching practices and supports student achievement. The recommendations that emerged from this study are proposed so that professionals in the field of education can take action to increase the benefits of using PLCs in schools. These findings can also be useful in stimulating future research about PLCs.
CHAPTER FOUR: FINDINGS

The intent of this qualitative study of Professional Learning Communities (PLC) was to closely examine the work that teachers do during PLC meetings in conjunction with interviews to better understand how their efforts improve professional practice for improved learning experiences for students. One aspect of this work is to recognize that simply allocating time for teachers to meet about their professional needs is a useful practice even when the work they do during this time deviates from a strict focus on student achievement. At Lincoln High School, teachers demonstrated their professionalism by arriving on time and then spending a few minutes sharing ideas for how to use the designated period in all 15 PLC sessions that were observed. The conditions of the meetings were relaxed in that no prior agenda had been created and no school administrator was present to oversee or participate in the work. While the meetings were informal, they were a required part of a teacher’s assignment at Lincoln High School. The school district has invested in this professional development initiative to the extent that teachers are assigned a collaborative meeting time that is embedded into the school schedule, which is supported at the building level. This shared time has created a means for teachers to professionally benefit through participating in a professional learning community.

This chapter is organized to first look at findings related to the Models of Professional Community, which includes Supportive Structural Conditions, Shared Vision, Supportive Relational Conditions, and Shared Personal Practice. The next sections examine Leadership Group Formation and Depth of Dialogue, and conclude with Teacher Evaluation and Data.
Models of a Professional Learning Community

Supportive Structural Conditions

Time that is specifically set aside for teachers to work together is important given that the majority of any teacher’s day is typically spent instructing students. The Lincoln School District has designated the learning that teachers can gain from collaborating with one another as relevant. Teachers at Lincoln High School look forward to attending their PLCs because they value the time they are given to participate in subject area-based discourse and other professional activities—the occasion to share resources and instructional strategies, engage in common planning, and discuss student management issues is valued by all teachers. When PLC meetings are embedded into a weekly schedule, teachers are able to bring the concerns of daily instruction into their conversations and receive routine advice from colleagues. This is important because conversation that focuses on the individual considerations of a teacher is not applicable at a more general faculty meeting or even a professional development training, which is more formally structured, has a specific objective, and held with a larger group of people. For example, it would be inappropriate for a teacher to raise questions about a particular lesson during a department meeting or a faculty meeting, which have different set goals and agendas. Both of these types of meetings are conducted with a top down approach. In contrast, a PLC is meant to be a ground up approach with the onus on participants for determining how to utilize the time. Additionally, the structure of school wide meetings, faculty and others, usually address topics that are common to all attendants. However, the size and function of a PLC serves a unique space in school communities by being a place where individual teachers can share and receive collegial input geared toward their professional needs.
Lincoln High School provides every teacher with 83 minutes of PLC time once every four school days. The school runs using an A/B block schedule on a four-day rotation (A1, B1, A2, B2), with four classes meeting on A day and four classes on B day. During the span of this two-day, 8-block rotation, a teacher will teach three blocks on one day, two blocks on another, have one block of teacher preparation time each day, and is assigned either a PLC or study hall once every two days. Teachers have about 25 minutes for lunch and supervise an advisory for 25 minutes every day. PLC time is scheduled to occur opposite a study hall or similar teacher duty. For example, a teacher could have PLC time during block two of an A1 day and then study hall duty during the same block on an A2 day. Although this configuration is challenging to schedule, the school is committed to providing this time because the district believes in the work done in PLC meetings. Sara believes the time allotted is a strong indication of administrative support in the building.

This is an administrative scheduling nightmare; to get four teachers aligned for this and yet everything else goes on without having to double up on anything. Getting in the preps. Getting in the study halls. We all have study hall or some sort of duty. I think it’s just a bloomin’ miracle that they get it in. (Sara)

Another structural element that is important for PLCs to function well is to have designated meeting space. At LHS, PLCs are expected to meet in the library. However, no designated space for PLCs has been set aside, so teachers find themselves trying to work while sometimes surrounded by crowds of students who can be loud or interrupt the teachers with questions. Some groups have handled this issue by relocating themselves to a group member’s classroom, an action that is permitted but not an official practice.
We have stopped meeting in the library learning commons because of the noise level and it has just affected our ability to concentrate. Our department chair knows that. We usually let the secretary or [our] administrator know where we are, but for the most part we’re always working, so I think that’s been okay. They have left us alone. But, if we are required to go down there [library], we will. But, it really does affect our ability. So the place that we need to go is really important to us. (Ann)

However, relocating to a teacher’s classroom can invite other issues that interfere with PLC work. Julie said her group has found the library distracting with constant interruptions from students who see their teachers and think the teachers are available to help them. Although, when her group moved to a classroom, that teacher was “distracted by their own stuff.” Julie raised the issue of locating PLCs in the library formally as a concern, but it has not been addressed and her speaking out even created tension.

I brought this up at faculty senate a couple of months ago, which I was told ruffled feathers. I don’t know why, but I kind of said, “Is there a professional space that we can have that isn’t necessarily the library, that isn’t somebody’s classroom, like I don’t know what, but somewhere we can go, because that’s difficult.” (Julie)

During the observed meetings, Julie’s PLC group met midday when the library was more crowded than those that met during the first or last block of the day. Students were witnessed interrupting the teachers. In addition, teachers were not able to frequently have private conversations and at times, teachers had difficulty hearing each other over the noise coming from students. Given the purpose of PLCs is to improve student learning and utilize student data to improve teacher practice, it is problematic that there is a lack of privacy for teachers to speak confidentially.
Shared Vision

Teachers who had been at LHS since the PLCs were first instituted six years ago recalled different rationales for why the practice began. Some veterans said that they were told to work together on lesson planning while others thought it was started in preparation to meet the demands of the Connecticut System for Educator Evaluation and Development (CT SEED) that was instituted as a statewide system for evaluation in 2014 (Connecticut State Department of Education, 2014). While the original vision of the PLCs is somewhat contested, all participants confirm that the Lincoln School District expects faculty to use the PLC time to develop, score, and analyze student assessments required by CT SEED. In Connecticut, teacher evaluation is tied to student performance based on the guidelines mapped out in the CT SEED policy. Specifically, the teacher evaluation system requires teachers to develop standards-based assessments to track student learning annually from the fall to the spring. A teacher’s annual performance rating is heavily dependent upon the degree to which learning goals are met as proven by student performance data on goal-related assessments collected over the course of the year. In addition, teachers are expected to analyze the student performance data to develop instructional materials to improve student learning in targeted areas during the PLC meetings. Overall, teachers were critical of how the evaluation plan dominated their PLC time and expressed a desire to use the time to focus on developing lessons that focus on curricula content topics.

In a variety of ways, we prepare the assessments. We search for sources to use with the assessments. We create remediation for students. We then go and look how our students did and will debrief each other as to what our experiences were. But as I said before, once that requirement is out of the way, we’ll actually get down to what
we expected in the beginning and that is just, “Wow, do you have a cool lesson on how the senate works for Civics? Oh yeah, I’ll share that with you.” So, we are unusually focused for a group that is required to do something. (Ben)

Ben praised his group for their productivity with respect to following the district requirement to assess student progress toward the learning goal that was established to evaluate teacher effectiveness, even while questioning the ascribed nature of the work. Although PLC members are compliant with this district expectation, their belief is that using PLC time to develop innovative approaches for students to experience course content would be more meaningful.

The absence of a shared vision that was mutually established and agreed upon by the faculty and administration was clearly evident. Although teacher perceptions were that the majority of the PLC work focused on actions related to teacher evaluation, the observations told a different story. Teachers believe that making and scoring assessments and logging data to prepare for their individual year-end review dominated their PLC time. However, only a minor segment of the observed time was dedicated to either scoring common assessments or preparing data for the evaluation plan requirements (Appendix I). The English #1 PLC was focused on setting learning goals for students in second semester, half-year English elective courses. Although the teachers in this PLC were all teaching different courses, they decided to focus on improving narrative writing as a common goal. They spent half of two observed PLC meetings calibrating their approach to scoring baseline on-demand narrative writing prompts. No other PLC was observed doing this work, although several teachers told the researcher they would start administering and scoring end-year assessments in May. Instead of working with data, teachers were most often observed engaging in
individual tasks such as correcting student work, entering grades, or researching curricular resources to use during instruction (Appendix H). Examples representing some participants highlight a single teacher in the Social Studies #1, Social Studies #2, and World Language #1 PLCs who was engaged in individual work at a table and sitting with the rest of the group and would only jump-into conversations periodically. Another practice that occurred was when a teacher or two in the Social Studies #1 and World Language #1 PLCs were each using a laptop computer independently for a range of activities. These included scanning websites to find instructional content, reviewing student grades, reviewing a slideshow in preparation for class, and looking at a fundraising site dedicated to raising money for a school field trip. Periodically, an individual would comment on the content they were looking at on the computer screen, and other teachers would respond. While this type of work was done in a communal environment, it was not collaborative nor focused on large scale student performance. In general, activities that filled the PLC time included common lesson-planning and conversations about general school topics such as classroom management, administrative response to discipline-related issues, field trips, and anecdotes detailing a variety of interactions with students. Although the PLCs are scheduled to meet for 83 minutes, all five groups shortened their sessions by starting late or finishing early on multiple occasions (Appendix H). The exception was the Social Studies #2 group whose members started on time for all three observations and finished early only once during the first observation when they were listening to a presentation by a textbook publisher. One member of the Social Studies #2 PLC said her group was one of the most productive in the school.
We are known to use it very effectively and we are very structured. We do allow for other things that come up or sometimes just the need to talk about things but we are very structured in things in what we want to do, as far as we always using the time together. (Ann)

Although the school does not specify a structure for the PLC meetings, Ann’s comment and the PLC observations indicate that all members of the Social Studies #2 PLC believed it was important to use the PLC time for a focus pre-determined by all members of the group. While the Social Studies #2 PLC interacted with each other more than any other PLC, they used only part of one meeting to address issues related to CT SEED. Overall, the data collected from the PLC observations contrast with the explanations provided for how the PLC was to be used as communicated by teachers and building leadership which stated that CT SEED consumes a majority of the PLC time.

Some teachers acknowledged the incidental nature of PLC work and thought that this may be an intentional benefit of the loosely structured design. Ellen believed that the loose structure of the PLCs at LHS was a positive feature of the practice.

We don’t always have lessons that we are collaborating on. So, it is nice to have this catchall time where we have…to take care of our many, varied responsibilities. And, like I said, “good administrators do recognize that we have many varied responsibilities” and they respect our autonomy in [PLC] to do that. (Ellen)

None of the participants expressed an awareness about the fundamental principle in PLC models that staff must embrace a shared vision that centers on student learning. Although a few teachers mentioned they wished the PLC time had more structure and focus, most of the participants said it was important for them to have the freedom to decide how to use the time.
Teachers did acknowledge that some of the PLC meeting time is spent on topics unrelated to course-related content. However, they felt this was an important feature that added value because they could discuss general concerns about the school such as the discipline policy or final exam schedule. In this way, teachers appreciated the support from peers about all the responsibilities associated with their position.

Although the teachers did not give evidence as to how the PLCs were helping students to learn and achieve at higher levels, they did believe students come to class more prepared than students had before teachers started working in PLCs. Even though a predetermined focus was usually not established for individual PLC sessions at LHS, teachers felt the time together improves their overall level professional practice:

Even if it’s not in a structured way, I walk away feeling good about what I’m doing or bad about what I’m doing, and I need to step it up or that was a really great thing we just created together. (Julie)

Julie taught for many years before the school instituted PLCs and feels that the time together has helped her colleagues and her become much more reflective about their work. Overall, teachers expressed an emphatic appreciation for having the PLC meetings because they use the time for work that might otherwise be rushed or neglected. For example, Ellen was new to LHS and came from a district that did not provide time for teachers to collaborate. Ellen expressed that she was more anxious and exhausted in her former school district because she did the work she currently completes during PLC meetings at home. Now that she participates in PLC work, she believes she is more effective as a teacher and more respected as a professional. In this way, another advantage of the PLC time is that it relieves some of the demands on teachers’ time outside of school and provides the added benefit of interacting
with colleagues. Ellen believes the PLC work strengthens her professional practices on many levels.

Honestly, it’s one of my favorite things about working at [Lincoln] High School. It feels like you just have time to do the things that you need to do whether it’s analyzing data or collaborating, or like I said, on that occasion when we feel that we have all those things under control and you just need to squeeze in a few more minutes kind of refining a lesson that you have for your individual class. It really makes my life a lot less stressful compared to the last school I taught at where we didn’t have that time built into the day. I feel that I take less work home, and I also appreciate that I feel like our administration respects us to allot the time in a way that we feel is valuable. I am able to come into class every day prepared, confident, and ready to go. (Ellen)

Working within a PLC structure provided Ellen with the time outside of school to rejuvenate and be her best in her position. This was similar to the experiences of other teachers who described the PLC time as especially valuable because it helps to ease the strain of balancing work and personal demands. The reality that teaching is a consuming profession that requires a good deal of time and energy, which can be easily depleted led Abby to acknowledge that while she is highly interested in engaging in professional conversations, these interactions would not occur were it not for the PLC meetings.

When my commitment here is done, I’m often running out the door because of my own children. So, I don’t have a lot of time to linger around after the day and walk down the hallways and say, “What’s your thought on this?” This gives you a
scheduled time every four days that you know you are going to be with this group [to] accomplish tasks. (Abby)

Other participants also expressed a need to use the time for planning and grading that would have otherwise needed to be completed after school or at home. This appreciation for time to complete professional work suggests that teachers have a commitment to their responsibilities.

I try to really use my [PLC] time. I have a toddler, so I try…there’s not much even if I try to get something done at home it’s kinda…he demands a lot of our attention and I enjoy it too. So, for me, [PLC] time is important. (David)

Teachers like Abby and David are devoted to both their work and personal lives outside of the school day. The PLC meetings help teachers function successfully in both of their roles without having to compromise the responsibilities of either.

Supportive Relational Conditions

Teachers, regardless of their stage of career, identified the enhancement of collegial relationships as one of the most important benefits of working in PLCs. Historically, teachers have spent the majority of the school day isolated from other educators while they delivered instruction, planned lessons, and corrected student work. Teachers in these conditions could choose to seek out interaction with colleagues, however finding common available time can be difficult and was an impediment. Although the intent behind the evolution of PLCs is to help teachers improve student learning, teachers report that the quality of the relationships with their peers is very important to them. “Those anecdotal things that we share with each other and just time we spend together is very healthy for us as a department and as teachers” (Julie). With this example, the implication is that strong
collegial relationships are part of a favorable work environment. One could go so far as to suggest that this connected feeling will result in improved instruction for students, for when people are happy at work their work improves.

Participants frequently mentioned mutual trust and respect as relational factors that evolve as teachers come to know each other’s work. The teachers identified openness as one of the aspects they most value about participating in a PLC and indicated that they trust their colleagues.

I value that I can be honest; I can ask questions. If I need help, I have the support of my colleagues, that it [PLC work] pushes me to be a better teacher through the discussions we have, through the plans we come up with, [and] through the ideas we share with one another. (Nancy)

The honesty referenced by Nancy is an example of how the group members can be forthright with one another. Members do not feel a need to impress each other or maintain any other type of pretense. The teachers bring the commitment they have helping students learn in the classroom right into the PLC environment in the ways they help each other. The support system that develops in a PLC environment originates from initial common professional interests based on a shared subject area and evolves into one that often includes deep mutual trust and respect. The extent of trust and the relationships that have been built is discussed by Stacy, who shared:

We all, I think, have similar personalities, and we all get along very well. We don’t judge each other. If we have a problem with a student or a lesson or something just not working then we can discuss it and I can actually have positive feedback. (Stacy)
Having a peer group that is trusted and appreciated gives teachers confidence and elevates their instructional skill set. Stacy, one of the most veteran participants, considers the relationships with colleagues as an important factor to her overall job satisfaction.

I really do value the time. I value the fact that I have colleagues I can go to. And I think it is important about a professional working environment—I think it’s important to be able to have that camaraderie with a group of teachers who teach the same thing. (Stacy)

This fellowship was demonstrated when Stacy complimented Carmen—a young teacher—on an idea she had for a summative assessment and Stacy said she was going to try that approach. Another time, Stacy shared a problem she was having with a student, and the PLC group brainstormed strategies for her to try that they believed may help her reach the student. Even with Stacy’s many years of experience, she felt the opportunity to hear peer suggestions was important. In this way, she modeled for newer, less experienced teachers the value of PLCs and also how to operate within one.

Participants from all the PLC groups highlighted PLCs as a valued structure for supporting beginning teachers. While all teachers shared positive experiences about participating in the LHS PLCs, novice teachers expressed a strong appreciation for using this time to learn from more experienced educators. LHS had seven PLC participants who were in their first two years of teaching at LHS, and of these, five were just beginning their teaching careers. Learning the names of colleagues, knowing the school policies and rules, considering what strategies to use for successful student management, and deliberating over how to teach and assess content are just a short list of the challenges that new teachers encounter in the profession. In the interest of helping newcomers succeed, the entire PLC
group functioned as a mentor to a new teacher by answering various questions about planning, unit content, and communication with students. “Without them, I would have been very confused” (Carmen). Other new teachers welcomed the PLCs because they “provide a means for beginning teachers to learn from colleagues, and that it discourages a culture where classroom doors are shut and teachers do not learn from each other” (Dennis).

Similarly, Joan shared, “I feel like it makes me a better teacher being able to collaborate with teachers who have been doing it for a much longer than me . . . their ideas kind of give me some where to go.” Veteran teachers who did not have the benefit of PLC meetings in the early years of their career also recognized how PLCs are an asset for new teachers. They recalled the anxiety they felt when first starting to teach and recognized how much the group regularly meeting helps the beginner make decisions about instruction.

    I think it [is] especially good for new teachers who say “this is going on in my course right now, this is how I handled it, how would you have done it differently?” for them to maybe get some support or advice from someone who has done it before. (Nicole)

Even though the LHS administration did not institute PLCs for the purpose of helping new teachers, an unexpected benefit was that novice teachers were provided low-risk mentoring where they could ask questions in a safe environment without fear of it reflecting negatively on them. This has been especially critical since an induction program for supporting new teachers at LHS has been discontinued. Julie shared her perspective on how help for new teachers has changed over the years in the school.

    I know that [the] teachers who have only been here for a year or two, they’ve told me that they look forward to meeting in [PLC] because they have things they want to run by everybody. I’ve had some of them say, “When we sit there and I hear you guys
talking and I realize it’s not just me because I’m new.” It’s nice. It creates a support that we don’t have any more. We don’t do new teacher meetings on a monthly basis anymore. (Julie)

The PLC meeting has replaced a once valued teacher meeting and provides a continued way for teachers to interact with one another. Specifically, the PLC meetings allow new teachers to see how experienced teachers struggle with the daily challenges of implementing meaningful instruction. Witnessing how others process these challenges and feeling included in this professional dialogue assists new teachers in learning about the intricacies of the profession.

Shared Personal Practice

The nature of operating in a PLC structure meant that teachers were provided a context that served as an outlet for peer feedback. One of the greatest strengths of the PLCs was the interactions in which teachers challenged the ideas of group members or recommended a teacher take different approaches about creating a lesson or responding to a student. “I get honest feedback from my [PLC], you know, where I’m at, where I should be at, and they help me with things that I may be lacking in” (Nancy). During meetings, these sincere types of interactions occurred spontaneously and frequently—in this way they were organic and are difficult to imagine occurring in a different type of organizational structure. When teachers were asked to discuss the way that PLCs provide feedback, Nicole elaborated on how she was the process of the PLC as it connects to reflective practice.

We get to work with teachers in our department where we get to do things that we normally would have to do on our own time and just don’t have the time to do [collaboratively]. Where it gives us the time to have those casual conversations as
“this is what I did in my class, this is what worked, this is what didn’t work.” To kind of reflect on yourself, to give advice, to get advice from another teacher who teaches the same level or has taught that course before. To give suggestions on how to do something different --maybe a different way, like you mentioned, with practices to do a different activity or to do another way to assess. I think it just works in that kind of atmosphere--where otherwise we just wouldn’t have the time to do that [reflect collaboratively]. (Nicole)

PLC work generates community support, and this is valued by both newcomers and experienced educators. As new teachers are working to internalize the fundamentals of the profession, experienced practitioners feel that collaboration improves their approach to instruction with students. During PLC meetings, new and veteran teachers report they frequently shared suggestions for lesson resources, brainstormed new approaches for engaging students in learning tasks, and collaborated on developing tests and other assessments. Making decisions about selecting instructional strategies and resources for lessons is enhanced when teachers receive input from their peers. As one of the interview participants said, “You’re integrating different teaching styles whether you realize it or not because of the way projects are constructed, you’re gaining all these different ideas and not just yourself and the kids get a lot out of that” (Ann). Teachers also reported that they sought out opportunities to share ideas for classroom instruction, with veteran teachers appreciating some of the creative ideas that they heard from new teachers. In this way, the PLC work makes teachers more apt to vary their approaches to instruction. “I think we adapt each other’s pedagogical innovations and make them our own. We’re tweaking each other, and tightening each other up, and making each other better” (Ben). The ongoing meeting time
structured for the PLCs encourages teachers to consider multiple approaches to lesson design. That the teachers are expanding their practices is one way that students with diverse learning needs benefit from the increase in a variety of teaching strategies in the classroom. Hearing the accounts of what others are doing inspires teachers to experiment with their own practices, which likely increases the diversity and quality of instruction provided to students. For example, a small idea that a teacher has for instruction can turn into a rich learning experience for students, as illustrated by Abby:

> Just talking about a project and saying, “Hey, I’d like to do this, does anybody have any ideas?” So, it’s not necessarily part of what our agenda is supposed to be-- but those things are just as important. So, I think we have good quality feedback. (Abby)

Abby’s example represents the informal interaction that begins with a teacher thinking about something she may plan for students and because the PLC meeting is in place, the teacher leaves the meeting with a new set of ideas about how to approach the topic. This serves as a concrete example of the way that PLCs advance the work of teachers by enhancing the lessons that they provide to students. Study participants indicated that the design of the PLC at Lincoln High School was not meant to become a forum for peer feedback, and teachers did not always arrive at the PLC meetings with a plan to ask for advice, yet this was a positive attribute of collaboration.

**Leadership**

The Lincoln School District leadership structure is typical to that of other public-school districts in Connecticut. The central office team includes a superintendent and an assistant superintendent responsible for the preK-12 educational program, the management of human resources with respect to all district faculty and staff, and the oversight of all financial
concerns in the school system. Individual buildings are led by principals and supported by assistant principals who are responsible for the evaluation and supervision of teachers. Department chairs hold leadership positions in the core disciplinary areas; they are paid a stipend and have a reduced teaching load in order to work on department related duties such as ordering supplies, running department meetings, developing teacher schedules, and serving as a conduit between teachers and the building administrators. Although they serve in an intermediary role between teachers and administrators, they are a part of the teacher’s union and their role is more aligned with teachers than with the administration.

The department heads at LHS participate in PLC work on the team with whom they share a common course or grade level. The role each department head has in the group varies across content area. In English, the department head controlled the meeting and decided what topics were going to be discussed. This created resentment from the other teachers on the PLC. “I think that is one of the major issues is having the department head as one of your [PLC] members because she is able to easily just command the entire thing every time” (Dennis). In contrast, the social studies department head had a laid-back approach to working in the PLC. He was often doing his own work at the computer or talking to students in the library. He chatted with David when working on the computer while Nancy and Ellen worked on psychology plans. All the teachers in this PLC had identified oral participation for students in class as one of their Student Learning Objective (SLO) goals for the year. Occasionally, they made a comment about how an individual student was performing in class, but they did not have a conversation with all four members about how to improve student participation during the context of the study. In world languages, one teacher often led conversations that others initiated in order to address the issues.
Julie has been teaching a lot longer than me. I definitely look to her as an expert on what we are working on. So, I will probably ask her for more advice than she is asking me. (Joan)

In all the PLCs, teachers were critical of “the administration,” which included assistant principals and the principal, but not the department head. In fact, the department head would participate in these discussions as a peer with the rest of the group. At LHS, teachers are members of the teacher’s union unlike some districts in CT where department heads are members of the administrator’s union and serve as primary evaluators for teachers. The fact that department heads are not responsible for teacher evaluations likely contributes to the LHS department heads identifying with the concerns of teachers.

The assistant principals at LHS are each assigned departments for which they provide supervision and evaluation responsibilities. In addition to fulfilling other building duties, the assistant principals meet with teachers for goal-setting, mid-year check-in, and end-year summative reviews. They also conduct informal and formal observations throughout the school year of teachers delivering instruction. The assistant principals do not regularly attend the PLC meetings, although they do meet with groups early in the year to discuss the learning goal focus or pop-in once in a while to check-in with how things are going. On one occasion, a group was divided about an issue regarding exam formatting and the PLC members invited the assistant principal to attend and help resolve the problem. The assistant principals look favorably on the PLCs, and all three identified the alignment of assessments and the end of year data showcase as examples of the productive work that occurs during PLC meetings. The principal does not have direct supervision or evaluation responsibilities and does not attend PLC meetings. His observations about the functioning of the PLCs were similar to
that of the assistant principals in that he cited the common assessments and the data showcase as highlights of the PLC program.

The administrators at LHS have a positive perception about the value and productivity of the PLCs. One administrator recalled that while the faculty initially responded with skepticism about the collaboration initiative, the teachers would now not want work without PLCs. “At the time, our teachers were very apprehensive and maybe a little resistant to the concept. But now, if I tried to take their time away, I think there would be mutiny” (Ed). He believes the faculty has grown to see the PLCs as advantageous. “I think for the most part, our staff values the time to collaborate” (Ed). All the administrators acknowledged that variation exists in the ways group function. As one of the administrators explained, some groups are viewed as ideal while others are seen as less committed.

There is the model that we like with everybody involved [in] listening and sharing and really no leader. I have a few groups that have been together for years now and they work, they function very well. You can’t identify a leader. Everybody is participating. Everybody is questioning their own work and their own students and wanting to know how other people got different results. Other PLC’s, you go down there, and you are calling their classrooms because they haven’t gotten down there yet. They don’t see the group work as valuable as their own independent expertise. (Deb)

The high-functioning PLCs are exemplars that show the administrators how the time can be used for improving the educational program. Ideally, all the PLCs in the building should work to maximize their time together as they reflected on their own practices and discussed
student performance. Although discrepancies between groups exist, the building administration chiefly believe that the PLCs are a beneficial use of time.

Increased consistency with course assessments and enacting a stronger focus on strategies to help students succeed are the most prominent benefits LHS administrators attribute to the implementation of PLCs. One administrator believes the PLC work has helped the faculty to establish common expectations for courses that have sections taught by multiple teachers.

Not that our teachers need to be in lockstep, but they should be very consistent with the types of assessments they are giving, the number of assessments they are giving. Whether you have Mrs. Jones for English I or Mr. Smith for English I, the experience should be the same, or very similar. (Ed)

Teachers have used the collaborative time to discuss what they are teaching on a weekly basis and the criteria they are using to measure student achievement. This has helped to eliminate large disparities around how teachers understand the challenge level of their courses. This is a concrete advantage to come from the PLCs. Administrators now have the means to tell parents who call to request a teacher that students have a similar educational experience in all the sections of a particular course. An administrator said the group meetings support both the decision of what to teach and assess and how to deliver instruction.

I think it lends itself to consistency. We still have the art, which each teacher puts their own flair but with the science of teaching. We know that all students should be getting the same thing. And when we have parents calling saying, “we want this teacher or that teacher,” it makes it much easier to say, “I’ve been in their meetings, they’re all giving the same assessments.” It might be a couple of days off but there is
a consistency. There should be the same number of papers and projects. One teacher is not easier than another. (Deb)

Discussions about how the students are performing on assessments are a natural extension to the work on course alignment. “[Teachers] are really honing in and having those conversations about topic X that will help them improve it for that group and for other groups to come” (Olivia). The administrative view is that PLC activities include segments of time in which teachers are engaged in a deeper examination of how students are performing in classes and using this exchange of ideas to continuously improve the curriculum and support teachers.

I think there is more reflection because you are able to throw ideas off each other in those PLCs, instead of kind of living in a vacuum or teaching in a vacuum. You can talk about kind of those successes and failures which can lead to more successes and more effective teaching. (Todd)

The presence of PLCs as a core part of the school’s infrastructure enables teachers to exchange ideas and work together to help students. Prior to the implementation of collaborative time, teachers were making these decisions in isolation.

As previously described, LHS administrators visit the PLCs intermittently on a “pop-in” basis, but they are not sitting members of any PLC. All the administrators said they are most likely to attend PLC meetings at the beginning of the year when teachers are setting student learning goals and administrators have not yet started evaluation meetings and observations.

One of the most important times that we [visit] is actually the beginning of the year as they are kind of setting their goals and stuff like that for the year—talking with them
about what they want to work on, what their students need them to work on, and
where our expectations are of them for the course of the year. (Olivia)
The assistant principals assist teachers with identifying a learning focus for students that will
be measured and contribute significantly to a teacher’s end-year rating. In this way, targeted
growth is expected to be set at a level that demonstrates a rigorous goal for teacher
improvement. The assistant principals are the direct evaluators of teachers, so their
participation in conversations with teachers about the development of SLOs in the beginning
of the year is an important part of the evaluation process. However, some teachers would
like the administration to have an increased presence at the PLC meetings.

I’m not trying to knock the administration because they are very busy, but they don’t
try to come to check-in or give any guidance. They’ll come one time in the very
beginning and talk about SLO’s, and they’ll come at the end of the year because we
do a data showcase at the end of the year. And they’ll come in and say, “Your data
showcase is on this day. Here’s your board. Good luck.” And we’re like, “What
data are we going to be showing?” And I do feel that something is missing in that
sense. (Julie)

Julie believes that the productivity of the PLCs could be improved if administrators attended
the meetings more regularly. The limited administrative participation experienced by Julie
indicates that their role with PLCs is mechanical, superficial, and solely, yet minimally,
connected to the focus on data.

Teachers and administrators reported few, if any, concerns about conflicts between
PLC members. The participants were only able to recall isolated circumstances in which the
group sought help from an administrator to try and resolve a problem.
On one of the PLC’s there was some kind of disagreement when the school kind of pushed towards common grading practices to make sure everyone is on the same page. There were some tough discussions because obviously you have people who were set in their ways, did things for a while, and now they had to come to some sort of an agreement. So, there were difficult conversations. I sat in on some PLC’s, but I mean that’s what they should be—difficult conversation—but I thought they handled it well in regards to the conflict and came up with those common practices together.

(Todd)

The administrators confirm that the teachers at LHS respect each other’s work and report few, if any, interpersonal difficulties about working together. When a disagreement surfaces, the teachers may seek out leadership to help the group reach a consensus. “The few times that I have been in there with conflict—I think there is a high level of professionalism here. Either of the two people will step back and someone else in the group will try to massage their way through it” (Deb). In general, the PLC groups operate without the need for administrators to act as referees who settle differing viewpoints from members.

The administrators at LHS view the PLCs favorably because they know—from occasional visits to speak with a PLC group or find an individual teacher—that teachers are engaged in work that has a professional focus. However, the descriptions from the teachers and administrators of the limited interaction that the leadership has with the PLCs suggests that the meeting time is about matters that are disconnected from administrative concerns. In this way, it may be incongruous that the assistant principals oversee the data process that measures student learning and teacher effectiveness, but they do not engage in the ongoing PLC conversation about curriculum, instruction, and assessment. In effect, their role is to
provide a confirmation that work related to the academic program is occurring, but they are not involved in the specific nature of this work. As a result, variations are present in PLC effectiveness and the teachers view their work with data as perfunctory.

**Group Formation and Depth of Dialogue**

All the PLC groups at Lincoln High School had advanced past the initial stages of group formation, which is the period when members are going through the process of developing a basic group identity and meeting norms. In this stage, they have not yet had experiences in dealing with differences or making contributions to the group. Participant interviews confirmed what was witnessed during the PLC observation which was that the groups had established routines and expectations for their work, and teachers were comfortable in volunteering different ideas and in making some contributions. In this way, department members counted themselves as teachers first and not as supervisors. This benefitted the work of the PLCs. However, none of the teams demonstrated the features of mature group functioning such as engaging in activities that show a shared identity with the entire group, negotiating challenging topics of conversation in order to address critical issues about teaching and learning, or by focusing on essential topics about student learning. Therefore, while the PLC members at LHS were observed having communal and collegial interactions, they did not engage in collaborative work. The teachers had not experienced any professional development about PLC models that could educate them about the different levels of functioning that should occur overtime for teams. When asked to define a PLC, one veteran said, “Teachers working on something together, I guess” (Peter). Another teacher, who is a department head, explained that PLCs are “a group of folks with similar background and common task that have been given the time to sit down and to collaborate to improve job
While several participants included the examination of data as a function of a PLC, no participant elaborated on why they were looking at data or even mentioned students as the reason for the PLC work. This complicates the picture of LHS as an environment that has established PLCs, as they have not progressed to deeper levels of work one would expect six years into existence.

Even though student learning was not explicitly identified as a focal point for PLCs, teachers commended the PLC initiative. In fact, they were unanimous in believing that PLCs strengthen a school and praised the opportunity for collective interaction. It is clear that teachers understood the benefit of PLCs for teachers, but not for students. Since the school day unfolds at a fast pace, it is often difficult to find time for professional conversations that can help teachers target the needs of diverse learners. “It’s always rush, rush, go, go, go. [PLC meeting time] allows us to have that time to actually sit down and have meaningful conversations about what is going on in a course or different circumstances that may come up in those classes” (Nicole). During interviews, participants shared that setting aside time during the school day for collaborative work represents a best practice in the profession:

I think it’s great and I think that all schools should have this [PLC meetings]. It’s that set opportunity to work with a colleague instead of “Oh, we don’t have the same planning period, so maybe we’ll meet after school,” but then you have kids coming. It is a time for you to focus on being a professional, which I think all teachers should have the opportunity [to do]. (Nancy)

Teachers reported that the opportunity to have any kind of congenial communication elevated their feelings of professionalism. Even if the discussions were about operational topics such as when student assessment data were due, the status of a union issue, or the administrative
policy on student discipline issues, teachers felt this communication connected them to each other about important professional concerns. Overall, teachers used the PLC time to help themselves manage the complex demands of the teaching profession.

**Teacher Evaluation and Data**

The LHS teachers and administrators believe the primary function of their PLCs is to fulfill requirements for the Connecticut’s System for Educator Evaluation and Development (CT SEED). At the end of the year, all CT public school teachers are rated as Below Standard, Developing, Proficient, or Exemplary. The process used to complete evaluation goals is extensive for all teachers in CT. For elementary schools, teachers track growth for a single class of 20-25 students who spend the majority of their day with them. Secondary teachers have to track a large proportion of the students assigned to them for instruction. Since high school teachers track the growth for a significant percentage of the students assigned to them, they may be collecting data and responding to student learning needs for 50-75 students, which aligns with the CT SEED expectation that teachers track growth for students who are in their primary course assignment (Connecticut State Department of Education, 2014). Contact time between an individual teacher and students is more limited in secondary school than at the elementary level, so a secondary teacher has less opportunity to work with students on learning goals. For example, since LHS runs on an A/B block schedule, teachers see their students for 83 minutes every other day. The window for improving student learning is even narrower for teachers of semester courses who only have half a year to demonstrate growth with their students. Despite these structural differences, the CT SEED plan requires teachers in K-12 to follow the same process.
While trying to meet CT SEED requirements, teachers find it difficult to generate data that represents an accurate and reliable account of how learning is progressing with their students. In addition, the content focus of secondary curriculum creates an increased challenge for measuring student growth at regular intervals. For example, primary students are expected to make predictable gains in reading to achieve at grade level expectations. However, comparing a high school social studies student’s knowledge of World War I to World War II does not necessarily reveal skill strengths or deficiencies from year to year. CT SEED requires high school humanities teachers to develop goals based on assessments that are aligned the English Language Arts (ELA) Common Core State Standards (CCSS). Therefore, to implement the standards-based expectations outlined in CT SEED, English, social studies, and world languages teachers are expected to embed opportunities for student to improve their reading, writing, and speaking and listening skills while they pursue the instruction of disciplinary content (Connecticut State Department of Education, 2014). The high school courses are complex, therefore, because the curriculum is expected to support the learning of content and skills. The CCSS were released in 2010, and the CT SEED was enacted in 2014, so CT schools have had only three years to align practices and materials that support both of these initiatives. These large changes have created a great need for teachers to develop new curriculum, new assessments, and new practices for measuring student learning that will highlight student growth.

Fulfilling the CT SEED plan is time-consuming, and the district expects LHS teachers to use the PLC time to enact this work. The PLC meeting time is used for teachers to document the work surrounding the development of two SLOs for the year. Although the Connecticut teacher evaluation plan does not require teachers to uniformly focus on the same
SLOs, each PLC group at LHS identified a common goal because they wanted to work together for assessment development. Once the goals were decided, teachers developed assessments that were used to measure student ability levels in this area. The work was scored, and the results were used as the baseline data from which student growth goals were developed. Forty-five percent of a teacher’s overall effectiveness score for a school year is determined by whether or not their students meet the student learning goals. For data monitoring purposes, common formative assessments (CFAs) are developed, administered, and scored throughout the year to track student progress toward the goal. At Lincoln High School, this work is celebrated in June when each PLC group creates a display for a data showcase event.

Lincoln High School teachers feel that efforts related to developing and measuring SLOs is imposed upon them and disconnected from the important work of teaching. Therefore, they were resentful about the time the work on the teacher evaluation plan takes from the opportunity to focus on regular instructional content. Although the intent of the CT SEED plan is to align the tracking of student growth data with regular curricular assessments, teachers find that the assessments they develop are artificial and disconnected from the curriculum. While a high school course requires students to learn a breadth of content and work on numerous skills, the CFAs are not based in content and focus only on a single skill. [Teacher evaluation] takes time away from actual teaching and learning. Not the PLC work itself, but the fact that you need to create this artificial indicator and interrupt our educational momentum. Talking about World War II, which kids care about deeply and want to know more about . . . to say, “All right, now we are going to measure your understanding of context.” The problem is that our group has not
figured out a way to make that seamless. Every year we say, “Next year, let’s make these growth expectations something that we already need them to do so it is not artificial and separate.” Somehow, it always winds up artificial and separate. So far, it seems that the fact that the expectancy for the statistics is there interrupts actual classroom instruction. (Ben)

Ben’s comment illustrates how LHS teachers are challenged by the difficulty of developing assessments that are strongly aligned to the course curriculum. The English teachers wrestled with the issue of how they can access standardized tests, such as the SAT, or even buy publisher created tests related to content-specific topics, but neither of these tools are effective measures for how much students are learning from weekly instruction. The teachers believed that teacher-developed assessments requiring students to use higher-order thinking skills are more closely connected to what students learn during instruction than generic assessments from a publisher that test low-level fact-based knowledge. Peter explains how his English PLC has been dealing with this problem.

I mean, to give an example, this year’s SLO focus on literary analysis is one of them. And we’re using these Pearson standardized pre-test, benchmark test type things and I don’t know, I think having them take those tests and me putting those numbers into my computer . . . I feel that I get a better sense of what they can do just by the day-to-day classwork. (Peter)

In order to satisfy the requirement for multiple data points, Peter’s PLC group gives low-level multiple-choice types of tests on works of literature. However, the group does not believe the results provide useful information about how students are responding to instruction. In contrast, teacher-designed assessments may assess different thinking at
different times of the year. For example, it would be difficult for Peter to meaningfully compare how his students are doing in the fall when they are reading Homer’s *The Odyssey* to the winter when they read Shakespeare’s *Macbeth*, and to the spring when they read Lee’s *To Kill a Mockingbird*. These texts vary greatly in structure, language, and ideas, and so many different factors are related to how students perform on unit-related assessments. Forming an accurate conclusion about whether or not a teacher is an effective instructor based on such data is absurd. The need to show student growth and have meaningful assessments creates a situation for teachers where they feel professionally conflicted.

Alec: What if we make it easy on ourselves? What if we pre-select the literary analysis questions?

Carmen: Because we haven’t been using data that way throughout the year?

Alec: Yeah, but literary analysis is the goal, and how are we supposed to measure that other than multiple-choice questions? I want a writing piece and want more than multiple-choice scores.

Peter: Yeah, but that’s a lot of work. Are you going to grade all that?

Carmen: This isn’t authentic to begin with, and this is definitely not authentic since the data is manipulated.

Peter: I’ll be shocked if they meet the goal I set for them. That’s why I’m going to include a paper to show how they’ve achieved the skills.

Teachers feel pressure to generate statistics to prove students are learning. Using the multiple-choice test is desirable because it is easy to score, but teachers do not feel it is an authentic representation of learning. Carmen’s concern about authenticity represents the experience of a novice teacher who had not been through the process but had heard about it.
Her confusion speaks to the way that teachers discussed the event as disconnected from their daily practice and how they helped one another best highlight the successes found in their classrooms. In this conversation, the teachers are referring to how the CT SEED plan allows for using an alternative assessment to demonstrate student learning, and so that is why the group is considering a writing assignment. Through writing, students can show a competency with literary analysis. The writing piece may be a more trustworthy approach for gathering data, but such an undertaking requires more work from teachers and students. The burden teachers feel about complying with the Connecticut teacher evaluation system requirements actually steer the conversation away from sound assessment practices and encourages them to consider a less robust and meaningful option.

The focus on teacher evaluation is so closely connected to the work done in PLC meetings that some of these educators assume that PLCs exist for the purpose of supporting the implementation of the teacher evaluation plan. Teachers also resent how they have used the time.

I think one of the unfortunate things about the way PLC work happens is too much of it goes to statistical analyses and collection of relatively meaningless data points. When we were presented the idea, we thought it was going to be time carved out for collaboration. In many cases, the way it plays out is every man for himself—“Oh, I need to get these numbers in, I need to make these numbers work.” (Ben)

Educators at LHS are uncertain about whether the PLC is intended solely for data work or also for program development. Some districts have adapted the PLC model in order to focus solely on data. These groups are widely referred to as data teams, which are groups of educators who meet regularly to examine student performance data and plan interventions to
boost achievement. Todd came to LHS as an administrator from another district that required teachers to work in data teams. He makes a distinction between teacher groups that meet for the purpose of collaborating about curriculum and instruction and groups that meet for the purpose of working with student data.

Part of the problem I think is the evaluation process. We’re doing end of the year evaluations now with teachers. It’s that part of collecting data—make sure your benchmarks are good—that is seen as, “We got to get this done.” I don’t know if that message of how to use data and the value of it has been portrayed. There’s a difference, I think, in the data for the benchmark stuff versus the data to drive the everyday instruction. It’s seen as kind of we have to do this instead of let’s use this to make our teaching more effective, which is a big difference. (Todd)

Although teachers support each other in the data analysis process, they regard it as individual work they are doing toward their individual teacher evaluation obligations. When teachers are working on duties related to evaluation, they feel their time is allocated to activities that are compliance driven and done to prove they are adequate. However, when teachers work together on content related to the courses, they feel that is a much more collaborative experience since the work does not focus around a state mandate. The idea of truly collaborating with each other about the educational program is appealing, but they cannot seem to make the move to seeing how this can be symbiotic with CT SEED. Teachers speculate that more frequent opportunities to collaborate and work on the academic program is something that would be widely embraced.

If we were told tomorrow that SEED is going to disappear, we would love to continue doing this but more from the curriculum end of things. We would want to talk about
subject area, and lesson planning, and styles of teaching, and projects that sound like a lot of fun. (Carl)

The desire to work toward higher levels of professional performance is strong, but teachers feel oppressed by the bureaucracy of evaluation.

District priorities are occasionally inserted into the PLC structure causing teachers to blend superficial initiatives into an already convoluted process for supporting student growth. For example, teachers reported that a central office administrator had recently analyzed midterm and final exams from the prior year and determined that they were not rigorous enough. This information was presented to teachers at a faculty meeting where teachers were told that the final exams for this year needed to include more rigorous content. Teachers were instructed to focus on using assessments that addressed Level 3 and Level 4 thinking on the Webb’s Depth of Knowledge (DOK) model. In several PLCs, teachers wondered how they could enact this initiative. Unfortunately, teacher training on the Webb’s DOK model was limited to what was covered at the one hour-long faculty meeting. The inadequate preparation to meet this district demand was evident in a PLC meeting when one dutiful group tried to enact the district expectation. They went through a final exam they had used in the past and labeled multiple-choice questions as Level 1, 2, 3, or 4. They discussed each question without realizing that all the questions were Level 1 recall questions, as is a function of multiple-choice.

Ann: I’m almost going toward 2.5. I don’t know—we need a tie breaker. Abby?

Abby: Make it a 3.

Donna: If it’s 2.5, we’re rounding up.
Ben: I don’t know if you remember, but when we made this test, we said we were to [focus] on content, so I’m not surprised if we’re going 1, 2, 1, 3.

Ann: Let’s just throw a 4 in there because we haven’t had one. “The Americans won the Revolutionary War mainly because…”

Donna: Go back to the DOK thing. If you have to put things together, it’s a synthesis.

If done with fidelity, implementing an initiative to increase rigor in the academic program would require substantive teacher training to fully understand the DOK model and appropriate curriculum revision. This would ensure that students were engaging with content in a manner that aligns with upper-level thinking. However, for LHS, the directive for teachers to use their PLC time to change the rigor of exams is makeshift and unsupported. Teachers heard the message from central office to revise assessments for DOK at the same time that they are consumed with preparing their data for the end-year performance review. Consequently, teachers blend their work on developing CFAs with the message to use upper-level DOK-based assessments. This development brought the PLC meeting even further away from using the time to give students a clear and focused academic program.

Sara: We’re going to switch it up a little today. DOK—this is what everyone is talking about. What [the principal] was talking about is that our midterms don’t have that level of questioning.

[The teachers discuss whether or not the Evidence and Reasoning section of the narrative writing prompt could fit for DOK.]

Sara: We can use it as their final in May.

Larry: So, their final is not going to be the common final?
Sara: We don’t need a common final; we can make it up. Why don’t we see if we can make a prompt? Do we want a common one?

Larry: That’s going to be tough ’cause I want to direct them back to the content.

Dennis: I could do what they did last time and research the author, but it’s not very fun. How do I make a Level 4 narrative? Like I said, that’s going to be a big project to do.

Sara: I don’t see it that way. I see it as a prompt. I give 30-minute prompts all the time. You’re making this too complicated.

Larry: From the kid’s perspective, the narrative has been flushed down the toilet.

Dennis: I’m looking at the language here. If I say, “Create a short story,” is that a Level 4?

Sara: That prompt I just said—what would that be on the wheel?

Dennis: I don’t know—design, create?

Larry: The projects are at Level 3. Are the exams pushed to Level 4?

Sara: No, forget all that, Larry. I’m asking the students, “Have you ever tried anything and failed?”

Dennis: I don’t see “reflect” on this, and that’s what it’s asking them to do.

Sara: Level 1.

Dennis: It would be a Level 1 if they just listed what they did.

While the teachers were well-meaning and working to fulfill district orders, this conversation is misguided because the teachers were focusing on what to give students as an assessment without discussing what needs to change in instruction. If students are going to perform well on a task that requires upper-level thinking, students need to have a rich experience in
instruction and teacher feedback that supports performing at an advanced level. Although the actions from central office are intended to increase rigor of assessment, the teachers need professional development on the DOK model in order to be well-equipped to make informed educational decisions. This disconnect between the district office expectations and the preparedness for teacher to enact district initiatives are further complicated by the limited opportunity at the building level for administrators to support the teachers. Issues with the DOK model are not the only challenges for teachers at LHS.

The data showcase that takes place at the end of the year is an event designed to celebrate student learning as demonstrated by displaying the SLO data results from each PLC group. Participant interviews revealed a large disparity between how this occasion is perceived by teachers and administrators. Teachers expressed an apathy for the event:

At the end of the year, when we do our showcase, we have to put together all of our data from our SLOs and then everybody kind of has coffee and dessert and we walk around and look at everybody’s presentation. I don’t necessarily think that they are really looking at the data in depth or considering it. I think it’s more of let’s just cross this T and dot this I and get it off our plate as our requirement to the district.

(Megan)

The teachers acquiesce and create a display, but they do not find value in the showcase. When Carmen, a new teacher, asked if she has to answer questions about their group exhibit, Stacy responded, “No, because we all walk around and look at each other’s and the superintendent stands in the middle of the room.” The consensus among teachers is that the district has a need to show evidence of using data to prove that the PLC time has been valuable for helping student learning. Although the teachers attend the event, they do not
believe that anyone cares about the data, nor does it matter if the data represents the majority of the work teachers do with students over the entire year.

At the end of the year we present our SLO results. I think that is related to our PLC, so they have us present it. I don’t feel that’s super valuable because other people don’t really care that much. It’s just that—you are just doing it to do it. (Joan)

The message received by teachers is that the central office is more concerned about data results than the collaboration about the academic program. The teachers’ perspective is that the data showcase had the unintended consequence of devaluing what can be achieved through PLCs.

Administrators asserted a drastically different perspective about the data showcase. They regard it as the culminating event of the year that proves the value of the district’s data effort. An LHS administrator described the data showcase as a highlight of the academic year:

We kind of have a data walk. All year, [teachers] are working on CFAs and what that data yields and SLOs. Then on June 6, in our cafeteria, we have a celebration of that. It looks like a sixth-grade science fair. We’ve got the trifold boards up and there’s some data and you really can see the work that they’ve done and where they started and where the kids have grown which is what it is all about is the student growth.

But that collaboration is vital to ensure some sort of course consistency as well. (Ed)

The other administrators also expressed beliefs that the data showcase is something that is highly valued by the teachers. Olivia said that teachers like “to see what [their] colleagues are doing” and that the showcase “cultivates a culture of collaboration” while Deb shared that the data showcase is one of her favorite events of the year. “It really is a great way for
teachers to see what everybody has been doing all year.” Since the data showcase is attended by the superintendent and other central office staff, it is possible that the administrative participants held insights similar to those of the teachers but felt uncomfortable expressing them to a researcher. Another possibility is that building administrators truly are so disconnected from the teacher perceptions of this event that they assume the tri-fold boards represent examples of academic richness. Either way, one can conclude that the showcase upholds a contested impression that the PLC time is critical to driving the data that evidences student learning.

Teachers at LHS have expressed frustration and negative feelings about the PLC work that is related to the development and analysis of data designed to satisfy the state teacher evaluation program. They feel this requirement is disconnected from what they identify as important educational work connected to student learning. However, the administration and central office staff are detached from these unspoken, yet deep concerns of the teachers. Administrators want proof that teachers are effective and that students are learning, but little information exists from this study to suggest that the district leadership has aligned vital elements of a strong, educational institution.

**Summary**

The information gathered from the observations and participant interviews is rich and provides thick description of how teachers and administrators experience working in PLCs at Lincoln High School. To summarize the findings in this chapter, it is important to note that teachers believe the PLCs helps them to reflect on their own practice and that hearing ideas from their peers and soliciting feedback to improve their use of resources, instructional strategies, and the development of assessment is meaningful. Administrators also believe
that the work done in PLCs is valuable for student learning. Teaching is a stressful profession, and the PLC meetings help teachers respond to the expectations of students, parents, administration, and central office. The PLCs reduce isolation and foster collegial relationships that are highly valued. However, educators at LHS have not received any ongoing professional development on PLCs, and they are unaware of various formal models that outline PLC work. The teachers and administrators at LHS express a mutual respect for each other’s work, but the PLCs function without the presence of curriculum focused leadership. Although the teachers resent the activities associated with the teacher evaluation system in CT (CT SEED), they accept this work as a state requirement and believe that administrators are working hard to satisfy the requirements of the CT SEED system. Teachers stated and demonstrated that they lack the training they need in order to use data in a manner that would help them to best understand the learning needs of their students. A disconnect between teachers and administrators was also evident with respect to how they connected data to PLC work. Teachers viewed it as something to complete and accomplish to comply with the state mandate, and administrators perceived it as important evidence of student growth. All of these findings from the various themes (District Provided Structural Conditions, Shared Vision, Supportive Relational Conditions, Shared Personal Practice, Leadership, Group Formation, Depth of Dialogue, Teacher Evaluation, and Data) are important for considering ways that even well-established PLCs can benefit from ongoing commitments to teacher professional growth.
CHAPTER FIVE: SUMMARY AND CONCLUSIONS

The purpose of this study was to examine the perceptions of high school humanities teachers who participate in PLCs to determine if they believe this work improves teaching practices. The teachers who participated in this study felt they benefited from communal experiences because the peer interaction helped them to manage stress and to prepare lessons and assessments for students. Although the feelings about PLCs were generally positive, teachers believed their work was limited because they needed training in several areas. This was communicated through interviews and supported by observations that identified several areas of insufficiency. To increase the likelihood that the PLCs make an impact on improving teaching practices and student achievement, it is recommended that the district develop a shared vision about PLC work, increase the participation from school leaders around the PLC work, and provide teacher training on the use of data and on the dynamics of group discourse.

Findings for the Research Questions

Research Question One

How do teachers perceive the relationship between the work of the Professional Learning Communities and their classroom practices?

Data analysis revealed that teachers believe the work of the PLCs influenced them to try new resources, new instructional strategies, new classroom management strategies, and use instructional materials and assessments that were developed during PLC meetings. All teacher participants recounted incidences of when their practice was enhanced because they acted upon a suggestion made by a colleague during collaborative time. The administrator participants cited the use of common assessments as evidence that the PLC work improved
classroom practices. This finding is consistent with the idea that warding off isolation and providing time for teachers to meet creates a resource of peer support and ideas about teaching that impacts the classroom. All participants enthusiastically believed that this work has had a positive impact on their classroom work.

Research Question Two

What perspective do teachers have about the impact of Professional Learning Communities on student learning experiences?

Teachers and administrator participants responded with “yes” when asked if the work of PLCs impacts student learning experiences. However, the reasons for this affirmative answer were vague and not connected to evidence of student learning. Some teachers responded with justifications that repeated the response given to describe the impact on classroom practices. For example, a teacher who referenced a new resource as an example of how the PLC work improved classroom practices also gave this as an example of improved student learning. In actuality, the new resource may have had an impact on student learning, however, no evidence was given during any of the interviews as proof that this occurred. Some teachers explained their “yes” answer by discussing the ways in which they are a better teacher, such as developing lesson plans that are more logical or using classroom management strategies more effectively. A few teachers justified their “yes” answer by referencing the fact that they use data as a part of the evaluation system, but no one confirmed that the data was evidence of student learning. Some teachers answered the question “yes” and followed with a statement about how demonstrating improved student learning is hard to prove, but they had a sense this was happening. The administrator participants referred to the data showcase at the end of the year as evidence that the PLC
work improved student learning. However, the data analysis raised concerns about how accurately these results represented growth in student learning and whether or not the data were specifically targeted to support the teachers meeting the evaluation system requirements. The PLC observations showed that while teachers occasionally commented on the whole class results of an assessment, at no time was there a discussion observed on a topic of student learning. Although the parameters of this study involved only three observations of each PLC, it appears that a routine focus on student learning is not embedded into the PLC work. One can speculate that the teachers have not developed strategies for how to analyze student work to determine evidence of learning and that they likely need training in how to do this work and how to routinely include it into the work of their PLCs.

**Research Question Three**

In what ways does an established Professional Learning Community support the professional learning of teachers?

The data analysis demonstrates that the PLC work supports the professional learning of teachers to the extent of the members’ expertise. In describing instances when such learning occurred, teachers responded with similar examples to those given about the question on classroom practices. They shared an experience of using a new resource or a new instructional strategy suggested by someone in the group. Teachers who had knowledge of an approach that was unknown to the group readily shared their knowledge, and it was enthusiastically received and applied by other teachers. However, this professional learning was limited by the particular experiences of group members. The PLC groups were not engaged in collective pursuits that would yield new learning such as action research or a book study. When the district introduced expectations that the elements of the Depth of
Knowledge (DOK) levels of thinking would be incorporated into assessments, teachers attempted to support each other’s learning by recalling information from a faculty meeting and Googling the DOK model. However, without needed training and resources, the teachers made guesses and incorrect assumptions about how the DOK model could be applied to their work, and their professional learning did not advance.

**Research Question Four**

How do teachers view their roles and the roles of others in a Professional Learning Community that is no longer in the formative period of development?

Although the make-up of PLC groups shifts annually because of the reassignment of courses and faculty turnover, all participants with the exception of new hires brought PLC work experience to this year’s groups. The PLCs in the study had been intact since September, and therefore new members had adapted to their group by the time the study occurred in the spring. Teachers viewed their roles and the roles of others positively and with the belief that group members were equal contributors. While some participants mentioned minor personality traits that differentiated their interaction with individuals, they did not feel that one voice overpowered others or that individuals functioned in fixed duties. Teacher interviews revealed that they believe the group dynamic was fluid, and this was confirmed by the interactions witnessed during the PLC observations. Three of the five groups included a member who was a department chair. In two of the groups, teachers deferred to the department chair when information from the building or district leadership was communicated, but these instances were infrequent and were not a pronounced feature of the PLC work. In a third PLC, the department chair controlled the focus and discussion of the PLC work. Interviews revealed that the other members felt resentment toward the
department chair because they felt stifled, and that the department chair was unaware of this perception. Since the data analysis found that all the groups were beyond the initial stages of group formation but not yet at the mature stage, it is important to note that the roles of group members were not challenged. The groups were operating at the level of a pseudo-community and were not engaged in deeper conversations that may have provoked individuals to assume a greater range of roles.

**Research Question Five**

What perspective do administrators have about the impact of Professional Learning Communities on student learning experiences?

The perception from building administrators is that the PLC work makes an impact on student learning experiences. They all referenced the consistency that is created by having teachers focus on common pacing for units of study and the implementation of common assessments as indicators of improved learning experiences for students. One administrator explicitly stated that there is no evidence of improved learning experiences for students, but it is assumed that is the case because student experiences are more common. All the administrators indicated that the absence of some students having an “easy” teacher while others had the “hard” teacher for one course translated into an improved learning experience. Although the administrators believe the PLC work impacts student learning, no participant provided evidence to confirm this belief. A conclusion can be made that administrators either do not know what data to look at to judge student learning, their positions are not structured to allow for the examination of relevant data to gauge student learning, or they did not want to share this information with an outsider.
Comparison and Contrast of Findings Related to the Literature Review

Models

The PLC literature highlights the importance for PLCs to have a shared vision that centers on student learning so that all group members approach the collaborative work with the same focus (DuFour & Eaker, 1998; Hord, 1997; Supovitz & Christman, 2003). Simply establishing PLCs are not a goal in and of themselves—they need to identify a purpose around an area for school improvement (Riveros, et al., 2012). The presence of a shared vision was missing from the PLC work at Lincoln High School. The participants believed that the PLCs existed for the purpose to comply with the teacher evaluation system. Since administrators and teachers articulated this conclusion, it can be said that the groups worked with a common expectation for the work that should occur during PLC time. However, this is inconsistent with the PLC models that emphasize that in order for student achievement to improve, collaborative teams must embrace a common vision around the needs of the learner (DuFour, 2015; Supovitz & Christman, 2003).

The presence of supportive structural and relational conditions as well as shared personal practice are also important anchors in the PLC model (Hord & Sommers, 2008). These features were a strength of the PLC initiative at LHS. Teachers appreciated the generous amount of time they had to meet every four days. They also underscored the value of peer relationships and peer feedback as what was most important to their work in the PLC groups. This trust and openness was evident during the PLC observations. Although some groups struggled with environmental conditions when they met in the library, it was appreciated that the administration permitted groups that desired to meet in classrooms the flexibility to do so.
**Group Formation**

The literature that targets the evolution of PLC groups uses various terms for the classification of group formation stages, but the researchers agree that a pattern that includes an initial stage of bonding and politeness, a middle stage of confronting conflict, and a later stage defined by a greater focus on identified group goals and the relinquishing of individual agendas is characteristic of teacher groups that work together over an extended period of time (Caine & Caine, 2010; DuFour, 2008; Grossman et al., 2001; Mulford, 1998). The PLC groups at LHS were all past the initial stage of bonding. The teachers had established routines for meetings and were comfortable exchanging ideas and asking questions. The observations of the PLC groups revealed that they show characteristics of the early “Evolving” stage, as defined by the Model of the Formation of Teacher Professional Community (Grossman, et al., 2001, p. 688). In order for groups to develop, members have to participate in the substantive debate and exchange of ideas about educational practices (Owen, 2014). This level of professional interaction was not observed during any of the three group meetings observed, and participant interviews did not yield any examples of confronting challenging topics or tackling significant topics about professional practices. Teachers were eager to report the absence of conflict and the informal nature of their work as positive features of their groups. Since the data analysis showed an absence of negotiating an essential tension that is necessary for evolution (Grossman et al.), the PLC groups at LHS function in a stalled state of progress.

**Depth of Dialogue**

Experts agree that groups are obliged to have conversations that are distinguished by ongoing questions and reflective practices about student learning if they intend to improve
student achievement (Ball & Cohen, 1999; DuFour, 2004; Harris & Jones, 2010; Kruse & Louis, 1993; Nelson et al., 2010). Data analysis of the PLC observations concluded that the groups operated collegially but not collaboratively. Teachers either worked independently or with others on preparing an upcoming lesson. Although two of the five groups were observed establishing a communal focus for the meeting, the ensuing discourse was superficial in nature and was not sustained beyond a single meeting. When teachers did have conversations about students, it was usually recounting an interaction the teacher had with the student about a disciplinary incident. On a few occasions, a teacher finished grading a set of assessments and made a comment about whole class performance. However, these individual remarks never led to questions or reflections from the group about why behavioral or learning issues were present. The dialogue in the PLC groups was superficial since it did not address issues related to student learning and was not characterized by questioning, probing, or reflection.

**Leadership**

The literature around leadership practices as they relate to PLCs is compelling in that researchers find that guidance from school leaders makes a significant impact on teacher collaboration (Gallimore et al., 2009; Peppers, 2015; Thessin, 2015; Wells & Feun, 2013; Wilson, 2016). When administrators are directly involved with PLC work, the learning of teachers is enhanced and student achievement improves (Buttram et al., 2016; Hipp et al., 2007; Kennedy et al., 2011; Long et al., 2009; Wilhelm, 2010). The participant interviews and observations found that administrators at LHS did not participate, facilitate, or provide guidance for the PLC work. The distributed leadership theory asserts the importance of understanding leadership activity from the perspective that administrators work within a
situated context (Harris & Jones, 2010; Riveros et al., 2012; Spillane et al., 2004). Knowing that leaders are responding to social and situational factors is important when evaluating their role in a school. For example, determining why the administrators at LHS do not regularly attend PLCs would need to include a consideration of how the concerns coming from central office, faculty, students, and the community impact their work. One issue to address would be whether or not the district wants to identify high-functioning, mature PLCs as a prioritized goal. If so, in requiring leaders to take on direct involvement with PLC work, they would sacrifice time currently allocated to other matters. The interviews did not reveal any information suggesting that the district had an interest in the effectiveness of the PLC work.

**Data Use**

The collection and analysis of data can help educators gain insight about how effective teaching practices impact student achievement, but doing this work requires that teachers have support in developing the skills to do this work (Cosner, 2012; Kruse & Johnson, 2017). Specifically, it is important that teachers know how to use both qualitative and quantitative data and focus this work not on individual teachers but instead on an examination of all levels of the school system (Fullan, 2006; Sims & Penny, 2015). Teachers at LHS were vocal about how they were expected to generate data even though they had never received any training about how this is done. The most common objection from the teacher participants was about the design of the data showcase held in June. The teachers openly referred to the event as meaningless and advised each other on how to display the data. This issue revealed the greatest disparity between teachers and administrators. The administrative participants heralded the data showcase as an exemplar of PLC effectiveness. It was not evident if they were aware of the humanities teachers’ perspective. It is possible
they were, and the answers they gave were what they felt was expected for them to say rather than their actual beliefs. It would likely be very uncomfortable for a building leader to admit that the data showcase was superficial. Regardless of whether or not the administrators responded candidly during the interviews, this study found that the lack of professional development around how to use data created resentment from the teachers. They were forced to do work that to them was confusing. These data were then used to rate teachers at the end of the year. This practice made teachers bitter about topics related to the use of data, which is understandable given the high stakes nature of data and teacher evaluation in Connecticut.

**Implications for Educators**

The research provides educators with important information about the implementation of a professional learning initiative. Decades of research about professional learning communities has shown that creating opportunities for teacher collaboration is a highly effective practice to support job-embedded, sustained professional learning that can reform teaching practices and improve student learning (Darling-Hammond & Richardson, 2009; Louis & Marks, 1998; McLaughlin & Talbert, 1993, Poekart, 2012). Consequently, PLCs are now a core feature in the organization of schools (Kruse & Johnson, 2017). When school districts construct calendars and schedules that provide opportunities for teachers to collaborate, they are allocating time resources that could be spent on other programs. Installing and continuing a PLC initiative that does not strive to effect positive change and reform in teacher learning and practices can become a wasteful endeavor. The recommendations for educators, therefore, are based on the assumption that schools have a vested interest in optimizing the impact of the PLC work.
The implementation of professional learning communities must be a district priority in which support begins at the central office administration and the board of education level. The individuals who work at the top positions of school systems and the governing bodies of these organizations ultimately control the resources needed for teacher collaboration. A shared vision that articulates clear and transparent goals for the PLCs must be understood and embraced by those who control the organization. During the PLC observations and interviews, comments were made about what teachers were supposed to do during the collaborative time. Teacher understanding about these expectations was vague, and the communication of this information often went from central office leadership to the principal to department heads and then, finally, to teachers. Since teachers are the individuals who are engaged in the ongoing work of the PLCs, a representative group of teachers should partner with building and district leadership to develop and facilitate a common vision and application of professional learning that operates with fidelity.

Building level leaders shoulder the most complex responsibilities in a PLC professional learning program, but they also have the potential to make the greatest impact. The principal, the assistant principals, and the department heads make decisions on a daily basis that impact the way in which a school functions. They receive and respond to communications from central office, teachers, students, and parents, so they have an intimate insight into the concerns of all these stakeholders. Since research (Buttram et al., 2016; Hipp et al., 2007; Kennedy et al., 2011; Long et al., 2009; Wilhelm, 2010) has demonstrated that the involvement of school leaders in PLC work yields increased achievement for students, it is essential that they participate in the collaboration with a degree of regularity. Spillane et al.’s (2004) theory about the distributed leadership perspective is important to contemplate.
when considering how to connect administrators more closely to PLC work. Their daily schedules are already filled, so a reconsideration of priorities and a reallocation of duties may be necessary. Developing new mindsets about the role of school leaders and how they can affect teacher learning and student achievement will require that attention is paid to the situated context. Ignoring the situational factors that are present in a school could doom the efforts to reform leadership roles to fail. Recommended changes must be reasonable given the context of a particular school. Although leaders may not be available to become permanent members of a PLC, they can significantly impact the effectiveness and productivity of PLCs by increasing the ways in which they support teachers doing this work.

The teachers in this study demonstrated an interest in nurturing collegial relationships and in responding to district and administrative requests with professional dedication. However, they have not had the necessary training that is required if they are going to work in a manner that will have an effect on student learning. The most prominent need for professional development is in the area of data collection and analysis. Teachers must learn about the different types of qualitative and quantitative data they can collect from students, and also receive training on how to analyze student work and draw conclusions about student learning needs. Given that so many teacher evaluation systems now require educators to generate data as proof of student learning, it is vital that this information is valid and reliable. Otherwise, educators are wasting hours of work on producing information that does not increase their ability to help students. The other major area in which teachers need training is around the elements of group communication. Teachers need to understand the difference between superficial conversations and those that are truly collaborative. In addition, teachers will need support in learning how to manage tensions and conflict that will emerge as a result
of participating in deep, professional conversations. It is expected that teachers would eagerly welcome these supports and apply them to increasing the effectiveness of their PLC work.

**Suggestions for Future Research**

This qualitative case study builds upon prior research that shows how the experiences of teachers align with research-based conclusions about the features of professional communities. The studies referenced in the literature review cited examples of high-performing and low-performing PLCs and examined the elements that contributed to effectiveness. The conclusions of this study found that the absence of a shared vision, limited involvement from leadership in PLCs, and a lack of teacher training in the areas related to district initiatives hampered the work of PLCs. The recommendations emerging from this study emphasize the need for districts that enact a PLC initiative to invest in developing a shared vision, devising strategies that supportive the ongoing involvement of building leaders in guiding PLC work, and in providing training for teachers in the area of collaborative dialogue and the effective use of data. The surprising element about these findings is that these recommendations are not based on unknown practices about PLC work. Hord (1997) and DuFour (1998) were the first to make these suggestions more than 20 years ago. Although previous researchers have studied various components of PLCs, such as the role of leadership or the facets of group formation, few studies discuss the complex interrelatedness of PLCs. One area to further research would be an investigation into the PLC process from a systems perspective. This would specifically address the changes that must occur in an organization so that all the components of a PLC—such as shared vision, leadership, data analysis, peer feedback, group evolution—are supported and implemented
with fidelity. Building on the perspective that PLCs are complex systems within an organization, another area to investigate centers on looking more closely at the impediments to fully committed PLC implementation. Potential research questions for further study with this lens include: What restricts a district from developing a shared vision? What prevents building leaders from participating in PLC work? Why do districts implement PLCs without giving teachers the necessary training to do the work of which they are asked?

It is also a possibility that research that focused on replicating this study in districts with different demographics would yield important findings and is ripe as another area for future research. This could entail studies that examine PLC in smaller schools and larger schools, in schools urban and rural school, in schools that have a diverse population and a homogenous population, and in schools that are poorly funded versus those that are fully funded could be useful in determining if these characteristics impact the functioning level of the PLCs. Additionally, a researcher could examine whether these findings are most common of PLCs that are situated in a high school, or if similar findings are present across elementary and secondary schools.

**Conclusion**

This study examined the experiences of high school teachers in humanities-based PLCs to learn about their perspectives on professional conversations and what impact they believe this work has on student learning. Although the participants expressed enthusiasm about working with their colleagues, they also shared frustrations regarding the limitations and perceived mandates of PLC work related to teacher evaluation and student data. While the academic research shows specific practices that are either effective or ineffective for the purpose of improving professional learning and student achievement, these best practices of
PLC work seemed to be little understood by participants in this study. They understood the beginning phase of this work but were stranded at the collegial level because they failed to progress to a mature level characterized by deep reflection about their practices. The popular literature aimed at practitioners provides versions about how to implement PLCs into a school, yet this seemed to be missing as well. The findings of this study include the understanding that PLCs function within the context of a school and the situated nature of PLCs means that the multitude of variables that are present in any given building are unique. In order for schools to take advantage of the current popular practice of installing PLCs for the purpose of professional development, more insight needs to be articulated with respect to setting expectations for PLC work within a complicated environment. An approach using a one-size-fits-all model is unlikely to work, so educators must learn how to customize their approach to PLC work so that they leverage the opportunity for rich collaboration and this is maximized.
REFERENCES


DuFour, R. (2015). In praise of American educators—And how they can become even better. Bloomington, IN: Solution Tree Press.


Appendix A

Permission Form – Superintendent

Study Title: Professional Learning Communities: An Examination into Teachers' Perspectives on Professional Conversations and Student Learning

Principal Evaluator: Elizabeth Spencer-Johnson
Doctoral Student, Western Connecticut State University

This form describes a research study that Elizabeth Spencer-Johnson, principal evaluator from Western Connecticut State University is conducting to explore how humanities teachers perceive their work in Professional Learning Communities (PLC) as it pertains to impacting subject knowledge, pedagogical knowledge, and the influence it has on changing instructional practices. The intent of this study is to represent the collaborative experiences of teachers and identify factors that enhance or hinder their work because of this professional development practice. You are invited to participate in this study as the information that you share will help better understand the experiences of teachers in established PLCs.

The study involves observing participants who are teachers in a school district that has operated PLCs for several years. Each participant will be observed three times during a collaborative PLC meeting for approximately 80 minutes each session. Observations will be conducted between February and June of 2017 and the actual PLC participant observation record will be maintained for 5 years and then destroyed.

All participant communications will be kept strictly confidential. Only the Principal Investigator and her advisor will have access to the raw data and only summarized data will be presented at meetings and in publications. At any time, an individual can decide to ask the observer to leave without any repercussions. Additionally, there are no foreseeable risks for participants nor is there any compensation for participation.

Participation in this study is completely voluntary. One is free not to participate or to withdraw at any time, for whatever reason. If you have any concerns, you can contact the Institutional Review Board at IRB@wcsu.edu.

For more information about this research, contact: Elizabeth Spencer-Johnson at 203-610-1473 or 1111111111.

If you agree to allow High School to participate in this study, please sign a copy of this form and return it to me. Thank you for your consideration.

___________________
HS Superintendent’s Signature  02/28/17
Date

___________________
Witness  02/28/17
Date
Appendix B
Permission Form – Principal

Study Title: Professional Learning Communities: An Examination into Teachers' Perspectives on Professional Conversations and Student Learning

Principal Evaluator: Elizabeth Spencer-Johnson
Doctoral Student, Western Connecticut State University

This form describes a research study that Elizabeth Spencer-Johnson, principal evaluator from Western Connecticut State University is conducting to explore how humanities teachers perceive their work in Professional Learning Communities (PLC) as it pertains to impacting subject knowledge, pedagogical knowledge, and the influence it has on changing instructional practices. The intent of this study is to represent the collaborative experiences of teachers and identify factors that enhance or hinder their work because of this professional development practice. You are invited to participate in this study as the information that you share will help better understand the experiences of teachers in established PLCs.

The study involves observing participants who are teachers in a school district that has operated PLCs for several years. Each participant will be observed three times during a collaborative PLC meeting for approximately 80 minutes each session. Observations will be conducted between February and June of 2017 and the actual PLC participant observation record will be maintained for 5 years and then destroyed.

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For more information about this research, contact: Elizabeth Spencer-Johnson at [redacted] or at [redacted].

If you agree to allow [redacted] High School to participate in this study, please sign a copy of this form and return it to me. Thank you for your consideration.

__________________________ 02/28/17
NMHS Principal’s Signature

__________________________ 02/28/17
Witness

Date

Date
Appendix C
Participant Observation Consent Form

Study Title: Professional Learning Communities: An Examination into Teachers' Perspectives on Professional Conversations and Student Learning

Principal Evaluator: Elizabeth Spencer-Johnson
Doctoral Student, Western Connecticut State University

This form describes a research study that Elizabeth Spencer-Johnson, principal evaluator from Western Connecticut State University is conducting to explore how humanities teachers perceive their work in Professional Learning Communities (PLC) as it pertains to impacting subject knowledge, pedagogical knowledge, and the influence it has on changing instructional practices. The intent of this study is to represent the collaborative experiences of teachers and identify factors that enhance or hinder their work because of this professional development practice. You are invited to participate in this study as the information that you share will help better understand the experiences of teachers in established PLCs.

The study involves observing participants who are teachers in a school district that has operated PLCs for several years. Each participant will be observed three times during a collaborative PLC meeting for approximately 80 minutes each session. Observations will be conducted between February and June of 2017 and the actual PLC participant observation record will be maintained for 5 years and then destroyed.

All participant communications will be kept strictly confidential. Only the Principal Investigator and her advisor will have access to the raw data and only summarized data will be presented at meetings and in publications. At any time, an individual can decide to ask the observer to leave without any repercussions. Additionally, there are no foreseeable risks for participants nor is there any compensation for participation.

Participation in this study is completely voluntary. One is free not to participate or to withdraw at any time, for whatever reason. If you have any concerns, you can contact the Institutional Review Board at IRB@wcsu.edu.

For more information about this research, contact: Elizabeth Spencer-Johnson at 203-610-1473 or at 111111111111.

“YOU ARE MAKING A DECISION WHETHER OR NOT TO PARTICIPATE. YOUR SIGNATURE INDICATES THAT YOU HAVE DECIDED TO PARTICIPATE AFTER HAVING READ THE INFORMATION PROVIDED ABOVE.”

_________________________________________  ____________
Participant’s Signature                    Date

_________________________________________  ____________
Witness                                      Date
Appendix D
Interview Consent Form

Study Title: Professional Learning Communities: An Examination into Teachers' Perspectives on Professional Conversations and Student Learning

Principal Evaluator: Elizabeth Spencer-Johnson
Doctoral Student, Western Connecticut State University

This form describes a research study that Elizabeth Spencer-Johnson, principal evaluator from Western Connecticut State University is conducting to explore how humanities teachers perceive their work in Professional Learning Communities (PLC) as it pertains to impacting subject knowledge, pedagogical knowledge, and the influence it has on changing instructional practices. The intent of this study is to represent the collaborative experiences of teachers and identify factors that enhance or hinder their work because of this professional development practice. You are invited to participate in this study as the information that you share will help better understand the experiences of teachers in established PLCs.

The study involves interviews with participants who are teachers and school administrators in a school district that has operated PLCs for several years. Each participant will be interviewed one time for between 45-60 minutes. Interviews will be conducted between February and June of 2017 and the actual interview files will be maintained for 5 years and then destroyed.

All participant responses will be kept strictly confidential. Only the Principal Investigator and her advisor will have access to the raw data and only summarized data will be presented at meetings and in publications. At any time, an individual can decide not to answer a question or to end the interview without any repercussions. Additionally, there are no foreseeable risks for participants nor is there any compensation for participation.

Participation in this study is completely voluntary. One is free not to participate or to withdraw at any time, for whatever reason. If you have any concerns, you can contact the Institutional Review Board at IRB@wcsu.edu.

For more information about this research, contact: Elizabeth Spencer-Johnson [REDACTED] or at [REDACTED].

“YOU ARE MAKING A DECISION WHETHER OR NOT TO PARTICIPATE. YOUR SIGNATURE INDICATES THAT YOU HAVE DECIDED TO PARTICIPATE AFTER HAVING READ THE INFORMATION PROVIDED ABOVE.”

___________________________________  ____________
Participant’s Signature             Date

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Witness                           Date
Appendix E

Interview Protocol

Teacher

1. Tell me a little about yourself. How long have you been teaching? (Probe: At this school? Any other subjects/grade levels?)

2. Before working in this school, did you have any training around Professional Learning Communities? (Probe: Can you tell me more about that?)

3. How do you define a Professional Learning Community?

4. Tell me about the PLC that you are a part of at Lincoln High School.

5. How does your PLC group usually use the meeting time? (Probe: Who makes the decisions about how the time will be used? Does everyone have an opportunity to suggest the topics? Does everyone do so?)

6. Does your PLC use the time effectively?

7. Do you ever have difficulty staying on task? Please explain.

8. Do the PLC meetings help your work as a teacher? (How? Why or why not?)


10. Does your expertise in your subject area has been enhanced by working in a PLC? (Probe: How? Why or why not?)

11. What impact does the work of your PLC make on your classroom practices? Please explain.

12. Do your students have improved learning experiences because you participate in PLC work? (How? Why not?)
13. Do you look forward to attending PLC sessions? Why or why not?

14. Briefly describe how much experience you have working with the current members of your PLC. (Probe: Do members of your PLC assume-specific roles?

(Probe: What are these? How did people assume these roles? If not, what do you think contributes to the fluidness of roles? How helpful do you find this (effective)?)

15. Does your PLC handles conflict productively? (How? Why not?)

16. Recall a time when members of your PLC had a disagreement. Describe the issue.

Was the problem resolved? Please explain. (Probe: How do you think that the disagreement impacted the relationships of the group? How do you think that disagreements impact the work of the group?)

17. Is there a reluctance on the part of some people to fully participate in the PLC?

(Probe: Can you tell me more about this?)

18. Do your building administrators value the PLC work? (Can you provide an example that highlights why you feel the way you do?)

19. What do you value most about the work of your PLC?

20. What is an area that you think your PLC could improve around, something that you would change, if you could?

21. Given the things that we have talked about so far, is there anything else that you would like me to understand about your experiences with this PLC? (Probe: Is there anything else that you would like me to understand?)

Thank you for your time today. If you think of anything else that you would like to share with me, you can call or email me.
Appendix F

Administrator

1. Tell me a little about yourself. How long have you been an administrator? (Probe: At this school? Any other subjects/grade levels?)

2. Before working in this school, did you have any training around Professional Learning Communities? (Probe: Can you tell me more about that?)

3. How do you define a Professional Learning Community?

4. Do you participate in teacher PLC work? Please explain.

5. What are your observations about how does PLC groups usually use the meeting time? (Probe: Who makes the decisions about how the time will be used? Does everyone have an opportunity to suggest the topics? Does everyone do so?)

6. Do you believe the humanities PLCs use the time effectively? Please explain.

7. Do teachers have difficulty staying on task? Please explain.

8. Do the PLC meetings help the work of teachers? (How? Why or why not?)

9. Do the PLCs in your building support teachers in learning new pedagogical approaches to instruction? (Probe: Assessment? How? Why not?)

10. Has teacher expertise in their subject area has been enhanced by working in a PLC? (Probe: How? Why or why not?)

11. What impact does the work of PLCs make on classroom practices? Please explain.

12. Do Lincoln High School students have improved learning experiences because teachers participate in PLC work? (How? Why not?)

13. Do teachers look forward to attending PLC sessions? Why or why not?

14. Do the PLCs handle conflict productively? (How? Why not?)
15. Can you recall a time when members of a PLC had a disagreement. Describe the issue. Was the problem resolved? Please explain. (Probe: How do you think that the disagreement impacted the relationships of the group? How do you think that disagreements impact the work of the group?)

16. Is there a reluctance on the part of some people to fully participate in PLCs? (Probe: Can you tell me more about this?)

17. Do you value the PLC work? (Can you provide an example that highlights why you feel the way you do?)

18. What is an area that you think the PLCs could improve around, something that you would change, if you could?

19. Given the things that we have talked about so far, is there anything else that you would like me to understand about your experiences with PLCs? (Probe: Is there anything else that you would like me to understand?)

Thank you for your time today. If you think of anything else that you would like to share with me, you can call or email me.
## PLC Participant Observation Template

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### Minutes Spent on General PLC Activities

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<th>General Chatting at Beginning of PLC</th>
<th>Time Elapsed Between Conclusion of PLC Work and End of Block</th>
<th>Teacher Working Individually</th>
<th>Time Remaining When a Teacher Leaves the PLC</th>
<th>Reading, Viewing, and Discussion of Instructional Resources</th>
<th>Chatting About Multiple School-Related Topics</th>
<th>Discussion about Classroom Management Issues</th>
<th>SLO or Data Showcase</th>
<th>General Discussion</th>
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### Appendix I

**Minutes Spent on PLC Assessment Activities**

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EdD in Instructional Leadership
Department of Education and Educational Psychology
Dissertation Registration Form

Student: Elizabeth J. Spencer-Johnson Date: May 13, 2018

Dissertation Title: Professional Learning Communities: An Examination of Teachers’ Perspectives on Professional Conversations and Student Learning

Dissertation Committee Members: See attached Dissertation Approval Page

For Office Use Only.

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Primary Advisor

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Associate Director, Division of Graduate Studies