

**AN INVESTIGATION OF PROFESSIONAL LEARNING COMMUNITIES AS A
TOOL FOR EDUCATIONAL CHANGE WITHIN ONE SASKATCHEWAN
SCHOOL DIVISION**

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Raymond Vincent Rawlyk, candidate for the degree of Master of Education in Educational Administration, has presented a thesis titled, ***An Investigation of Professional Learning Communities as a Tool For Educational Change Within One Saskatchewan School Division***, in an oral examination held on June 28, 2012. The following committee members have found the thesis acceptable in form and content, and that the candidate demonstrated satisfactory knowledge of the subject material.

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Abstract

The purpose of this qualitative study was to investigate how one Saskatchewan school division used professional learning communities (PLCs) as a tool for change. The investigation involved in-depth interviews with seven participants to determine their perceptions, understanding and viewpoints of PLCs and their implementation within the school division. The participants included one superintendent, one consultant/teacher, one elementary in-school administrator, two secondary in-school administrators, one elementary teacher, and one secondary teacher. The participants were all veteran employees and had experienced the implementation of PLCs firsthand. The main PLC model used in this division was based on the work of DuFour (2004). The analysis of PLCs was built upon two theories often present in literature pertaining to PLCs—complexity theory and loosely-tightly coupled systems theory.

The literature review of PLCs presented several findings that showed some possible shortcomings in DuFour's (2004) model. Firstly, the learning community should be built on relationships-- trust, the sharing of ideas, and collegiality rather than a prescriptive and mandated menu of what the community needs to consist of and to accomplish. Secondly, the learning community should be led by teachers themselves to encourage individual transformative change. Thirdly, the learning community should encompass all aspects of all roles of teaching—scientist, care-giver, social activist, and learning manager.

Although the superintendent and a few administrators stated some positive aspects to PLCs, all interviewed teachers and most administrators viewed the PLC experience negatively. The findings indicated that there were problems with where to

draw the line between mandates and autonomy, finding the passion for PLCs, alleviating stress and burnout, incorporating elementary and secondary school differences, time challenges, and curricula issues. The study presents several recommendations concerning future initiatives. Recommendations included focusing more on relationships within the learning community, attempting to find the edge of chaos in determining where to draw the line between top-down mandates and bottom-up autonomy, more effective communication of the vision and purpose of PLCs, ensuring adequate training and mentoring is in place, understanding that the passion for an initiative is inherently difficult to pass on to those who will be doing the work, lessening the number of simultaneous initiatives, understanding elementary and secondary school differences, providing adequate time for initiative implementation, ensuring communication of the purpose of the PLC is communicated effectively, and having the tools ready to accomplish the work.

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I would like to thank all of the participants for their willingness to become part of this investigation. This thesis would not have happened if not for you. I was humbled by the extent of each participant's honesty and the willingness to share data that was, at times, sensitive, and personal. I thank you for your willingness to trust me.

My school colleagues were very supportive of me as well. I especially want to thank my administrators who shared insights, compassion and patience with me—they provided me with a long, almost dangling leash, to give me time to work on this study. To my teacher colleagues, you know who you are, I thank you for asking me about my progress and wishing me well on this journey.

The researcher acknowledges the funding received from his employer, the school division of this thesis investigation, for all courses, including thesis courses, in the attainment of this degree.

Dedication

I want to thank my parents, Paul and Betty, for being a constant support for me during this time. In a significant way, this thesis is especially for my dad who always wanted me to be the best that I could be. I think I'll always have his "It'll all be worth it in the end" in my head. I hope this achievement has made my parents proud.

My wife, Debbie, has been the epitome of support during all stages of this thesis. She has learned the art of pretending to understand what I was babbling about whenever I had a stray inspiration. Just to know that I always had someone to hear me and to support me was a gift.

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Chapter 1: Introduction and Significance of the Study

Purpose and Need for the Study

The purpose of this study was to investigate how professional learning communities (PLCs) were used as a tool for educational change within one Saskatchewan school division by collecting and analyzing the experiences and perceptions of some people who went through the PLC process. The school division of this study embarked on the PLC journey for four, arguably five years (2004-2009), and then, from the viewpoint of many teachers, the PLCs were seemingly abandoned. The intention of this study is to investigate the PLC experience, to determine what can be learned from it, and, hopefully, to assist my school division and other school divisions in implementing future change mandates more effectively.

Burant's (2009) masters thesis, *The relationship of instructional supervision and professional learning communities as catalysts for authentic professional growth: A study of one school division*, is the only PLC study in Saskatchewan that I am aware of. Mitchell and Sackney (2000) have written a book about building learning communities based on their experiences with some Saskatchewan and Ontario schools, and Tarnoczi (2006) has studied PLCs in Alberta. Given the current popularity of PLCs in Saskatchewan school divisions, there is obviously a need for more Saskatchewan studies of PLCs-- this investigation will add to the limited amount of knowledge in this area.

Introduction to PLCs

The idea of professional learning communities (PLCs) can be traced back at least to the 1960s when "researchers offered the concept as an alternative to the isolation endemic in the teaching profession" (DuFour, 2006, p. 2). Judith Little's work in the early 1980s on collegiality was an important milestone for PLCs (DuFour, 2006; Fullan, 2006b). Some researchers (Naylor, 2007) go back even further to the 1930s and early 1940s as the origin of PLCs. Education recently, including the school division in this study, has used the model of PLC as prescribed by DuFour (2004) and supported by Fullan (2007). Fullan has referred to DuFour as "the gold standard for fostering the development of PLCs" (2006b, p. 12). DuFour's model of PLCs, which is described in chapter two, can be seen as a tool to make education more relevant, meaningful, and accountable for all stakeholders. The basic idea is that teachers should be working together to "plan lessons, develop assessments, study curriculum, and otherwise improve student learning" (DuFour, 2004, p. 6). PLCs, in this light, can be viewed as a tool for educational change—a means for educators to become more standardized in terms of what students are taught, how students are taught, and how students are evaluated. It may be possible that these common assessments and evaluations will result in more meaningful instruction that improves student learning. One of the pressing questions relating to PLCs is how to implement such an idea among all teachers. The nature of implementing such a reform is inherently complex because it is tied to the dynamics of a people-based organization, the complex adaptive system which is education. Another difficulty is how to implement DuFour's model of PLCs given he asserted "if all attempts to persuade educators to do the right work fails to persuade them to do it,

leaders should exercise their authority to require the work to be done" (DuFour, 2007, p. 43). The perception of top-down mandates was a significant response in the data—and contributed to one of the more troubling problems in understanding how PLCs can be used as a tool for change within a school division.

Origin and Theoretical Framework of the Study

Because I am a secondary teacher within the division of this investigation, I had experienced the implementation of PLCs firsthand. During this time I had started to pursue my graduate degree and some of the classes presented me with theories that seemed to lend themselves to my experiences at school. Two particular theories, Weick's loosely coupled systems theory (1976) and complexity theory (Batty & Torrens, 2001; Clarke, 2003; Fullan, 2001; Mansfield, 2003; Pouravood, 1997; Richardson, 1998; and Sun & Scott, 2005), seemed to be relevant to my experience with PLCs. I came to view them as an umbrella that covered more detailed and focused concepts, such as DuFour's (2004) model of PLCs.

Studying the works of Fullan (2001, 2007) motivated me to focus on PLCs as a tool for educational change using loosely coupled systems and complexity theory. I was struck by how similar the language and terms were and the extent to which he used loosely-tightly coupled systems and complexity theory. Fullan used terms and phrases such as "edge of chaos" (2001, p. 108), "permeable connectivity" (2007, p. 262), and "strange attractors" (2001, p. 115) which have their roots in chaos theory, which is now a subset of complexity theory (Rosenhead, 1998, p. 2), and loosely coupled systems theory. I found that much of what he had to say was rooted in these two theories which became the theoretical framework for this study. In fact, while I found that much of

Fullan's work was not stating anything new or original, he did use many concepts of complexity theory and loosely coupled systems theory that shed some light on a particular issue in education—how change can be implemented. Fullan (2001) stated that "complexity in educational change keeps people on the edge of chaos—the edge of creativity and anarchy" (p. 6), which is where implementation of reform should seek to be. It is at this edge that a "true learning community operates within a bounded instability, where order and disorder influence each other" (Pouravood, 1997, p. 58). Much of this investigation's findings had to do with this exact point—which begs the question of where to draw the line between order and disorder.

Fullan (2001) used the term "strange attractors" in his chapter on *Coherence Making* to refer to "a series of experiences that will galvanize (attract) the deep energies and commitment of organization members to make desirable things happen" (p. 115). This term is used in chaos theory to refer to "forces that pull chaotic states into periodic pattern . . . [and that] perhaps moral purpose is one of those strange attractors" (Pouravood, 1997, p. 59). Fullan has incorporated this concept into an entire chapter entitled *Moral Purpose* (pp. 13-30). The ability to draw the commitment from teachers and administrators to PLCs in this school division was a significant issue.

Loosely coupled systems (which became multiple linkages or, as Fullan stated, "the too tight too-loose dilemma", 2007, p. 43), and complexity theory provided the means to investigate DuFour's model of PLCs from a unique vantage point. With these two theories as the theoretical framework I was also able to connect how the division implemented change with what the research suggested. As the research progressed, I had

the feeling or perception of someone on the outside looking in. Perhaps the utilization of these two theories enabled this perception.

As a teacher, it is easy to live and work in your own little bubble—to simply deal with the students that you teach within the classroom and to remain ignorant of the overarching theories that guide educational practice. This investigation was an attempt to break out of this bubble to try to understand education in a more comprehensive way. My vice-principal stated that writing a thesis is a way of giving back to education. I suppose that this investigation, as difficult and delicate as it sometimes was, is my way of giving back to the division that supported me for many years.

Assumptions, Delimitations, and Limitations

For the purpose of this study, it was assumed that the interviewees selected for this research were able to recall and communicate pertinent experiences regarding the division's implementation of PLCs. It was also assumed that the interviewees' shared experiences were true for them and that those experiences and insights actually took place.

This study focused on one school division in Saskatchewan so the data and analysis of this investigation are delimited to this one division. Second, the small sample size of interviewees delimits the generalizability of the study's results. Third, the study was delimited by the fact that all of the participants knew me, the interviewer/researcher; on one hand they may have withheld delicate information because of my status as a co-worker and, on the other hand, they may have exaggerated responses because of their familiarity with me. Fourth, the study is limited because the interviews were conducted by a single researcher; a different researcher may have

received different results—for example, if the interviews were conducted by a senior administrator from within the division, rather than a teacher, participants may have responded differently. Fifth, the study was limited by the ability of participants to answer the interview questions openly, candidly, and honestly; if the interviewee was stressed or, for some reason extremely happy, because of circumstances beyond the interview, then these circumstances may have had some influence on his/her responses. Sixth, the researcher's ability to accurately analyze and interpret the data provided by the participants may be an additional limitation, particularly because I had also experienced the same PLC implementation process as the participants.

Definition and Explanation of Terms

The following definitions refer to how I will be using the terms within this thesis.

Change: A new way of doing things, using new structures and practices to meet the demands of today (Servage, 2008).

Change theory: A generalized theory that studies how organizations can change to meet the demands of today. Loosely coupled systems theory and complexity theory are particular models within change theory. For Fullan (2001), change theory "is nonlinear—there is no clear beginning or end. There are only closer approximations to increasingly ambitious goals which are embraced by more and more people in the organization" (p. 2).

Chaos theory: A subset of complexity theory; chaos is now "a particular mode of behavior within complexity theory" (Rosenhead, 1998, p. 2). The theory examines how simple things can generate complex outcomes that cannot be predicted by looking at the

parts themselves. MacGill (2007) used birds as an example: flocks of birds often create beautiful dances in the sky yet research has shown that "all that is required is for each bird to stay a certain distance from its neighbor—the rest just happens" (p. 2).

Complex adaptive systems: Diverse and independent agents that are constantly changing and interacting in a non-linear manner. In determining the characteristics of a complex adaptive system we are determining those traits that exist when the complex system exists at the border between chaos and order; when there is "enough order for stability, consistency and patterns to endure but enough chaos for novelty and creativity" (MacGill, 2007, p. 2).

Complexity theory: A theory that studies dynamic systems that adapt to their context. The interactions from within a complex system are more important in explaining overall results than the make-up of the parts themselves. Complexity theory focuses on how complex systems generate what appear to be simple outcomes—the opposite of chaos theory. An example would be billions of cells working together so the body can move as a single unit. In education, complexity theory attempts to understand how change can be implemented in a complex environment. (Mansfield, 2003; *Pop 810*, n.d.)

Complicated systems: Composed of many simple linear systems. In the past, theorists took apart components in systems and analyzed their nature like a mechanic taking apart a car, piece by piece, to understand how a car operates. This approach would work for a car or a clock because they are *complicated systems* composed of many simple linear systems. (Mansfield, 2003)

Edge of chaos: A particular mode within complexity theory that lies on the edge between stable and unstable modes. Complexity theory maintains that complex

organizations need to be between these two modes—at the edge of chaos, in order to have optimal performance. This area is a transition zone, a turbulent environment, but it is "bounded instability . . . [an area of] unpredictable behavior within a predictable general structure of behavior" (Rosenhead, 1998, p. 3).

Elementary school: A Saskatchewan school comprised of kindergarten to grade eight.

Loosely coupled systems theory: A theory developed by Karl Weick (1976) that argued individual components of the educational system can operate with little input or communication from other elements. Moore (2000) clarified the main characteristic of a loosely coupled system:

[The] problem with profoundly and systematically influencing the core of education is that the people who manage educational institutions do not manage the core functions related to the institution—teachers, working in isolated classrooms, manage the technical coreThat disconnect is the primary characteristic of the loosely coupled system in education. (p. 2)

Multiple linkages/ Loosely-tightly coupled systems: A more recent version of Weick's (1976) loosely coupled systems theory in which loosely and tightly coupled structures within an organization are purported to be used to promote successful change. (Fussarelli, 2002; Goldspink, 2007a)

Permeable connectivity: A term used by Fullan (2007, p. 236) to indicate shared two-way communication between various levels of an organization.

Professional learning communities (PLCs): Numerous definitions exist. One of the more all-encompassing definitions is from Servage (2008):

One model within a constellation of models and theories characterized by a number of core beliefs: 1. Staff professional development is critical to improved student learning. 2. This professional development is most effective when it is collaborative and collegial. 3. This collaborative work should involve inquiry and problem solving in authentic contexts of daily teaching practices. (p. 1)

Hord (2008) stated what PLCs have become for today's educators: "What should we intentionally learn in order to become more effective in our teaching so that students learn well" (p. 2). DuFour's (2004) version of PLCs is a particular model within this framework.

Reform: A reworking of existing structures and practices into a workable version relevant to today. (Servage, 2008)

Secondary school: A Saskatchewan school comprised of grades nine to twelve.

Chapter 2: Review of the Literature

Introduction

This literature review focused on areas pertinent to professional learning communities (PLCs): Change theory, chaos and complexity theories, loosely-tightly coupled systems theory, historical development of PLCs, characteristics of PLCs, and critical analysis of PLCs. The purpose of the literature review is to investigate how PLCs are used as a tool for educational change, and what that form presently looks like.

This review of the literature is divided into two sections: First, PLCs are examined, focusing on their relevance and purpose in the context of educational change, the form they presently have in education, and a critical analysis of that form. Second, change theory is examined in terms of creating conditions for sustainable educational reform.

Professional Learning Communities (PLCs)

This section is divided into five areas: (a) What is a PLC? (b) A brief history of PLCs, (c) Why use PLCs? (d) DuFour's model of PLC, and (e) Arguments against/problems with PLCs.

What is a PLC? There is a lack of agreement among researchers on the definition of a professional learning community. DuFour (2004) stated that the term "professional learning community" is "so overused that it's in danger of losing all meaning" (p. 1). As a result, DuFour defines PLCs by presenting "Three Big Ideas" or pillars of the model: (a) ensuring that students learn (focus on learning rather than teaching), (b) culture of collaboration (systematic process where teachers work together

to analyze and improve classroom practice) and, (c) focus on results (data used to provide relevant information for staff).

Other researchers have attempted a definition of PLCs:

- Date and Ryan (2008): A collegial group of administration and staff who are united in their commitment to student learning. They share a vision, work and learn collaboratively, visit and review other classrooms, and participate in decision making. (p.1)
- Servage (2008): One model within a constellation of models and theories characterized by a number of core beliefs: (a) Staff professional development is critical to improved student learning. (b) This professional development is most effective when it is collaborative and collegial. (c) This collaborative work should involve inquiry and problem solving in authentic contexts of daily teaching practices. (p.1)
- Hord (2008): PLCs are a way of organizing educational staff to engage in purposeful, collegial learning. (p. 5)
- Burant (2009): PLCs refer to a combination of: (a) Collaboratively developed and shared mission, values, and goals of the school and division.
(b) Collaborative teams that work interdependently to achieve common goals.
(c) Teams using data to drive instruction and school improvement to see targeted results. (p. 9)

Shared elements of the definition among researchers are collaboration and a sense of purpose. Some researchers emphasize the analysis and use of data (Burant, 2009;

DuFour, 2004) while others do not (Date & Ryan, 2008; Hord, 2008; Servage, 2008).

The effect of these differences in definitions may be that a professional learning community may be more of a scientific and focused endeavor for one group, and a more flexible and open endeavor for another group. Wyatt (1998) emphasized this point:

"Defining community is somewhat difficult because, to a large extent, what a community is depends on what its members intend it to be" (p. 80). The definition of a PLC may be, to some degree, dependent on the specific model one has decided to use.

A brief history of PLCs. According to DuFour (2006), "the term professional learning community (PLC) first emerged among researchers as early as the 1960s when they offered the concept as an alternative to the isolation endemic in the teaching profession . . ." (p. 2). PLCs, at first, were simply places and opportunities for teachers to discuss and to work collaboratively. In the 1980s, open classrooms and team teaching were introduced to address the problem of isolation which resulted in "an increase in teacher morale and motivation" (Hord, 2008, p. 1). Both DuFour (2006) and Fullan (2006b) credit Judith Little's work on collegiality in 1981 as an important milestone in initial PLC development. Other important events in the PLC timeline include:

1989—Susan Rosenholtz found that learning enriched schools were characterized by collective commitments to student learning in collaborative settings.

1993—Judith Little and Milbrey McLaughlin concluded that the most effective schools were characterized by shared norms and beliefs, collegial relations, collaborative cultures, reflective practice, technical inquiry,

professional growth, and mutual support.

1995—Newmann and Wehlage found that the most successful schools function as a PLC by utilizing collective effort, collaborative culture, and collective responsibility for learning.

1995—Sharon Kruse suggested critical elements needed for PLCs: Reflective dialogue, de-privatization of practice, collective focus on student learning, collaboration, and shared norms and values. Kruse reaffirmed PLCs in a 1998 study.

1998—DuFour and Eaker made PLCs more mainstream with an emphasis on ensuring high levels of performance from all students, collaboration, and a shift from teaching to learning. (DuFour, 2006)

It may be of some importance to note that perhaps DuFour made PLCs more mainstream by packaging the idea of PLCs as a commercial enterprise. Also, a note on Fullan's contribution to this timeline: He does delve into the history of PLCs (Fullan, 2006b, p. 3), but the information appears to be a cut and paste procedure of the above points from DuFour. DuFour's timeline is also questioned by Naylor (2007) who referred to Stoll's observation that "PLCs are not new, tracing influences back to Dewey (1929), Stenhouse (1975), and Schon (1983). Bullough (2007) also traces substantial elements of PLCs back . . . to the 1930s and early 1940s in the USA" (p. 3).

Hord (2008) stated what PLCs have become for today's educators: "What should we intentionally learn in order to become more effective in our teaching so that students learn well" (p. 2).

Why use PLCs? This question focuses on the essence of this thesis in all of its complexity. The wide range of PLC definitions creates difficulty in determining the shared characteristics of the concept. Much literature focuses on the popular versions of PLCs as espoused by DuFour and supported by Fullan, yet there is new research that is redefining what PLCs should consist of. Because DuFour's model of a PLC is a commercial enterprise (he trains school divisions in his version of PLCs through the selling of "how to" literature guides and speaking seminars), it has been utilized by more school divisions; hence there is more literature written about his model. One danger in researching PLCs is to view DuFour's model as the definitive and only model simply because of the sheer amount of literature written by him, with him and about him. With this danger noted, this study is not necessarily an investigation into what model is the most popular and widely used.

DuFour (2005) stated that it is "difficult to identify any leading educational researcher or organization that is explicitly opposed to PLCs" (p. 9). He noted as early as 1998 that the "most promising strategy for sustained, substantive school improvement is developing the ability of school personnel to function as PLCs" (DuFour & Eaker, 1998, p. xi). In his view, PLCs are required in order to break from the industrial model of education and to move towards a learning organization that emphasizes relationships, shared ideals, and strong culture.

Many other researchers support the idea of PLCs: Hord (2008) stated that "PLCs serve to promote quality teaching, the prime factor in whether students learn well" (p. 5). Both Date and Ryan (2008, p. 1) and Burant (2009, p. 17) listed the benefits of

PLCs: Reduction of teacher isolation, increased commitment to school mission and vision, collective responsibility for student development, well informed teachers, and higher morale. Mitchell and Sackney (2000) stated that there is "overwhelming agreement that professional learning is directly and persistently linked to educational improvement" (p. 15). There is much agreement for the general concept of PLCs. What is unclear is if the researchers agree on a more detailed account of what a PLC consists of, such as the specific model offered by DuFour. This is a blurry area because, on one hand, the brief query into the definition of PLCs shows that there are some major differences of interpretation, and on the other hand, present PLCs "are understood within the framework proposed by DuFour and Eaker (1998)" (Servage, 2008, p. 1).

DuFour's model of PLCs. There are two reasons for focusing on DuFour's model of PLCs: First, the school division of this study used DuFour's model. An understanding of this specific model will assist in the appreciation of how PLCs were used in this school division as a tool for educational change. Second, if Servage (2008) is correct, then using DuFour's model means studying the prevalent PLC model being used today. Also, the counter arguments of the following section are more focused because they are directed towards this specific model.

Servage (2008) summarized DuFour's premise for PLCs (arguably more succinctly than DuFour did):

Teachers should be working together to plan lessons, develop assessments, study curriculum and improve student learning. PLCs formalize these collaborative efforts and embed them in a school day as a regular component of teacher work. Collaboration encourages teachers to become active and conscientious learners to respond and prepare students for a complex world. (p. 1)

For DuFour, PLCs avoid becoming just another reform movement by focusing on three big ideas (DuFour, 2004, pp. 1-6; DuFour, 2003, pp. 2-3). The first big idea is *ensuring that students learn* by shifting the focus from teaching to student learning. This idea calls for colleagues to answer: What do we want students to learn? How will we know when they have learned it? How will we respond when students have not learned it? This first big idea involves a focus on what each student needs to be successful, and it is based on intervention rather than remediation.

The second big idea is creating a *culture of collaboration*: a systematic process where teachers work together to analyze and improve classroom practice. Every team must meet during the day to develop norms, clarify expectations, student achievement, and strategies to improve results. The focus is on measurable goals and every teacher is on a team. Collaboration does not mean camaraderie; it is productive work time, not just a friendly gathering.

The third big idea is a *focus on results* where data is turned into relevant information. Common formative assessments are designed and implemented and there are reviews of team progress.

For DuFour (1998a, p. 23) the common characteristics of a PLC are: (a) shared mission, values and vision, (b) collective inquiry, (c) collaborative teams, (d) action orientation and experimentation, (e) continuous improvement, and (f) results orientation.

In terms of leadership, DuFour's model requires directed autonomy where the leader "establishes clear priority and parameters, and gives each school autonomy to

chart its own course" (2003, p. 1). This version of a loosely-tightly coupled system has a "forceful leader embracing site-based management" (p. 1).

Critical analysis of DuFour's PLC model. This section deals with recent research that questions some of the basic principles of DuFour's model.

Naylor's British Columbia Teachers' Federation Research Report (2007) reviewed PLC literature in order for teacher unions to consider its implications. He stated that there is no wide support for DuFour among teachers and that

positive messages of collaboration are tempered with prescription and control . . . telling teachers to demonstrate the discipline implies a controlling view of community. DuFour's work implies success follows adherence to a prescription. (p. 2)

Naylor calls DuFour's PLC a "marketed approach . . . that is aided and abetted by Fullan" (p. 7). Naylor (2007) pointed out that the marketed approach to PLCs implies some form of ownership and control by those who market it. If PLCs fail, proponents may argue that the failure is the consequence of non-compliance or that more instruction and training (i.e., more money) are needed on how to be a "real" PLC (p. 11). Naylor also questioned Fullan's referral to DuFour as the "gold standard for fostering the development of PLCs" when the communities in DuFour's model are forced, mandated, and "require compliance to norms established outside the community—hardly encouraging safe spaces for teachers" (p. 7). Naylor concluded that the present form of PLCs is not needed; what is needed is a form of a learning community that focuses on a "sharing of ideas in the context of where you are" (p. 11). This new form of a learning community is "built on trust, [and] offers approaches that engage teachers, and with

processes that they can control" (p. 11). Naylor's suggestion for learning communities certainly is reminiscent of what PLCs were initially all about in the 1960s.

Servage's study (2009) found limitations in what PLCs can offer teachers:

PLC learning embraces the technical and managerial dimension of teacher's work at the expense of craft knowledge and critical perspectives, resulting in narrow and impoverished understandings of teacher professionalism, and limiting potential contributions of PLCs to technical growth and learning. (p. 1)

Servage suggested that DuFour's model of PLCs presents a limited vision of what schools can or should be providing students. She stated that "DuFour focuses on the implementation for school reform with no critique of the educational ends that such reform furthers" (p. 2).

Servage (2009) also questioned the idea of "professional" in PLCs. She offered four versions of what the term can imply: First, the professional as a scientist who delivers a battery of tests and determines appropriate treatments. Second, the professional as a caregiver grounded in relationships and ethical reasoning. The question here is if PLCs can foster an ethic of care. Third, professional as a social justice advocate invested in the political dimension of school. Fourth, the professional as a learning manager focusing on productivity over time—the means rather than the ends of work (p. 5). Her point is that DuFour's model provides a limited version of what a teacher represents to the school and to the students. Collaboration in a group can perhaps determine what "professional" means, but when the meaning is imposed from outside, then the content becomes pre-determined and does not empower teachers. In Servage's (2009) most recent article, she pointed out the "absurdity that collaboration could be administratively orchestrated—school contexts are not blank slates where pure

ideas are tried out, rather they are unique milieus shaped by complex histories" (p. 10). Servage thought that "PLCs need to be in the hands of teachers themselves" (p. 8)—much of the literature on complexity theory is in agreement with this view (Goldspink, 2007; Mansfield, 2003). Servage's model of PLCs supports Naylor in that teachers should be in control of their learning communities.

In an earlier article, Servage (2008) questioned DuFour's idea that community is composed of a shared vision and mission (DuFour, 1998a, p. 23). She pointed out that researchers claimed a collaborative community also needed: (a) mutual regard and caring for collaboration, as suggested by Lambert (2003); (b) a sense of identity and belonging, as suggested by Mitchell and Sackney (2000); and (c) the intimacy of a family or small village, as suggested by Beck (1999). For Servage, the PLC needs collective work, shared responsibility, *and* it has to also meet relationship needs-- an aspect that is absent in DuFour's model.

Servage (2008) questioned the changes that DuFour's PLC can hope to create. She noted the difference between transformative change (a radical change; a change of substance) and reformative change (a re-shaping of the same substance). Because the present form of PLCs focus on the means of teaching, not its ends, Servage concluded that PLCs are not transformative—the learning in a PLC only consists of "best practices that will guarantee positive academic outcomes for kids" (p. 65). For Servage, the problem with PLCs is that they "focus on instrumental learning yet anticipate the transformative impact of communicative learning . . . which is like hoping a cat will have a litter of puppies" (p. 69). She noted that collaboration should

serve as a catalyst for personal transformation . . . but so long as data driven decision making and a focus on student learning are the exclusive concentration of collaborative work, one can't expect much transformational learning via critical reflection. (p. 70)

Servage concluded that the best PLCs can offer is to "bring together like-minded teachers who have a genuine interest in improving student learning by improving their teaching practices" (p. 73). This narrowness does not have the capacity for transformative change within educators, and so it cannot change school culture.

Wood's (2007) study on learning communities in a mid-Atlantic city of the United States noted that "most participants did not claim a connection between their collaborative work and student learning" (p. 700). One of Wood's conclusions was that "districts must invest greater authority and autonomy in participants as well as adequate time and support" (p. 700). Like Naylor and Servage, Wood concluded that greater teacher empowerment is needed in order to affect real change.

Tarnoczi's (2006, p.1) paper on PLCs in Alberta had four conclusions: (a) PLCs restrict teacher learning; (b) PLCs support the status quo; (c) PLCs shift responsibility for educational shortcomings to individual teachers; and (d) PLCs employ processes to make teachers more manageable. Rather than enabling teachers to control educational change, Tarnoczi saw little evidence that PLCs live up to teachers' expectations. He also noted the difficulty in determining what exactly a PLC is (p. 22)—a point previously discussed.

DuFour's (2005) observation that "it is difficult to identify any leading educational researcher or organization that is explicitly opposed to PLCs" (p. 9) appears to be unfounded: Most researchers may agree with the general idea of a learning

community (without the "professional"), but there are many who are opposed to DuFour's version of it.

In summary, the key criticisms of DuFour's PLC model include: (a) A controlling and incomplete view of community and collaboration; (b) control of PLCs due to a marketed approach; (c) absence of teacher authority and empowerment; (d) a narrow idea of the teacher as professional-- it restricts teacher learning; (e) limited potential and narrow focus for change; and (f) processes that control teachers.

Recent research suggests that the following elements are required to sustain a meaningful PLC: First, one should focus on building a learning community built on trust, the sharing of ideas, and collegiality rather than a prescriptive and mandated menu of what the community needs to consist of and accomplish. Second, one should empower all forms of the "professional" in teachers within the PLC—the scientist, the care-giver, the social advocate and the learning manager. Third, PLCs need to be led by teachers themselves in order to encourage individual transformative change. Fourth, PLCs need time, shared responsibility, collective work *and* a focus on relationships.

Change Theory

Why does education need to change? There is much agreement among educational researchers that many schools today are not meeting the needs of students to enable them to contribute in an increasingly complex world. According to Mitchell and Sackney (2000) part of the reason for this failure is that many schools operate from a mechanistic, or a cause and effect, worldview that is irrelevant to today's students:

. . . school structures and practices that reflect a clockwork view of the world are

not natural, nor are they grounded in the realities of individual lives, and they can lead to alienated and disadvantaged students. This is a devastating indictment against schools and schooling. (p. 3)

Fullan (2007b) pointed out that the reasons for educational reform are familiar and urgent:

The global society is increasingly complex, requiring educated citizens who can learn continuously, and who can work with diversity, locally and internationally. Although the source of the blame varies, it is now an undeniable conclusion that the education system and its partners have failed to produce citizens who can contribute to and benefit from a world that offers enormous opportunity, and increasingly complex difficulty finding one's way in it. (p. 7)

It is unclear as to what criteria Fullan based this "undeniable conclusion" on, however his point is that the outdated structures and pedagogy that typify many of today's schools are not assisting students to operate in a complex world.

In order to better meet the needs of today's youth many researchers encourage on-going professional development as "the cornerstone of future reform efforts" (Gordon, 2004, p. 7). The general idea is that effective on-going professional development will lead to school development which will lead to increased student learning.

"Reform" or "Change"? Although most researchers use the terms "reform" and "change" interchangeably, there may be some differences in meaning that could aid in our understanding of change theory. One may assume that "reform" refers to reworking (or re-forming) the same structures and practices of education into a workable version relevant to today; the clay is the same, it is just molded into a new shape. "Change", however, may imply a new way of doing things; a new batch of clay is used to meet the demands of today. "Change" may encompass more of a philosophical shift

in thinking than "reform"; or to use another metaphor, we are not fixing up the old car, we are buying (or building) a new one.

The differences between "reform" and "change" can be related to Fullan's (2007b) distinction between "innovation" and "innovativeness" where "the former concerns the content of a given new program, while the latter involves the capacities of an organization to engage in continuous improvement" (p. 11). In this context "innovation" may be equated with "reform" while "innovativeness" may be equated with "change". Past reform movements may have failed because they "focused primarily on the development of innovations and paid scant attention to the culture of schools and districts in which innovations would reside" (p. 9); or, they focused on reform rather than change. "Change" may refer to something deeper and more complex than "reform", such as attempting to change the culture within a school.

Overview of Pertinent Theories within Change Theory. The literature on change theory is wide in scope and it encompasses everything from "recipe books" for successful change, commercial enterprises that focus on assisting school divisions to change, studies that examine change, and countless researchers who have added to the body of knowledge pertaining to change. There are two theories within change theory that are of particular note because they appear so often within the literature: Loosely coupled systems theory and complexity theory. These two theories do not definitively define change theory, but their persistent appearance within the literature warrants at least an overview of what each consists of and how they impact educational change.

Loosely coupled systems theory. Karl Weick's theory of education as a loosely coupled system (1976) is one of the most cited concepts in modern education. The

essence of the theory is that individual components of the education system can operate with little input or communication from other elements. In a mechanistic worldview the business of education filters down in a tidy and streamlined manner from the director to the teacher. Weick's theory suggested that this traditional view is not what actually happens within the system. Moore (2000) clarified the implication:

[The] problem with profoundly and systematically influencing the core of education is that the people who manage educational institutions do not manage the core functions related to the institution—teachers, working in isolated classrooms, manage the technical coreThat disconnect is the primary characteristic of the loosely coupled system in education. (p. 2)

What happens in the classroom with individual teachers and students *is* the main business of education; administration supports this core business rather than dictates what it is. Education is not the tidy hierarchical system that we thought it to be; it is messy, chaotic and clumsy. The mystery is that the system actually works and from some perspectives, it works well.

Many researchers have made lists of the theory's characteristics; the following is a condensed version of key points taken from Fusarelli (2002) and Weick (1976):

- Multiple goals exist which are often conflicting or unclear.
- Participation of members is fluid.
- Rules are often violated.
- Policy implementation is uneven.
- Work is unevaluated.
- Structures exist that do not map the actual activity.
- There is minimum teacher-teacher interaction.

Weick (1976) found several positive characteristics that may help to explain why education's loosely coupled system has survived collapse: (a) It can adapt to local conditions. Teachers can use student interest and capabilities to construct a meaningful unit. (b) It embraces self-determination: Teachers can interpret and implement units of study. (c) It can tolerate differences. While teaching the same course, Mr. B utilizes story-telling while Mrs. A utilizes reading. (d) It is able to resist change. Division implementations have come and gone (i.e. "flavours of the month") with little impact to what teachers actually do in the classroom. (e) It is able to allow for sub-system breakdowns without total system breakdowns. It seems reasonable that Saskatchewan school division amalgamations were probably a headache at head offices, but individual teachers were largely unaffected in their isolated classrooms.

More recent researchers (Fusarelli, 2002; Goldspink, 2007a) have added tightly coupled and multiple linkages to loosely coupled systems, perhaps in part because a loosely coupled system is "not useful to policy-makers and educational leaders because it offers no guidance for school improvement or reform" (Fusarelli, p. 3). A move towards more tightly coupled systems can be seen in the American system: for example, bonuses to teachers for high class grades and state tests. The resistance to this change can be seen with teachers "teaching to the test" or altering class grades where a 60% is the new 70%. Despite the problems of moving towards a more tightly coupled system, it seems unlikely that public accountability and the demand for transparency will fade away.

Elmore (2000) suggested that we need distributed leadership or a shared governance that "provides the impetus people need to unlearn the behaviors of a loosely coupled system and to learn new behaviors associated with collective responsibility for teaching practice and student learning" (p. 32). Teachers, consultants and administrators must work together, sharing the problem, in order to find the solution. Goldspink (2007b) stated that in order to succeed with the solution there is a "need for intrinsic motivation and innovations at a local level . . . [the] key to this focus is relationships and building of congruent behavior around trust" (p. 88). The solution appears to be for individuals, including teachers within the educational system, to take ownership of the problem and work together so the solution is not a top-down dictate. The literature on loosely-tightly coupled systems appears to be consistent in this regard: more control must be given to individual teachers to affect real change.

Fullan (2007b) viewed a too-tight and too-loose dilemma as one of the main concerns for educational change. Top-down or too-tight change "doesn't work because it fails to garner ownership, commitment, or even clarity about the nature of reforms. Bottom-up change—so called let a thousand flowers bloom—does not produce success on any scale" (p. 11). His solution was to develop strategies that "integrate top-down and bottom-up forces in an ongoing dynamic manner, achieving what he called "permeable connectivity" (p. 262). The blending of tightness and looseness would result in an "interactive culture of the organization" (p. 43). For Fullan "relationships" are a key component in his philosophy for implementing reform programming. Fullan

(2008c) stated that the "key to achieving a simultaneously tight-loose organization lies in purposeful peer interaction" (p. 60).

Complexity theory. Complexity theory represents a new way in which we understand systems. In the past, theorists took apart components in systems and analyzed their nature like a mechanic taking apart a car, piece by piece, to understand how a car operates. This approach might work for a car or a clock because they are *complicated systems* composed of many simple linear systems. The problem in reality is that most of nature is made up of *complex adaptive systems*—diverse and independent agents that are constantly changing and interacting in a non-linear manner. Studying the parts of a complex system (as opposed to a complicated system) produces an incomplete understanding of the whole. Perhaps a fitting example would be studying how a mouse can function by observing and analyzing its inner structures. The problem would be that in order to analyze its inner structures the mouse would die—the essence of the mouse is gone; the understanding of the whole is impossible because the interacting agents that make the mouse what it is have stopped functioning. The result is an incomplete picture of what the mouse is in reality. The mouse is not what it is when science dissects it; it is only a mouse when alive. In fact, complexity is "founded on the assumption that science does not fully describe the reality of the natural world" (Mansfield, 2003, p. 2).

Complexity theory studies dynamic systems that adapt to their context—a faculty committee that adapts to current pressure from administration or a human body that adapts to the flu. These adaptations help complex systems evolve over time and inexplicable results come from the interactions of the simple components within the

system. For example, the combining of hydrogen and oxygen can explain water, but the combination cannot readily explain the "noise of a brook or the shimmer of a lake" (*Pop8910*, n.d., p. 1). The noise of the water is difficult to predict *but* the noise is not random. This point is vital to complexity theory because the fact that new elements can emerge from interactions, and that this emergence is not random, means that the theory can become known through inquiry—the non-randomness helps to validate the theory.

The interactions from within a complex system are more important in explaining overall results than the make-up of the parts themselves. To understand a complex system one needs to stand back in order to see the whole rather than stepping closer and breaking the system into pieces (reductionism). In terms of organizations, a complex system is made when "people relate or interact with each other over time" (Clarke, 2003, p. 1). With this interaction new forms allow a complex organization like education to evolve over time in a creative and dynamic manner.

A prior theory, chaos theory, is now a subset of complexity theory; chaos is now "a particular mode of behavior within complexity theory" (Rosenhead, 1998, p. 2). There are three modes within complexity theory: stable, unstable (chaos), and the "edge of chaos" which is the point between stability and instability. The three modes constitute a model used to show where a complex organization is heading. In *stable mode*, a disturbance within the organization eventually converges back to its initial conditions. For example, professional learning communities would have failed and the school division would return to its stable state before the PLC implementation. According to complexity theory, stable mode should be avoided as organizations become stagnant and

unproductive—they wither and die. In *unstable mode*, disturbances cause a progressive divergence away from initial conditions. Professional learning communities would take place but at the cost of all order and cohesiveness within the school division—chaos would take over. This mode is the old chaos theory. Complexity theory maintains that complex organizations need to be between these two modes—at the edge of chaos, in order to have optimal performance. This area is a transition zone, a turbulent environment, but it is "bounded instability . . . [an area of] unpredictable behavior within a predictable general structure of behavior" (Rosenhead, 1998, p. 3). Fullan (2001) stated that "complexity in educational change keeps people on the edge of chaos—the edge of creativity and anarchy" (p. 6), which is where the implementation of reform should seek to be. Complexity theory allows for an organization to change while retaining integrity. A successful complex organization operates on the delicate edge of chaos, balancing itself between static and chaotic modes. This edge provides for the spontaneous emergence of creative ideas that enable the organization to adapt to change and evolve over time—a complex adaptive system.

In determining the characteristics of a complex system we are determining those traits that exist when the complex system exists at the border between chaos and order; when there is "enough order for stability, consistency and patterns to endure but enough chaos for novelty and creativity" (MacGill, 2007, p. 2). The idea is to avoid a simplified view of complex organizations because the "richness of their structure would be lost" (Batty & Torrens, 2001, p. 5). The following are suggestions for how schools can become more complexity-like:

- Systems within a system influence each other, but it is difficult to determine how (Pouravood, 1997, p. 63).
- Uncertainty and paradox are inherent within the system (Sun & Scott, 2005, p. 893).
- Individuals are independent and creative decision-makers (Rosenhead, 1998).
- Small changes can have big effects (Pouravood, 1997, p. 58).
- Effective solutions can emerge from minimum specification (Mansfield, 2003, p. 2).
- The environment is never constant (Pouravood, 1997, p. 58).
- Conflicts are embraced as long as these conflicts do not stray out of the "necessary preconditions for survival [stability mode]" (Mansfield, 2003, p.2).
A complex system expects disagreement as necessary for evolution and survival.
- There is no top-down pressure to deliver—change comes from the individual (Mansfield, 2003, p. 2).
- Sustainable change comes through responsibility taken at a local level, not through imposition (Goldspink, 2005, p. 6).
- Risk-taking, ownership and belonging are central concepts (Pouravood, 1997, p. 63).
- Complex leaders share ownership, are flexible, build community and dispense power rather than hold onto it (Sun & Scott, 2005, p. 891).
- There is a shift away from planned change to the messiness of self-organization that produces emergent unpredictable change (Rosenhead, 1998).

- Administrators should let the system change itself and shift attention to those things that are working best rather than focusing on the elements that are not working well (Rosenhead, 1998).
- Loosen structure and build trust to catalyze innovation and learning (Goldspink, 2005, p. 15) .
- Consensus and strong culture are dangerous because they draw organizations toward stability (Rosenhead, 1998).
- Long-term planning is impossible since there is no cause-effect relationship in a complex system (Rosenhead, 1998).

McAndrew (1997) stated early on in complexity theory's short history that "order and reason people [*sic*] will find complexity theory challenging, while those who can tolerate ambiguity and unpredictability will find the edge of chaos stimulating" (p. 5). He used the scenario of a teacher encountering countless variables on a daily basis to illustrate the point. The unpredictability of the variables within each student and teacher is the joy of teaching. How the individual teacher interacts with these variables, and how the students interact with the teacher, is central to complexity theory; the school "is the unit of intervention, yet the individual is the unit of action" (O'Day, 2002, p. 2). The point is that the individual, not the school, is the basic unit of accountability (the same conclusion as Weick's loosely coupled systems theory).

Fullan (2001) used the term "strange attractors" in his section on *Coherence Making* to refer to "a series of experiences that will galvanize (attract) the deep energies and commitment of organization members to make desirable things happen" (p. 115). The term is mainly used in chaos theory to refer to "forces that pull chaotic states into

periodic pattern . . . [and that] perhaps moral purpose is one of those strange attractors" (Pouravood, 1997, p. 59). Fullan, of course, has incorporated this concept into an entire book chapter entitled *Moral Purpose* (pp. 13-30). Many of Fullan's answers to implementing successful educational change are rooted in loosely coupled systems theory and complexity theory.

Why Change is So Difficult to Accomplish

For Fullan (2007b), "educational change depends on what teachers do and think—it's as simple and complex as that" (p. 129). Many schools improve only on the surface because "they have failed to instill meaningful performance goals in educators" (Fullan, 2005c, p. 2). Change is largely externally induced and directed and there is no internalized commitment of teachers. There is "no reason for teachers to believe in the value of proposed changes Abstract goals that are mandated for teachers to operationalize them, resulted in confusion, frustration, anxiety, and abandonment of the effort" (Fullan, 2007b, p. 28). Change is difficult because teachers have to believe in the change. In order for sustained reform over time to happen the change has "to influence the core of educational practice: teacher beliefs and classroom practices" (Moore, 2005, p. 2). Mandates for change have to penetrate into the belief and values structures within individual classrooms. Branson (2008) concurred by stating that "widespread resistance to organizational change is caused by failure of strategies to provide a values alignment process for those affected by change" (p. 1).

Some inherent problems with attempting to change beliefs and attitudes were pointed out by Spillane (2002, p. 17): (a) People can have different interpretations of the same message. (b) Teachers can misunderstand new ideas as familiar. (c) Understanding

may focus on superficial features, missing the deeper relationships. (d) People are biased toward interpretations consistent with prior beliefs and values. (e) Sense-making occurs in a social context. He concluded that substantive change is very difficult to accomplish.

The difficulty of educational reform is that change has to occur within the loosely coupled systems of education, and it is highly resistant to change because the "technical core of education resides in individual classrooms, not in the organization that surrounds them" (Elmore, 2000, p. 5). Administration traditionally has not been equipped to change what goes on in the classroom because its role has not been "the management of instruction but the management around instruction" (p. 5). As a result, change reforms have been regarded as purely voluntary acts by teachers. O'Day (2002) presented two problems if one views the education system as a complex organization: (a) The school is the unit of intervention yet the individual is the unit of action. He questioned how "school accountability mechanisms will reach beyond the collective level to mobilize changes in individuals" (p. 3). (b) External controls seek to influence internal operations. The problem is that classrooms are inherently resistant to outside influence. One of the main drives of current change theory is to somehow break out of these solitary bubbles of classrooms because "isolation is the enemy of improvement" (Fullan, 2001, p. 123), and to progress towards shared learning and shared meaning.

Mosely (2008) saw the inherent difficulty in implementing change as the result of failure to view the classroom as a complex dynamical system. Teaching "as chaos is a more accurate representation of the teaching-learning process than the existing linear scientific metaphors on which traditional learning assessments are based" (p. 1). He viewed teaching as much of an art as a science—science is targeted competencies, while

art "embodies the spirit to connect personally that which encourages students to go beyond" (p. 1). His point is that one needs to view teaching as both art and science. Mosely also suggested that significant learning outcomes may not be practically predictable; the "paradox of learning is that a student may not realize the idea until years later" (p. 3). From this point of view, one may question the relevancy of change mandates that only encompass the science aspect while omitting the art perspective of learning.

Implementing Successful Change

The school division of this investigation attempted to use PLCs as a tool for educational change. This section attempts to determine what the literature and research has revealed about how such change can be successfully sustained.

The literature for implementing "successful" educational change is immense and to cut through all of the countless lists to reach any sort of commonality is quite an endeavor. The following is a "list" of the common features that successful change requires, as taken from loosely coupled system and complexity theorists, and leading change theorists. The list is organized by listing the specific elements needed to implement successful change, and a commentary on some of the researchers, theories or theorists who support or refute those elements. The intention was to produce a list from a variety of sources to safe-guard against the domination of one theorist's point of view, unless it was validated by others. The points of greater agreement among researchers and theorists lie at the start of the list which continues to points of less agreement, or little comment from others, towards the bottom of the list. Therefore the top part of the list represents a clear consensus across a broad spectrum of literature, and the bottom

represents those points that may be pertinent, but are only voiced by one or two researchers or theorists.

Collaborative cultures/relationships. These two elements represent a broad range of ideas with one idea that ties them together: Successful change needs people to work together in a collaborative setting. Goldspink (2005), who argued for a loosely coupled system-complexity theory approach to educational change, stated that a "focus on relationships and the building of behavior around trust" (p. 18) is part of the basis for the design and implementation of school change. Gonzalez (2003), in her thesis findings, confirmed this when she concluded that the professional and personal growth of four teachers resulted from "increased teacher collaboration time, the creation of warm and respectful collegial relationships, and the opportunity to share in decision-making on issues that [were] traditionally the responsibility of an administrator" (p. iv). For Fullan (2001), the building of relationships is just as important as structures:

Divisions can get tough about student learning, identify new and better ideas, and establish strategies and mechanisms for development. But successful strategies always involve relationships, relationships, relationships. (p. 70)

One key to building relationships is that "information becomes knowledge only when connected to people" (p. 78). Relationships are necessary to build shared knowledge in a community. This "exchange of knowledge happens only in organizations that have a noncompetitive and collaborative culture" (p. 84).

DuFour (2000) noted the importance of collaboration when he suggested that the most powerful form of professional development is through "collaborative cultures that enable teachers to work together" (p. 1). Changing into a collaborative culture is challenging because it implies changing people's behavior and attitudes. Eaker and

Keating (2008) suggested that this challenge can be overcome by "collaboratively developing shared values and collective commitments" (p. 2). They noted that an example might be a shared belief that the most skilled staff will help the children most in need (p. 2).

Gordon (2004, p. 158) noted that the conventional school culture has three negative effects: (a) A poor culture for student learning (students working alone, seatwork, quizzes, etc. that are intellectually boring). (b) A poor culture for teacher growth and development (isolated teachers; no collaboration or collegiality). (c) A school culture that is extremely resistant to change (most efforts have failed). His remedy for these negative effects is the development of a culture of continuous improvement, which can be accomplished by:

- engaging collaboratively in ongoing, critical analysis of behaviors, values and assumptions about curriculum, instruction and student assessment.
- continuously envisioning the ideal learning environment for students.
- collaboratively planning, implementing, assessing, modifying and integrating change aimed at continuous improvement at the school and classroom level. (p. 164)

For Gordon, a collaborative culture is essential to change school culture. In terms of PLCs, the literature suggests that a collaborative culture should be an important element in their construction and implementation.

Loosely and tightly coupled systems. This point includes the ideas of implementing and/or meshing loosely and tightly coupled systems, and the utilization of

top-down directives with bottom-up initiatives. Goldspink (2005) provided this insight about education as a loosely coupled system:

. . . systems organized loosely do not lend themselves to formal or bureaucratic control, rather they need a different form of management if their distinctive advantages are to be realized. Loose coupling suggests a rich multi-dimensional coupling between many 'agents' which make up a system but with no single locus of control. Weick expressly identified such systems as more capable of remaining viable in complex and uncertain environments. (p. 13)

Goldspink (2007a) suggested that sustainable change needs loose administrative control "to encourage diversity and pluralism" (p. 35). Although there is coupling between administration, schools and classrooms, this coupling is not tight. This loose coupling lends itself to a complex view of education where "order is not from hierarchical control, it is distributed and local" (p. 41). There are a large number of agents in an interconnected complex web. Mansfield (2003), a complexity theorist, confirmed Goldspink when he stated:

There will be no imposition of top-down pressure to deliver, indeed diversions from the norm will be amplified and supported. The organization will support the creation of informal networks or teams that seek to work flexibly to find best-fit solutions. It will be assumed that off-the-shelf solutions will not work and that change takes time. (p. 2)

For Fullan (1992), this loose coupling lends itself to the "concentration on building collaborative cultures rather than a forceful heavy agenda for change" (p. 1). Successful change requires "menus, not mandates" (p. 2) and the purpose of bureaucracy is to "facilitate, not constrain" (p. 2). However, in a more recent article Fullan (2008a) appears to see a need for meshing loose coupling with tight coupling where successful school reform "combines strong and inspiring external standards with strong school and community collaboration" (p. 96). For Fullan, these external standards are issued from

the provincial government, school boards, teacher-student relations, and parents. The standards include learning targets, curriculum frameworks, standards for teachers, and the improvement of teaching methods (p. 97).

DuFour (2007) suggested that there is a need for the implementation of loose and tight leadership, which fosters "autonomy and creativity (loose) within a systematic framework that stipulates clear, non-discretionary priorities and parameters (tight)" (p. 2). However, in contrast to many complexity theorists, DuFour stated that "leaders should exercise their authority to require the work to be done" (p. 4). For DuFour, the isolation that is inherent in a loosely coupled system is so deeply embedded that leaders "need to tell teachers to do it, not ask" (2000, p. 1).

Although the loose-tight debate is taken up by many researchers across a wide range of fields, there appears to be some disagreement among them as to how loose or how tight this coupling should be. The relevance to PLCs is that there appears to be no consistency in the literature in terms of the extent of top-down control or bottom-up autonomy that should be used. This is an area that will become extremely important in chapters four and five.

Coherence making/understanding the change process. There are several points of agreement among researchers in terms of understanding the change process (Bridges, 2000; DuFour & Eaker, 1998a; Fullan, 2001, 2007; Olsen & Sexton, 2009; Sullivan, 2006): (a) Change is complex, nonlinear and long term. (b) Change is a process that needs to proceed slowly. (c) People need to be appreciated as they move through the change process.

Fullan (2001) noted that

. . . a culture of change consists of great rapidity and nonlinearity on the one hand and equally great potential for creative breakthroughs on the other. The paradox is that transformation would not be possible without accompanying messiness. (p. 31)

For Fullan, "reculturing is the name of the game" (2007b, p. 44) so the transformation he noted is one of transforming culture. Action steps for change are secondary to the understanding and insight as to why change must occur. Drawing from the complexity theorist Pascale, Fullan (2001) noted that complex systems "cannot be directed along a linear path . . . the challenge is to disturb them in a manner that approximates the desired outcome" (p. 108). Sullivan (2006) supported this view when she observed that ". . . we cannot make change happen. We can only learn and use strategies that encourage open interchange and subsequent problem solving" (p. 94).

Another common feature among researchers is that "the restructuring movement needs to go slowly" (Olsen & Sexton, 2009, p. 35). Fullan (2001) uses Claxton's idea of slow knowing to emphasize the importance of "cultivating the ability to wait" (p. 123).

Somewhat tying into this slow process is the need to appreciate, and to give time for people adjusting to the change. Bridges's (2000) marathon effect showed that

the higher a leader sits in an organization the more quickly he or she tends to move through the change process. Because they can see the intended destination before others even know the race has begun, senior managers can forget that others will take longer to make the transition: letting go of old ways, moving through the neutral zone, and, finally, making a new beginning. (p. 4)

Fullan's (2001) implementation dip shows a similar conclusion in that change is a time consuming process, not an event. The implementation dip is "literally a dip in performance and confidence as one encounters an innovation that requires new skills

and new understandings" (p. 40). Effective leaders are sensitive to this implementation dip.

DuFour and Eaker (1998a) pointed out that past school reform failed in part because of "failure to appreciate and attend to the change process" (p. 13). This failure was due to an avoidance of conflict, the absence of an anchor to cultivate culture, and the holding onto a view that change was a task, not an ongoing process (p. 14).

For PLCs, all stakeholders, particularly teachers, need to understand why this change needs to occur and how it is going to happen. Then, appropriate amounts of time and encouragement need to be given for this change to occur.

Distributed leadership. The importance of leadership is a common theme among researchers. The literature in change theory points towards leaders who are "team players, interdependent, confident in people, not self-focused, but have learned flexibility and patience, and [who] do not have all the answers" (Mansfield, 2003, p. 2). Fullan (1992) stated that a leader should be "an enabler of solutions, not the solution" (p. 1). A leader, such as a principal, will offer challenges rather than solutions, treating teachers as leaders. Birky, Shelton, and Headley (2006) found that when teacher leaders functioned within a collaborative leadership model "teachers found more meaning and were motivated to continue in leadership roles" (p. 1). Elmore (2000) saw a distributed leadership model in which instructional practice is viewed as a collective good, and the isolation of practice becomes obsolete. He also viewed distributed leadership as challenging the "conventional roles of policy and administrative leaders in buffering instructional practice from outside interference" (p. 24).

The concept of distributed leadership involves empowering others in decision making; it means that solutions to problems involve the insights and actions of many people rather than the actions and insights of a few administrators. For PLCs, this may mean that teachers have more autonomy in determining the direction and constructs of this work.

Learning community/learning organization. According to Slick (2002) a learning community is "a group of individuals who establish goals and values for working and learning collaboratively . . . [and] generate meaningful learning and support for the individual" (p. 2). Mitchell and Sackney (2000) confirmed Slick: When schools function as learning communities they "are better able to combat alienation and anomie that saps energy and inhibits growth" (p. 4). Applying the idea of community to schools means a "shift from school structure to school culture . . . from bricks and mortar to ideals and relationships" (Wald & Castleberry, 2000, p. 13).

The development of learning organizations represents Fullan's answer to sustaining change in a complex organization. He stated that

if most schools and districts are not good learning organizations (or good professional learning communities), this means that they are not good employers. They are especially not good employers for teachers who want to make a difference. (2007b, p. 282)

His reasoning is that good learning organizations require people to start doing the right things while at work. When they "do this in other settings (lateral capacity building), many contexts get changed" (p. 302). The learning organization deals with the

development of a "culture for learning" (a set of strategies so people can learn from each other) and a "culture of evaluation" (assessment for learning and action plans).

For Pouravood (1997), the learning community can influence the change process within the individual, although it cannot determine that change (p. 58). Once the learning community is established "the effect will have a profound impact on participants" (p. 63). Sullivan (2006) extended this idea in that the learning community is where one can share and model what one believes in (p. 91).

The term "professional learning community", perhaps through marketing, has become synonymous with DuFour's (2004) model. The term "learning community", which was used before DuFour's model, avoids the automatic association to DuFour and provides for a more open-ended, organic interpretation. This section was purposely titled "Learning community/learning organization" to show that there is widespread support for the idea of a learning community among researchers, whereas adding "professional" creates more disagreement.

Motivation/moral purpose. Motivation and moral purpose allude to an intrinsic call to action. Goldspink (2007a) stated that sustainable change needs to "appeal to the intrinsic motivation of teachers and administrators" (p. 35). In this regard motivation and moral purpose have a close connection with the means to break out of the bubbles in a loosely coupled system.

Pouravood (1997) called moral purpose "one of those strange attractors in a caring community" (p. 59). The term "strange attractor" is used in chaos theory to explain forces that "pull chaotic states into periodic patterns" (p. 63). Fullan (2001) used

this term to explain the "experiences or forces that attract the energy and commitment of employees" (p. 115) and, of course, he has a whole book chapter entitled "Moral Purpose" (pp. 13-30). For Fullan, leadership action strategies must accompany moral purpose "to energize people to pursue a common goal" (p. 19). These strategies have to: (a) Have an explicit "making a difference" sense of purpose, (b) mobilize many people to tackle tough problems, (c) be held accountable by indicators of success, and (d) be assessed in terms of the extent it awakens people's internal commitment (p. 20). Moral purpose for Fullan is the "why" of change and he included the concept as the first of his "8 Forces for Change" (2005a, p. 1). Fullan viewed moral purpose as "raising the floor for those [students] at the bottom" (p. 1).

Motivation/moral purpose is important in terms of how teachers and administration intrinsically view PLC work.

Tri-level development/lateral capacity building. This idea, according to Fullan, consists of the formation of partnerships with those outside of the school (tri-level) and partnerships with other schools (lateral). To change the whole system, Fullan (2001) recommended connecting schools with other schools, the community, the district, and the state or province. For Fullan, the main reason that change fails in the first place is that "the infrastructure is weak, unhelpful, or working at cross-purposes" (p. 18). "Infrastructure" for Fullan means the next higher layers of whatever we are focusing on—so a teacher cannot be effective if the school is ineffective, a school cannot be effective if the division is ineffective, and so on.

From this perspective, PLCs need to be working with other teachers, schools, and perhaps, other divisions, in conjunction with the ministry of education.

Capacity building. "Capacity" is a vague concept that means different things to different researchers. Some researchers used "capacity" to refer to the structures and actions that support change while other researchers widened the meaning to include intrinsic motivation within individuals. For Fullan, building capacity refers to the "policies, strategies, resources and actions to move the system forward" (Fullan, 2005a, p. 1) and it is Fullan's second of eight "forces of change". In other articles Fullan uses the term to refer to the training and support of all leaders or in reference to the "right bus" which means the best structures, roles and relationships to improve all schools (2005c, p. 177). Fullan, using a study by Newman, King and Youngs as a guide, concluded that capacity building leads to a "focus on creating school-wide professional learning communities [because] the organization must change along with the individuals" (2001, p. 64).

For Stoll, Bolam, McMahon, Wallace, and Thomas (2006) the term "capacity" means a "blend of motivation, skill, positive learning, organizational conditions and culture, and infrastructure support . . . that gives power to get involved and sustain learning over time" (p. 1). Stoll et al. stated that professional learning communities "hold considerable promise for capacity building for sustainable improvement" (p. 1). Mitchell and Sackney (2000) divided capacity building into three domains that are needed to build a successful learning community: Personal (values and beliefs), interpersonal (collegial relations and collective practice) and organizational (flexible

system) (p. 12). "Capacity" in this regard includes an intrinsic motivation element that Fullan's definition lacks.

Sullivan (2006) viewed training as a means to build capacity: training for administrators and teachers in supervision, mentoring and coaching; and training in observation and the reflection on practice (p. 160). Bridges (2000) pointed out the need for the "details of change to be planned carefully and [that] someone be responsible for each detail" (p. 5). These two positions seem to be a movement away from the loosely coupled systems/complexity approach that calls for a balance between chaos and order—they may represent a movement towards order and top-down control.

To summarize, change theory research suggests that for successful, sustainable change to occur, one must:

- Embrace uncertainty and paradox. Micro-managers will be challenged, while those who can handle ambiguity and unpredictability will be stimulated. (McAndrew, 1997, p. 5)
- Seek to be at the edge of chaos as it allows the organization to change while retaining integrity. (Fullan, 2001, p. 6)
- Base collaboration around trust, collegiality, and empowerment. (Gonzalez, 2003, p. iv)
- Understand that change has to influence teacher beliefs and classroom practices. (Moore, 2005, p. 2)
- Utilize distributed leadership and shared governance. School leaders "work with", not "do to". (Elmore, 2000, p.32)

- Minimize top-down mandates. Change comes from the individual, not from external forces. Effective solutions can come from minimum specification. (Mansfield, 2003, p.2)
- Value risk-taking, ownership, trust, and a sense of belonging. (Goldspink, 2007b, p. 88)
- Utilize loosely and tightly coupled systems. This is a subjective point with various interpretations. Use both rather than one or the other—i.e., multiple linkages, or permeable connectivity. (Fullan, 2007b, p. 262)
- Understand the change process. It is messy, non-linear, and long term. Assist people through the change. (Fullan, 2001, p. 31)
- Seek individual transformative change before attempting to change school culture. Some research suggests that the right form of learning community induces individual change. This element encompasses moral purpose and motivation. (Fullan, 2007b, p. 28)

Chapter 3: Research Design and Method

This chapter provides a description of the research design and methodology used in this study: An Investigation of Professional Learning Communities (PLCs) as a Tool for Educational Change within One Saskatchewan School Division. The chapter is divided into five sections: qualitative research design, ethical considerations, researcher bias, data collection, and analysis.

The purpose of this study was to investigate how professional learning communities (PLCs) were used as a tool for educational change within one Saskatchewan school division by collecting and analyzing the experiences and perceptions of some people who went through the PLC process. The school division of this study embarked on the PLC journey for four, arguably five years (2004-2009), and then, from the viewpoint of many teachers, the PLCs were seemingly abandoned. The intention of this study is to investigate this failed process, to determine what can be learned from it, and, hopefully, to assist my school division and other school divisions in implementing future change mandates more effectively.

Qualitative Research Design

According to Rossman and Rallis (2003), qualitative inquiry "involves capturing people's stories and weaving them together to reveal and give insight into real-world dramas" (p. xiii). The "real-world drama" in this study involved making sense through the participants in professional learning communities as they were played out within one Saskatchewan school division. Rossman and Rallis also noted that qualitative research is "fundamentally interpretive and emergent, characterized by a stance of openness, curiosity, and respect" (p. 13). These characteristics were cornerstones of this entire

study—in fact, openness, curiosity, and respect were the means to obtain the meaningful data and stories from each of the participants. Although some of the data analysis may have benefited from a quantitative design, the investigation itself relied on a qualitative design, as put forth by O'Leary (2004): "Qualitative research is said to be a subjective, value-laden, biased, and ad hoc process that accepts multiple realities through the study of a small number of cases" (p. 99). The acceptance of multiple realities was of particular importance because each of the participants communicated a unique understanding of what he or she experienced which was equally valid, real and true.

I found that using a qualitative design has much in common with some keystones of complexity theory. In particular, qualitative inquiry allowed me to avoid a simplified view of complex organizations where the "richness of their structure would be lost" (Batty & Torrens, 2001, p. 5). Perhaps the messiness of data collection, the emotions of the participants, the complexity of PLCs , and the non-linear make-up of the data pointed toward a more realistic portrayal of what people experienced during PLCs when these elements were included in the study.

Because I was interested in the participants' experiences of professional learning communities I used a phenomenological approach where I "sought to understand the lived experiences of a small number of people" (Rossman & Rallis, 2003, p. 94). According to Rossman and Rallis, guiding questions for the interviewer using a phenomenological approach would include: "What has this person experienced? What meaning does this person make of this? How does this person understand his or her experience?" (p. 94). The interviewees' experiences of professional learning communities provided the critical data used in this investigation.

Ethical Considerations

I met with my supervisor twice to determine a topic of study—it started with the philosopher, Kierkegaard, and changed to Michael Fullan, then loosely coupled systems theory, then chaos theory, and finally to complexity theory. We finally decided that I could investigate my division's recent experience with PLCs through the lenses of loosely coupled systems theory and complexity theory, which would inherently include much of Fullan and change theory. After writing a proposal, my supervisor and I met with my thesis committee at the university and obtained their approval to assist me with the study. The other two members of my committee provided insights to improve the investigation. These insights included who should be included in interviewee selections, possible questions that should be included in the interview, and how to incorporate change theory into the investigation of professional learning communities (PLCs). One committee member also provided a verbal background of professional learning communities that assisted me in framing the investigation in a larger way—PLCs had a history that went back at least to the early 1980s. I received University of Regina Ethics Board approval for this study (January 27, 2011; Appendix F) after making some minor adjustments on the initial application (i.e., changing where I stored the interview transcriptions from my supervisor's office to my office at home). I met with the director of the Saskatchewan school division and received written approval to conduct the investigation.

The selection of potential participants was discussed at length with my supervisor and one other committee member. We decided to include a cross-section of potential interviewee candidates from the entire division which included the

superintendent, who designed the PLC experience, a consultant/teacher, one secondary administrator, one elementary administrator, one secondary teacher, and one elementary teacher. Participants were selected by the researcher with some assistance from an administrator who was also an interviewee of the study. This administrator helped me to choose one of the participants whom s/he thought would be knowledgeable about PLCs and would provide honest responses. My supervisor was essential during this time to limit potential bias in interviewee selection—together we provided a rationale for each interviewee used in the study. My main criterion for choosing participants was that they were veteran employees who experienced PLCs from the onset. Initially there were to be six participants, but I included one more in-school administrator who had recently left the division to pursue a career opportunity elsewhere. My reasoning for this inclusion was that I was concerned about guarded responses, especially from in-school administrators, and I felt that this participant would be more open to discuss PLCs than others who are still employed by the division. Three participants were female and four were male.

I e-mailed or phoned potential participants and, after gaining verbal or written approval to include them in the interview process, provided them a copy of the interview questions (Appendices C, D, E) and a consent form (Appendix B) one week to two weeks prior to the actual interview. The consent form included information about the study's purpose, role of the interviewee, risks and benefits of participation, confidentiality, and information about the study. Every initial potential participant agreed to be interviewed.

There were three versions of interview questions—one for teachers, one for in-school administrators, and one for the superintendent and consultant. The interview questions required several edits. All interview questions used the same categories: role, implementation, improvements in teaching methods, improvements in student learning, successes and challenges, abandonment of PLCs, personal growth, and conclusion. Particular questions were added for in-school administrators that referred to their specific schools. Questions were added for the superintendent and consultant that focused on the philosophy behind PLCs, how PLCs were implemented, how they were communicated to schools and to teachers, and how they learned from other school division experiences.

Proper ethical conduct guided this investigation and it provided for a few sleepless nights when deciding how to write the findings. The researcher is employed by the division of this study and all of the participants have known me professionally and/or personally for at least ten years. On one hand, I was able to gain quality responses from participants because they trust and know me. On the other hand, these responses made writing this thesis an incredibly delicate procedure. Professional learning communities was an emotionally charged topic for many participants and I was unprepared for the extent of the honesty and emotion that some interviews produced. Out of the whole thesis experience, how to handle the data from the interviews was the most troubling and frustrating period for me.

The researcher was able to somewhat protect the identities of most of the participants by using role names. Of course, teachers would be more protected because there are more of them within the division. When some of the responses from teachers

were emotionally charged I also removed the secondary or elementary designation. I took the same liberty with the consultant and placed most responses with a teacher designation. In-school administrators were more difficult to protect given that there are fewer of them within the division. Once again, the secondary or elementary designation was removed from some responses. The only person that I could not protect with much success was the superintendent as there was only one such person at the time. He/she was aware of this problem which made the honesty and the candor from the interview very deserving of respect. It truly humbled me, especially in hindsight, because this person knew very well the emotion and thoughts that would be coming in the subsequent interviews—even before I knew. I know that the data collected will potentially assist our division and others in a meaningful way, but I am not sure if I would embark on this investigation in my own division if I had to do it again. I was rather naive at the start and unprepared for the demands from my conscience.

It should be noted that terms for the roles of the participants were changed after interviews were completed. Initially, I was going to use the terms of "teacher", "middle-management" and "upper-management" to refer to the participants. The problem was that these terms seemed to indicate more of a business setting than an educational setting. After consultation with my supervisor, I decided to refer to roles as "teacher", "in-school administrator" and "superintendent". The only concern I had was with "superintendent" because it offered no anonymity—"upper-level management" offered little anonymity either but the term appeared to include the possibility of more than one person.

Researcher Bias

Researcher bias was a concern because of the close connection between the interviewees and me. Two structures were in place in order to minimize this bias: Firstly, all interviews followed the Guided Interview Questions so that every interviewee answered and/or commented upon the same questions if they were in similar roles. Secondly, close communication existed between my supervisor and me in order to ensure that the study was conducted in a professional and non-biased manner. This communication entailed phone calls or meetings once or twice a week, and numerous edits of written work. The close communication with my supervisor also limited two other forms of bias, as presented by O'Leary (2004):

. . . you actually need to consider two potential sources of bias. First is the author's bias. Because you are working with pre-produced texts, the credibility of the data you generate will, in part, be dependent on recognition of the bias/purpose of the author. It may be tempting to treat the printed word as truth, but if you do, you need to ask whose truth? The second source of bias lies with you as the researcher. As with any method, how you read and draw from the documents will be coloured by your own researcher reality. (p. 178)

The main concern with O'Leary's two sources of bias involved how I attempted to organize the PLC literature into two main theories within the research: Loosely-tightly coupled systems and complexity theory. Although these two theories may cover the breadth and depth of most literature on PLCs, the fact that I used them to support my findings may produce a bias based on the literature review. As stated previously, close communication with my supervisor assisted with limiting this bias. Also, the two theories allowed me to form a somewhat encompassing and arguably impartial foundation for assessing DuFour's (2004) model of PLCs. The immense amount of

literature on PLCs and change theory almost required a starting point that would not have existed without utilizing these two theories.

After reflecting on the study I wondered about another possible source of bias in that it was I who ultimately chose the interviewees. It could be possible that despite my best attempts at choosing participants who would be open and honest in their responses, I may unconsciously be choosing those participants who would be presenting a particular view of PLCs that may or may not be a representative sample of the entire division.

Data Collection

The literature review took several months to complete. Papers that I completed at the University of Regina for classes became very useful during this time. This study almost became a culmination of some of these classes where I could use the information, data and insights gathered and present them in a useful and meaningful way. Of special note were the classes on Change Theory (EADM 816) with a focus on Michael Fullan (2001, 2007), and Administrative Behavior (EADM 819) where I became familiar with Karl Weick's (1976) loosely coupled systems.

A pilot interview was conducted before the actual interviews with a teacher colleague of mine. The responses were rather quick and I was concerned about the short length of the interview which lasted only 25 minutes. It also became apparent that some of the questions needed more background information—PLCs were an on-going experience for four or five years (2004-2009) and then they were seemingly abandoned. I realized that the participants needed more information to remember that experience. Background information was added to my notes to provide this information to

subsequent interviewees. I did not add more questions in order to lengthen the interview time—in hindsight, that was the correct decision as most interviews lasted 70 minutes. A copy of the questions was given to all participants two weeks prior to interviewing and most interviewees took advantage of the time to prepare their responses. The superintendent even provided me with a typed copy of responses to the questions during the interview. I found that most of the interviews used the questions as a springboard for a more informal and passionate tone—many participants would answer the questions formally and then would communicate what they felt more passionately, and sometimes emotionally. Some participants would provide a more detailed answer after feeling more comfortable with the tone of the interview—i.e, they would come back to a question after 30 minutes and answer it more fully.

I was unprepared for the extent of the emotion that some of these interviews produced. My concern about guarded responses did not materialize. Each interviewee responded to the interview questions (Appendices C, D, E) and most went further to share stories which truly deepened the interview experience. Rossman and Rallis (2003) stated that this type of research "is exhilarating and deeply moving, and it can change the researcher's worldview" (p. 13). The experience of these interviews was very powerful and some of the interviewees opened up in a way that was very humbling for me. The topic of PLCs was almost a venting experience for some participants; in hindsight, I realized that this was probably the first time that some of these participants were able to express how they felt about PLCs. Because of these open and honest responses there was an incredible amount of quality data.

The interview process went quickly, taking two weeks to complete all seven. These meetings took place before, during or after school at the interviewees' place of work so that they would feel more comfortable in their own surroundings. The interviews consisted of open-ended guided questions. Although the interviews were structured in that there were "pre-established questions, asked in a pre-determined order, using a standard mode of delivery" (O'Leary, 2004, p. 164), most of the interviews included semi-structured elements: "neither fully fixed nor fully free, and are perhaps best seen as flexible They may start with a few defined questions but be ready to pursue any interesting tangents that may develop" (p. 164). All interviews followed the guided questions but many respondents added substantial elements of their own which I encouraged. The questions were divided into themes regarding the participant's role in PLCs and his/her understanding of what a PLC is, the experience of PLC implementation, improvements to teaching methods and student learning because of PLCs, successes and challenges of PLCs, perceptions of the abandonment of PLCs, personal growth, and conclusion. Specific questions were different depending on the role of the participant—i.e., teachers were asked about their experiences within their classrooms, principals were asked about their experiences within their schools, and the superintendent was asked about experiences within the division.

I transcribed each interview myself which gave me a greater sense of the participants' meanings, especially the stressing and slurring of specific words, potential meaning behind pauses, the quickening or slowing down of speech, and the volume changes of language. I can see why many researchers use a professional transcriber—it

was exhaustingly tedious, but I may have missed the meaning behind the words if I had not done the transcriptions myself.

Analysis

Analysis of the interviews was perhaps the most challenging aspect of this investigation. As stated previously, I was at a loss as to how to communicate common themes in a way that would protect the integrity of all participants. I even went so far as to attempt a quantitative analysis of common themes by providing percentages of themes through focusing on how many times each phrase or term was used in each interview. I suppose that was a way of separating myself from the difficult and delicate work that needed to be done; I needed to delve into that uncomfortable data. During this time I kept remembering what one interviewee stated when I shared my concern about how I was supposed to write this—s/he replied: "You *have* to let the data speak for itself".

The development of common themes took a few attempts—there was an overwhelming amount of data and I did not want to lose any information by using broad categories. As a result, the first draft included dozens of thematic categories which made the analysis difficult to follow for the reader and the reading became somewhat disjointed. On subsequent drafts I collapsed several of these themes into broader categories which made the analysis more cohesive. I used colored numbers with pen and high-lite markers to designate specific themes in each transcribed interview. These numbers and colors corresponded with a master outline of the themes. The master outline of common themes was the result of several concept maps as suggested and

shown in charts by Rossman and Rallis (2003, p. 285). The themes involved searching for common words and concepts (O'Leary, 2004, pp. 196-197).

Analysis of the data was a quicker procedure than developing common themes. One potential danger that became apparent was to search for the answer, the remedy, to all of the problems concerning PLCs. The background research on complexity theory helped to alleviate that danger because the answers to problems in complex adaptive organizations are not simple. Similarly, O'Leary (2004) stated that "Drawing appropriate, relevant, and significant conclusions is about searching for answers, but not force fitting your findings to portray a world without ambiguity and complexity " (p. 200). Findings of the study were supported by relevant literature and information from interviews. I used a three sectioned chart to align the specific theme with literature and interview information.

As with most of the sections of this thesis, I was able to present an arguably coherent and comprehensive final draft within one or two edits. The system that evolved was that I would read the relevant sections of several theses from the University of Regina, which would provide a general idea of what I should include in the writing, and I would write the first draft. I would then e-mail the draft to my supervisor and we would discuss what needed to be improved upon in detail. Because I live outside of Regina my supervisor would fax or mail the copy to me with side notes to make our phone discussions more focused. This simple process became very effective.

Chapter 4: Findings of the Study

The findings of this study are divided into three categories: Professional Learning Communities, Implementing Professional Learning Communities and Modifying PLCs for the Future. All interviewee comments are in italics.

Professional Learning Communities

This section deals with how the interviewees defined the concept "professional learning community" (PLC), what their understanding was of PLCs, what their roles were in the PLC initiative, and the history of PLCs within the division.

Defining a "professional learning community". The question "What, in your view, is a professional learning community?" was asked of each interviewee. All seven interviewees indicated one common ingredient: The collaboration of teachers to work together. For some this one ingredient defined PLCs and for others it was one part among many. Most indicated that the goal should be to increase student learning as exemplified by one high school teacher's definition: *Teachers getting together and collaborating to improve student learning.*

The exclusive focus on teachers in this collaboration, rather than including administration and/or students, was evident in the responses of the superintendent, one high school administrator, one high school teacher, and the elementary teacher. One high school administrator included others in this collaboration: *Teachers, administration, students working together as a team with a focus on student learning.* Some participants were more general in terms of who was collaborating and used "staff" or "people" in the definition, as stated by one high school teacher: *Any group of staff who work together to enhance knowledge, practice, and pedagogy.*

Three of the seven participants made special note of the power of the group over the individual. One high school administrator summed up this thought by stating that the *power of PLCs is in the synergy or the contribution with the end result being greater than the individual pieces.*

The superintendent and, to a lesser degree, the elementary administrator were the only interviewees who defined PLCs with scientific terms. The elementary administrator focused on goals and targets: *To focus as a group on what the goals and targets are and figure out the best ways to go about it.* The superintendent was more specific: The PLC

is about a job embedded PD model where teachers work collaboratively at the classroom and individual level to use data to improve student learning and teaching that responds to student needs.

The superintendent was the only respondent who identified "job embedded" and "data" as part of the PLC definition.

The superintendent elaborated on the purpose of the PLC where teachers *are trying to look at what their students are doing, and I'm not talking about large standardized measures. I'm talking what are their kids doing on essential outcomes in the curriculum. Then we gather some data—so we do some pre-assessing, teach what we're doing, or that should determine what we're teaching, and what we're trying to do is create this formative cycle of I gather some data, I figure out where my kids are at, I teach to what they need instead of a one size fits all, and this cycle continues—so I see it as a different professional model primarily but I think that's been lost in the rhetoric and the commercial production.*

The superintendent's purpose for PLCs was clearly defined and specific. The last line may allude to an inherent difficulty in defining PLCs, as evidenced by the subsequent general, or less detailed, definitions by the other participants.

Understanding PLCs. All participants responded more fully to the question "What, in your view, is a professional learning community?" These responses occurred at various points in the interview—some occurred when asked to describe their experiences with the implementation of PLCs, while others responded when asked to explain the successes and challenges with implementing PLCs. Other participants commented on this area on their own when the interview became more informal and not based on a specific question.

Although small pockets of teachers understood the process and intent of PLCs the superintendent admitted that the *vast majority missed the real understanding and potential of this work*. The challenge of understanding PLCs was evident in all respondents. One high school administrator stated that *people didn't see the big picture . . . what we missed was helping people understand change theory*. This lack of understanding was evident in teachers as pointed out by one high school teacher:

I was at a loss for direction—I wasn't quite sure what I was supposed to be doing on PLC days . . . when superiors are telling you this is what's expected, we all smiled and tried to figure out what we were supposed to do.

As the superintendent put it, *schools had a good support package—handouts, guides and meeting templates*, but, as one elementary teacher stated, this paperwork seemed not to assist in PLC understanding for teachers:

[I] don't learn by someone giving me a piece of paper—you need to take me by the hand. We need to have the people that know what the paper means and you need to show us how it works Coaching needs to be shown to teachers—lead them through it by the hand to make them believe it.

One high school teacher also admitted that *I'm still not quite sure what those [handouts] were all about*.

The lack of understanding PLCs had an effect on how in-school administrators trained their staffs. The elementary administrator stated that

there was some time where we floundered through the process, trying to provide direction but not quite sure how we saw it either. Trying to find our way through the process as in-school administrators and at the same time kind of providing direction to staff. We were all trying to figure it out.

A teacher summed up this lack of understanding quite forcefully:

Principals were trying to supervise PLCs and they had no idea what the hell PLCs were. They really didn't. And so I have no idea how you can facilitate that with your staff and make it into something great.

The lack of understanding on the part of in-school administrators was a point confirmed by the superintendent: *We didn't coach the process well enough for a length of time—we needed to support our school leaders more.*

One high school administrator stated that the intent to coach and train staff was present but there were too many groups within the school for training to be effective: *We tried to lead and guide people but how do you get around to seven or eight groups?*

An interesting point involved a lack of adequate time to coach or train staff. In-school administrators had a training session at an administrative meeting with the expectation that they would explain the rationale for PLCs to their staffs. The problem, as one high school administrator stated, was that *we were in administration meetings for one or two days and then at staff meetings you have twenty or thirty minutes of that.* In-school administrators had to explain two days worth of rationale and understanding in 20 minutes.

Another interesting point brought up by one high school administrator was that administrators are not necessarily strong in *leading teachers towards improved*

instruction. There's a very slim population of school administrators who have those skills. The root of this problem, as stated by the interviewee, was that there is difficulty in getting people interested in administrative roles. The result is that real change or understanding could not occur due to a lack of specific skills in the people who are leading or facilitating the change.

One challenge to a clear understanding of PLCs was a changing focus from year to year as shared by an elementary administrator:

They didn't stay still long enough to know whether what we were doing was going to be successful . . . the targets for staff and schools were moving all the time . . . it was tough to say we're on year one or two of this journey because it changed every year.

Perhaps this changing focus is part of the reason why one high school administrator suggested that we *need to have a clear vision—the why, how it will look*. For one high school administrator, the purpose of PLCs was to *develop some common standards . . . to develop some common assessments, some common practices amongst colleagues*.

However, without a clear vision or a common focus the same administrator stated that there is a problem with teacher buy-in: *I'm going to go back to buy-in because people missed the big picture. And if you don't have the big picture of what this is about you've missed the mark.*

There was some teacher animosity to the perception that they were unable to access the research that fuelled PLCs. There was a feeling among some teachers that they were forced to be ignorant of understanding PLCs in order to be controlled, as stated by one teacher:

It would have been really nice to have teachers have access to research, the research and review for themselves! And make decisions about things that they

wanted to do, directions they wanted to take, or even some of the initiatives that were being forced down everybody's throat from Central Office. So that in combination with having some kind of power to affect change I don't see how people, it's in their job to research and then decide we're doing this and just expect that everybody's going to go uh-huh without having an opportunity to read that for themselves and then they can make a decision about what they're thinking, how they feel. And I also felt that it's kind of treating teachers like children. You don't need to know why, you just need to do it.

This perception of forced ignorance affected teacher empowerment, as stated by the same teacher: *If I have all of the information and I never give it to you . . . then everyone feels dumb and doesn't say anything.*

Roles of people. Participants responded to specific questions involving the roles that they were given during the implementation of PLCs. The questions were adapted to teachers, in-school administrators, and the superintendent. Teachers and in-school administrators were asked: What was your role in the implementation of PLCs? Who decided this role? and How was this role communicated to you? In-school administrators were also asked about their involvement in the planning of PLCs. The superintendent was asked about how and when teachers, principals, and parents were involved, what roles they took in this implementation, and how these roles were communicated. The superintendent also responded to questions involving the roles of the superintendent and the school board.

In terms of teacher roles the superintendent stated the *roles were predetermined and top-down* but the essence of the work itself provided teachers with autonomy in that they could choose *subjects with whatever they wanted to do BUT they had to somehow improve student learning.* The perception of all teachers interviewed focused on their predetermined roles rather than autonomy, as stated by one secondary teacher: *I was just*

a teacher that was told that this was happening and that I needed to find a PLC. All interviewed teachers resented this predetermined role as typified by one teacher:

Nobody was asked whether they wanted to do it. I think principals came back [from administrative meetings] and told teachers this is what we're doing. It was ridiculous because teachers are the ones who have to do the work and we know that top-down doesn't work.

One teacher stated that teachers did not understand their roles other than the fact that they were being mandated to do something: *They were just to do, to carry out, whatever. I don't even think teachers understood what the heck they were doing and why.*

Teachers were required to complete paperwork which was handed in to in-school administrators after each PLC meeting. These PLC days occurred five times per school year for the whole day. The paperwork included information about the team's meeting outcome, common assessment, SMART goals, data gathering information, how this data improves student learning, changes made to teaching methods, and changes seen in classrooms based on the use of this data. All groups were provided with additional handouts clarifying the PLCs: DuFour's Four Guiding Questions and Big Ideas of PLCs, a PLC guide, and a rubric. All interviewed teachers viewed the paperwork negatively. One teacher stated that the paperwork did not connect with real classrooms: *You set up all these goals and it looks beautiful written down, but come to the classroom—it doesn't work like that.* Another teacher commented on the lack of motivation that the paperwork instilled in teachers: *SMART goals—I mean there's a great way to motivate people (laugh).*

Most in-school administrators were supervisory in role as stated by a high school administrator: *At the start it was a very rigid supervisory practice—we had report forms*

that we needed to complete. One high school teacher confirmed this role rather pointedly:

Principals were supervisory—to make sure groups were working at what they were working on Principals and administrators were going to do PLCs but [they] were needed to supervise teachers to make sure they were on task. We're children!

In-school administrators also had to train their staffs as stated by one high school administrator:

All the principals and vice-principals received a training session at an admin meeting. The expectation was that they would go back and be able to explain the rationale for the PLCs and facilitate those within their own buildings.

As previously mentioned, the role of trainer or coach for in-school administrators was difficult because they had limited time to train their staffs during staff meetings. Also, the number of groups within each school, especially at larger schools, limited the amount of time each administrator could meet with each group.

The superintendent's role was to design the PLC model that the school division was to utilize. This role was confirmed at the beginning of the interview when the superintendent was asked if s/he was familiar with PLCs during the years that framed the interview questions—the superintendent's response was *Yes, I designed it!* Although the superintendent was a lead player in the PLC design and implementation there were various committees that assisted PLC development. This development will be examined in the following section.

The beginning of PLCs. Information about the beginning of PLCs within the division was obtained mainly from the superintendent. Other interviewees added their perspectives to some of this information; this was limited to their memories—some

interviewees were attempting to recall events that occurred 10 or 20 years ago (1990-2000).

When asked the question "When did the idea to implement PLCs surface?" the superintendent responded that it was during 2004 when a small group went to hear the DuFours:

Well, we went to a conference in the north of Saskatchewan in 2004 and heard the DuFours and some other people who were doing this work and had been doing this work for ten years in the States. I forgot that they had been doing this for ten years! (laugh) So we thought that we could implement it within a year! And then we did take our teachers to Regina—we thought that if all teachers could get a common message it would give us a good learning point It came from the work of the DuFours in the United States, and then we started to attend other conferences and pay attention to other professional development—we became a study group basically, a little expert group on who was doing what

The superintendent stated that PLCs were implemented within the division because a small vocal group was passionate about what they had heard from these speakers and they were excited about the possibilities for learning:

Well, part of it was band wagon trend, I have to say—we got quite excited because a group of us went to hear some speakers, and it was a very strong voiced group of people, myself included, and we came back very very pumped about the possibilities for learning. And then what we tried to do was we met with senior administration, because I wasn't one at that time, and we tried to, well, we pitched it is what we did. And then we had to carve out time on the calendar, so we pitched the whole thing. It was really hard work because we had to convince our senior administration that this kind of time was valuable, to move away from the traditional model, one size for all. I met with the Board, talked with them—so it was a very big piece of work.

The beginnings of PLCs within this division happened when this small passionate group convinced Board members to implement this PLC model. PLCs became further focused upon when the superintendent became part of the senior management team (i.e., moved from an in-school administrator to the role of superintendent).

Other interviewees viewed the start of the PLC journey as taking place further back in time during grade-alike groups. In grade-alike groups teachers met with other teachers who taught the same grade and worked on some aspect of school or student improvement that the participants viewed as important. The infant stage of PLCs was perceived by one teacher as grade-alike groups in 2000 and 2001:

I remember as early as 2000, 2001 when we started doing grade alike groups, but I think that was the beginning of PLCs although we weren't calling them that at that time.

One secondary in-school administrator perceived the start of PLCs as going back even further:

. . . it goes back to probably the early nineties when it started with the kindergarten teachers, used to have kindergarten grade-alike meetings. So they thought that was a good idea, gee, the grade one and two teachers started to do it. Then the senior staff caught on and said "Hey, this is a good idea" so then we moved to grade-alikes. then we moved to learning teams and went into the DuFour model of professional learning communities. So, in my mind it was an outreach of the kindergarten teachers where all the instruction begins!

This early time period was generally accepted by interviewees as a positive experience.

One teacher commented on the autonomy, collaboration, and meaning that grade-alike groups offered:

*Teachers were going to come together, recognize what **they** needed to learn—where there was a need for them. And then, as a group, whether it was grade alike or subject alike or whatever—that's how we were coming together and going this is our need, how we can learn from each other, and from the information that's out there, so we can become better at our jobs and do what kids need.*

One other teacher confirmed this early stage of PLCs as a positive experience: *It went very well. I think people were—I think there were some groups who kind of took that and ran with it if it was an idea that they were passionate about.*

The DuFour model was viewed as overly prescriptive by teachers and some in-school administrators as compared with the earlier versions (grade-alikes). One elementary teacher commented that *it was when things changed when my role was pointless*. One secondary in-school administrator compared the earlier and later versions of PLCs in terms of a math group at the school:

Before we started the PLC we had a group of math teachers here that had developed their own PLC without knowing what a PLC was. They did some really good work that was exciting to see because it was of their own volition. It's interesting that that group did continue to work together and do things that, as the structure of the PLCs was laid on, rather than allowed to evolve organically, they became less attached to the process. I don't think they had the passion that they had when it was their own—of their own making and not a requirement.

This lack of passion and autonomy in recent PLCs was a common theme among all teachers and in-school administrators interviewed.

Implementing Professional Learning Communities

This section deals with the interviewees' perspectives on how the PLC experience unfolded which included pockets of success and a number of challenges: loose-tight coupling, finding the passion, stress and burnout, elementary/secondary school differences, time issues, and curricula problems. PLCs had challenges as confirmed by the superintendent:

Our implementation plan was shaky at best and misunderstood at worst. Further, we did not gather effect data that showed the fidelity of implementation by the adults, let alone the effect on student learning.

The following sub-sections represent common themes from the interviews. Participant responses came from the questions: What were some of the successes of the PLC experience? What were some of the challenges of the PLC experience?

Pockets of Success. Although no interviewed teacher viewed the PLC experience as successful, the superintendent and a few in-school administrators commented on some pockets of success. The superintendent stated that there were some examples of successful PLC teams:

The teams that got it—unbelievable. Really stellar work—I just checked in and comforted them through The pockets of people and teams that got it are making a phenomenal difference in student learning, as well as changes to their own practices. It's responsive instruction. They work with the children first and then they decide on their instruction in their groupings.

For these people, the PLC experience had a long-term impact on their teaching methods, as stated by the superintendent:

Every one of them will say, at first I thought you were nuts, I didn't get it—now they're saying I wouldn't operate any other way. The groups that got it are absolutely picture perfect for a video . . . they can diagnose at levels I haven't seen in my whole career.

Responding to the question, "Have you seen more success in elementary schools?" the superintendent replied: *Absolutely, particularly I would say in our primary more than our elementary, more than our middle and more than high school.*

The elementary in-school administrator shared an example of success with the PLC experience:

It was interesting to hear teachers talk about how exciting it was in some of the older grades to see the writing improve because of the work that has been done over the past three years, and having a common language within the school, of having a common practice of putting out the expectations and the steps of writing, and the same rubric. Those things have really helped overall scores.

It was evident to the researcher that there were some examples of PLC success within the division, particularly with teachers of younger grades, outside of the sample group interviewed.

Loose-tight coupling: Mandates or autonomy? Every participant commented on this area. From the perspective of the superintendent, PLCs had the potential *to improve the autonomy of teachers—that they're operating as learners and not just [adhering to] recipes that we tend to buy-- this program or that program.* The superintendent stated the *roles were predetermined and top-down* but the essence of the work itself provided teachers with autonomy in that they could choose *subjects with whatever they wanted to do BUT they had to somehow improve student learning.* The need for some structure or mandates was eloquently stated by the superintendent:

We need to understand that one size doesn't fit all yet there clearly are strategies that we know do make a difference and we can't allow teachers to blow those off anymore. We know very clearly what improves student learning.

The perceived need for structure was supported in varying degrees by all three in-school administrators. One high school administrator stated:

It appeared very top-down BUT there needs to be some level from the top to organize it, to keep everything in alignment, yet there's still a lot of autonomy from the teacher or the PLC group. But there is a process that we're going to follow and I think that's healthy otherwise teachers sit in a room and ask "What can we do for the next five hours?"

In direct contrast to this need for structure or a tightly coupled system identified by some administrators, all teachers perceived a need for much more teacher autonomy and empowerment—a more loosely coupled system. This area produced more emotional responses from the teachers than any other segment of the interviews. One elementary teacher resented the perception of top-down control:

PLCs were top-down—this is what we think you need to learn which comes down to 'Is it meaningful?' We talk constantly of making education meaningful to kids and yet when we're taught they're doing the exact opposite.

One other teacher confirmed the same sentiment concerning top-down control: *PLCs weren't encouraged—it was 'We will do this'. They were mandated that this is what schools and teachers will do yet we know that top-down doesn't work.* One teacher contrasted earlier PLCs to later PLCs in terms of this top-down perception: *When we could do our own thing PLCs were wonderful—things happened, but top-down systems and paperwork changed it.* The perception of PLCs as controlled and mandated created stress as stated by one teacher:

Out of the whole year PLC days are my most stressful. I see the pressure that it's put on teachers and I go 'Really? Is that how you want the people who are working for you to feel?'

The loss of teacher autonomy was a key point for all teachers:

PLCs take away from the professional decision making in what we need to be working on. We should be able to decide what area, with some guidance from the principal, who would be more in tune than someone from Central Office, what my weakness is or what I need to be working on.

Another teacher confirmed this view: *We need less structure and more teacher control.*

There was consensus from all teachers interviewed that PLCs were overly prescribed and too tightly controlled, which made the experience meaningless and stressful for them.

In-school administrators, while acknowledging the need for some top down control (tight coupling), also were aware of and, to a large degree, sympathetic to teacher concerns. All in-school administrators were aware of the problem with teacher buy-in for prescribed PLCs as typified by one administrator:

PLCs met with some resistance from teachers—probably seen as a system, methodology that was going to be prescribed for them—as a school and for them as a staff.

One administrator commented on the difficulty with getting teachers to buy into PLCs when the administrator is not sure if PLCs were important: *A lot of going through the motions in this school division . . . you're wrestling with trying to sell this as important.* Some in-school administrators resented the mandated delivery of PLCs as exemplified by one administrator:

To require people to do PLCs was ridiculous—to encourage people and provide and facilitate—that's excellent. It has to be a thing where individuals who are in it want to be there It was wrong to prescribe PLCs.

One administrator perceived a mixed message where top-down control was downplayed by Central Office but, in fact, it was top-down:

Don't say this isn't top-down when it darn well is! Everyone understands in an organization there are some no choicers. But if there is any heavy lifting to occur you have to have the people who are doing the lifting on side.

This administrator saw a need for more effort to get teachers to buy into PLCs.

Most in-school administrators felt caught between teacher concerns and division directives. All in-school administrators understood that loose and tight systems were necessary but there was some anxiety on where to draw that line.

Finding the passion. The findings of this study identified passion as an essential component to successful PLC implementation. Passion was a common feature in almost every interview.

The elementary administrator was the first participant to identify passion as a potential focus area. The elementary administrator told a powerful story that drove the point home:

There was a group of parents years ago that started a breakfast program. They took a room by the gym, paid money to get it rewired, they bought industrial

strength toasters, and there was a group of moms that said we've got kids coming here every day who are hungry and they're starting the day like that—they can't can't learn well like that. So, not the school, not the administrators, not the director—the moms said this was a concern. So they raised money and so on and every day these moms would go down there and make toast and peanut butter or whatever for these kids, and they were doing that forever. Then [there came a time when] most of the moms' kids had grown up. One mom kept on coming back and she was saying that she can't keep doing this—somebody else needs to pick this up. It was hard for them because here's some parents who were passionate about that project. They saw the need, they met the need, gave up their time, and then nobody else saw the need to save it. And I sort of see the DuFour thing [PLC] as the same way, I mean, yes, what you have there was a system that absolutely worked and it came about because people saw a need, they met the need, but to hand that off to someone else and say, "Okay, you have the same passion." Maybe not. You can't prescribe that. The reality is the next group of parents maybe weren't as involved in the toast program, but maybe they have a different program. Maybe they saw kids who needed to be more active or sports projects, do you know what I mean? We don't stop caring but I don't own your passion. I might have a different one.

The point of the story is the inherent difficulty in passing one person's passion for a project onto someone else for that same project.

The superintendent recalled how passion initiated PLCs in the division:

A group of us went to hear some speakers, and it was a very strong voiced group of people, myself included, and we came back very pumped about the possibilities for learning.

When asked about the passion of the group the superintendent replied:

Oh there was no shortage of passion . . . It was absolutely awesome—we were all firecrackers, and we did this on our weekends, and we were constantly trying to come up with a rationale as to what was the next step. So it was the ultimate in design at least at the design stage!

The superintendent commented on the need to develop passion within the majority of people:

Part of the struggle with change is that it is passionate and crazy fire-cracker people who do this thing, and they burn out and move on, or change jobs and move on. I think it's about how we develop this passion with everyone in the

field, or with a vast majority in the field . . . so that we're constantly working to improve.

Teachers commented upon the passion they had when working in early PLCs, as stated by one elementary teacher:

When PLCs worked they were teacher driven and they were eager—it was shared, practical hands-on stuff that was very effective and everyone was going to use. There was team teaching and we met on our own.

One high school teacher also commented upon the passion of early versions of PLCs:

Early PLCs worked because it was about choosing an idea they were passionate about. Later PLCs were thrown together and you really didn't know the people and where do you start?

Initiative heavy: Stress and burnout. Almost all participants commented about the sheer number of initiatives that were being implemented within the division. The overwhelming consensus was that there were too many simultaneous initiatives and they were leading to stress, burnout, and anger. Perhaps the scenario was best presented by an elementary administrator:

We were at 40 initiatives at one time but the word "change" was put on a plate and I think there was a backlash from teachers—we're overwhelmed, overloaded, people are going on stress leave—so feedback came back to the board level: "Enough already! Stop! Get your ducks in order before revamping the process." So they're stepping back to review the whole process of change and I'm hopeful it'll lead to some improvement.

This point was confirmed by a secondary school administrator:

. . . there were 32 initiatives that did affect us. I'm glad they pulled back—we'd been saying that for years. We felt heard. We're only human and you can only do so much Too many initiatives leads to burnout—we're only human.

The superintendent agreed that people were suffering from fatigue. Senior administration visited the schools and interviewed people. The superintendent stated that

they decided to *take a year off to get our act together*. The superintendent admitted to feeling embarrassed that the sheer number of initiatives was not identified earlier.

Elementary/secondary school differences. The superintendent and all high school participants commented on the difficulty in implementing PLCs in high schools; all elementary participants made no comment. The superintendent stated: [PLCs are more successful] *in our primary more than elementary, more than middle and more than our high schools*. The superintendent gave a number of reasons why PLCs are more successful in earlier grades [summarized]:

- Easier to identify slow learners in primary:

In primary you can't pretend that a kid doesn't get it. You can't pretend to put a kid in a group and then if they don't get it then it doesn't matter. So you have to be able to respond to little pre-K or a K or a grade one kid when they're not coping with what it is you think they need to do What I feel badly about is these little buttons who have gone through and we're shifting them from grade eight to grade nine and they're really struggling even with essential outcomes.

- Time and structure problems in high schools: Changing the calendar, changing the schedule and how to provide extra time for PLC work: *Just different structure problems such as changing the calendar, changing the schedule, how do you get extra time for it*

- High schools are more content focused while primary/elementary are more child focused. The superintendent pointed out that high schools did have child focused areas but that it was more prevalent in the younger grades:

Our high schools are more content focused than child focused, and that's not everybody but that's what we're finding, whereas in primary and elementary it's child focused.

The high school administrators and teachers provided different reasons from the superintendent for the difficulty in implementing PLCs at the secondary level. A secondary in-school administrator stated that elementary teachers were more familiar with the idea of PLCs: *There's a sense that teachers at the elementary level conduct their business that way anyway so it was second nature for them to collaborate.* This point was confirmed by another secondary in-school administrator: *Kindergarten and elementary were familiar with this type of thing.* One administrator mentioned that this familiarity resulted from the early nineties with kindergarten teachers getting together in grade-alike meetings which was the start of grade-alike meetings for other grades. The same administrator stated that there was

better buy-in at elementary because people could see the vision because there was ten years lead up time. At high school it [PLCs] was parachuted out of the blue and people didn't see the big picture.

Another difficulty expressed by high school teachers and administrators was the challenge to group single subject teachers or teachers who had multiple subjects: *[PLCs] left me floundering because there wasn't another subject like mine.* If a teacher taught a course that was unique to the school or to the division then the teacher was without a PLC group. One high school teacher suggested that some teachers could have focused on a small group of kids *non-attenders for example, but that's not what this [PLCs] was about.* As a result, some single-subject teachers joined groups of teachers who taught a different subject, or they would simply do the PLC work on their own.

One high school administrator stated that some groups used PLC time to coach new teachers about the subject *because the kids are coming tomorrow!* PLC time was used to provide a mentoring session for new teachers to become acquainted with course

content. One high school administrator thought these mentoring sessions were very meaningful because *just getting teachers together was a big thing at the high school level*. The idea of collaboration may be a foreign idea in high school as one teacher stated: *It's not my job to convince other teachers that my way is better or we should be collaborating when they're not interested*.

There was a sense for one high school teacher that the PLC model was based on the needs of an elementary school where a teacher would have the same students for a whole year as compared to high school where a teacher, for example, might have a student for one hour and one semester. The extension of this idea would mean that a high school teacher may very well have 100 different kids in one day for one semester which may pose some tracking problems for PLCs.

The challenge of time. The general finding from most interviewees was that more time was needed on a regular basis for PLC work. Teachers were strong proponents of embedded time within the work week or month as long as it was embedded. One teacher stated

I think time has to be given. Appropriate amounts of time. You know it needs to be built in and not just, you know, a whole day is fine, but two days for all of that in one year—it takes a lot longer than that.

The superintendent stated there is *a need for time to be embedded on a regular basis, embedded in school, to have some autonomy to decide what they need to learn*. The superintendent also stated that the school board appeared to be hesitant with this extra time because *it reduced teacher-student face to face time which was controversial and hard to pass by the Board*.

One elementary administrator stated that more time was needed to help create a team with a common plan: *The availability of time where we can work together as a school team so that we're all on the same page is important.* The lack of time for training staff was a challenge for one high school administrator:

... we're taken away to our [admin] meetings and got all of the information then you take two days worth of work back into a staff meeting that's an hour and try to convince them in ten minutes. So teachers were kind of like "What the? I don't get it."

One teacher pointed out that time was not used well on PLC days because *the amount of time to do paperwork probably took the whole PLC time to get it in!* This point reinforces a need to be able to use time effectively on PLC days.

Curriculum challenges. The essence of the curriculum challenge was that the division was working for a number of years on PLCs with a curriculum that seemed not to cater to the division's model of PLCs. Previous curricula were not suited to the work that the division was doing in PLCs. These older curricula were present for the entire time PLCs were implemented within the division until recently, depending on subject and grade level. The language in PLCs focused on common outcomes while former curriculums focused on objectives. The superintendent stated that *s/he visited the ministry and showed 740 objectives in grade seven that a teacher needs to cover, so they started to rewrite curriculums.* One high school administrator commented that PLC time was used to write curriculum objectives into outcomes: *we were writing curriculum--rewording curriculum objectives.* Once the new curriculums came out then the remaining two or three PLC days were used by teachers to become acquainted with the new curriculums. There was a sense from teachers that PLCs were abandoned altogether

but the superintendent indicated that PLCs will be back once the curriculum is organized.

Modifying PLCs for the Future

Modifying PLCs for the Future examines some changes for future PLCs as outlined by the division. The participants were responding to the questions, in various forms depending on the participants' roles: Has the PLC experience affected how more recent division initiatives are implemented? What division initiatives are occurring? How do you think change can be successfully implemented within schools? What have you learned from the PLC experience?

The superintendent was extremely candid, honest, and forthcoming in terms of challenges the division experienced while attempting to implement PLCs. While the reasoning and purpose for PLCs were well developed, the implementation of PLCs was a definite hurdle, as the superintendent stated numerous times:

We tried to move the work closer to the student. It worked fine at the senior level but it didn't filter down to the average teacher. We didn't do the best job implementing it.

We had intention, research and purpose in place but we fell down in implementation and application.

Despite the problems with implementation, and the resulting cynicism of many teachers, the superintendent stated that there were pockets of *teams that got it. Really got it*. The superintendent stated that the intention is that these teachers who "got it" will lead other teachers in PLC work in the future. Videos of their work in action will be shared throughout the division.

Part of the implementation problem, according to the superintendent, was that *We didn't have tools ready for them [teachers] like data collection or even the process of how we do the work together in a PLC.* As a result, PLCs were put on hold for two years *because we didn't have structures in place: common assessments, common curriculums . . . when the curriculum is settled then we'll return to PLCs.* As well, the superintendent stated that there was a problem with tracking student learning which the division is currently (2011) attempting to remedy *with a data system that we can track [students], teachers can input, and graphs to show who's excelling and who isn't.*

The elementary administrator commented on the need for standardized tools: *It would be nice if standardized tools were ready made, so the division developed that.* The superintendent stated that these standardized tools are evident in a newly piloted grade nine math (2011) where they have the entire *course organized for new teachers—so teachers aren't running around willy nilly.* The curriculum team is designing common assessments for every grade, every unit in math. The superintendent commented that the goal is for teachers to *do pre/post assessments and teach what they [students] need.* Common assessments are beginning to be shared with other divisions. The superintendent stated that *one of the most common questions from parents is why their kid writes one essay at this school and five at this one. We need common assessments and evaluations and we need a sharing bank of teachers.* There is a five year plan to get common assessments organized. One high school administrator supported the idea of sharing common assessments because *kids go from school to school with no common assessments and grade twelve scholarships are sometimes rounded to the third decimal place—are we really that good?* Once these shared tools

are in place with the new curricula then the "new" PLCs will begin although it is unclear whether the term "PLC" will be used. Teachers, schools, and divisions will be working at sharing these tools—that did not happen before.

Another modification to the new PLCs was to include more teachers in the planning and implementation phases. The superintendent stated that an American consultant was hired (2011) to work with a team of 50 representatives from the division (administrators and teachers) to *reshape a working model* for the division.

According to the superintendent, these new tools of common assessments, standardized tools, and data gathering systems, as well as a more inclusive planning committee, would attempt to provide for a more successful PLC implementation in the future.

Chapter 5: Summary, Conclusions, and Recommendations

This chapter presents a summary of the literature review and the findings, conclusions relating to what the researcher has learned about PLCs, recommendations for successful PLC implementation, and suggestions for further research.

Summary

This section summarizes the data, both from the literature and the participants' interviews. It is divided into two parts: Understanding PLCs and Implementing PLCs. A number of sub-sections accompany these categories.

Understanding PLCs. The subheadings in this section deal with issues pertaining to the understanding of PLCs.

Definition problems. The literature stated that there is no clear consensus of what a professional learning community is (Burant 2009; Date & Ryan 2008; DuFour 2004; Hord 2008; Servage 2008, and DuFour 2004) stated that the term "professional learning community" is "so overused that it's in danger of losing all meaning" (p. 1). DuFour's model presented "3 Big Ideas" to shed light on PLCs, while other researchers presented differing models. DuFour's model is fairly analytical where there is a systematic process of collaboration and a focus on results using data. Burant (2009) shared DuFour's emphasis on analysis and use of data but there are many researchers who do not (Date & Ryan 2008; Hord 2008; Naylor 2007; Servage 2008, 2009).

The interviewed participants in this study also provided a wide range of definitions of PLCs. At one end of the spectrum was a clearly articulated, specific, and analytical definition as stated by the superintendent who used terms such as "data", "job embedded", and "results" while at the other end was a rather vague and general

definition with the main point being collaboration, as espoused mainly by teachers and most in-school administrators. The point is that the term "PLC" means different things to different people—to researchers *and* to the participants of this study.

Even when the DuFour definition of PLCs was chosen to be used in this school division, participants stressed different aspects of this one definition. The only commonality among all participants was that PLCs had to do with the collaboration of teachers. A near consensus was that the purpose of PLCs was to improve student learning. The DuFour aspects of a focus on learning rather than teaching, and using data to focus on results were absent from most responses, and absent totally from the responses of teachers. A clear definition of what PLCs actually were did not filter down to the average teacher. Instead, what was focused on by teachers was the term "collaboration" which again meant something different to them than what DuFour's definition entailed. DuFour's collaboration does not necessarily mean a trusting, organic, or collegial environment, which interviewed teachers thought it to mean. Rather DuFour's (2004) collaboration means a "systematic process where teachers work together to analyze and improve classroom practice" (p. 1). Relationship needs as integral to collaboration, an idea supported by Servage (2008), is absent from DuFour's model. The result of this fractured or partial definition of the DuFour's model by participants may have led to some anxiety and misunderstanding of the PLC experience.

Another finding of this study has to do with an unclear understanding by the participants of what exactly PLCs were intended to accomplish in a broad sense. More specifically, the unclear understanding revolved around the question: Are PLCs intended to "reform" what happens in education or "change" what happens in education? Reform

suggests using the same structures and practices in a different way to meet the needs of today while change suggests using new structures and practices altogether. Servage (2008) noted the difference between transformative change which is defined as a radical change or a change of substance, and reformative change which is a re-shaping of the same substance. Because the present form of PLCs focus on the means of teaching, not its ends, Servage concluded that PLCs are not transformative—the learning in a PLC only consists of "best practices that will guarantee positive academic outcomes for kids" (p. 65).

In this study a few participants believed that PLCs were a newer version of grade-alikes. In this division, grade-alikes started in the 1990s with kindergarten teachers meeting informally to talk about their profession; these meetings gradually progressed to teachers of other grades. For these participants, PLCs were reformative, or a reforming of the same structures to meet the needs of today. The question then becomes whether the intent of PLCs was to initiate reformative change, or if the intent was a transformative change—a new substance altogether. This study was unable to answer this question with any certainty; however the journey to answer that question may provide future educational change initiatives with more clarity and understanding for everyone involved.

Communicating the vision and focus. Related to the purpose of PLCs is the communication of vision and focus. While the intent, vision, and focus of PLCs may have been quite clear for upper level management, many in-school administrators and all interviewed teachers were unsure of what PLCs were about. This was not a surprising finding given that most researchers cannot agree what PLCs are all about

either (Burant 2009; Date & Ryan 2008; DuFour 2004; Hord 2008; Servage 2008). The superintendent became aware of this disconnect as the implementation of PLCs progressed.

All interviewed teachers felt that they were not supposed to know the "big picture". One of the most interesting findings was this teacher perception of "forced ignorance"—that they were not privy to the research that guided PLCs and they had no part in interpreting that research. This perception of forced ignorance affected teacher empowerment. Teacher participants felt that they did not have to understand PLCs, they just had to do them. Of course, this perception, right or wrong, had a part to play in terms of how teachers viewed empowerment and mandated control.

One in-school administrator commented on how the focus of PLCs seemed to change on a yearly basis during its four year implementation: *I'm not sure that PLCs stayed the same long enough for us to know whether what we were doing was going to be successful.* Another in-school administrator commented on how the big picture of PLCs never filtered through to teachers: *People missed the big picture and if you don't have the big picture then you've missed the mark.* What was left was the mechanics of the PLC procedure for teachers to go through without the understanding to drive the experience in a meaningful way.

The roles of people in PLCs. Roles were predetermined in that the superintendent and a small group designed the PLC experience, in-school administrators were trained in the PLC model for two days and then were expected to convey this information to their staffs who would begin to implement PLCs. Teachers were trained in PLCs during staff meetings; it became problematic for proper training to occur

because of the limited time allotted for this training. One interesting finding was that some in-school administrators, although wanting to coach and mentor their staffs, felt that their role was more supervisory, as opposed to that of a coach or a mentor. Several reasons for this role confusion were elicited from the in-school administrators and a few teachers. One reason was that in-school administrators could not explain the rationale for PLCs well enough to affect teacher buy-in. This would force the in-school administrators to become more supervisory because teachers were simply not complying with PLCs. Another reason was that some administrators did not understand what PLCs were about so they could not mentor or coach their staffs. This point was stated quite forcefully by one administrator:

Principals were trying to supervise PLCs and they had no idea what the hell PLCs were.

One in-school administrator suggested that specific skills are needed to mentor or coach people and that many administrators, middle and upper levels, did not possess those skills. The last reason was that the sheer amount of paperwork required of teachers and administrators during PLC implementation simply left no time available for coaching or mentoring. Teachers had to produce information about the team's meeting outcome, common assessment, SMART goals, data gathering information, how this data improves student learning, changes made to teaching methods, and changes seen in classrooms based on the use of this data. These data were then given to the principal for further analysis. This paperwork was intended to ensure that teachers were actually doing PLC work. Without coaching and mentoring, all interviewed teachers felt at a loss about what

they should be doing during PLC time and the paperwork became a meaningless dry experience with little to no effect on professional development.

In terms of teacher roles, the consensus from the teacher interviewees was that they were to collaborate with other teachers. One teacher stated that teachers did not understand their roles other than the fact that they were being mandated to do something: *They were just to do, to carry out, whatever. I don't even think teachers understood what the heck they were doing and why.*

Goldspink (2007a) stated that sustainable change needs to "appeal to the intrinsic motivation of teachers and administrators" (p. 35). The roles of participants appeared to be mandated without firstly motivating them to believe in the work that they were to do.

Understanding change. The superintendent was extremely candid about the problems and challenges faced with educational change. The superintendent stated that the DuFours took ten years to implement PLCs whereas, *we attempted to implement it in one year!* The main finding here may have to do with understanding the change process, as one administrator stated: *People didn't see the big picture . . . what we missed was helping people understand change theory.*

Branson (2008), Fullan (2007b), and Moore (2005) explained the need for educational initiatives to penetrate into the belief structure of individual teachers. When change is perceived as mandated and externally induced then internal change (transformative change) does not occur. Internal change requires time and, as Spillane (2002) concluded, it is still difficult to accomplish. In this study, all interviewed teachers felt PLCs to be a meaningless experience that resulted in anger, stress, and

disillusionment. This points to the fact that their belief structures were not affected by the PLC experience.

Many researchers commented on the importance of collaboration and relationships to bring about individual change. For Servage (2008) this collaboration cannot occur in DuFour's PLCs. Servage concluded that the best that PLCs can offer is to "bring together like-minded teachers who have a genuine interest in improving student learning by improving their teaching practices" (p. 73). This narrowness does not have the capacity for transformative change within educators, and so it cannot change school culture or the belief structures within individuals. Servage's insights were supported by all interviewed teachers in that they perceived no change in themselves or student learning as a result of PLCs.

Fullan (2001) used the implementation dip to explain that change is a time consuming process, not an event. Similarly, Bridge's (2000) marathon effect indicated that the higher one is in an organization the quicker s/he is to embrace change because the intended results are seen more quickly—others may not even know change is occurring. While the superintendent and a few administrators commented on some PLC teams that had success, the majority of those interviewed did not experience success.

Finding the passion. An interesting finding of this study was the need for passion to drive educational initiatives. Every participant in the study commented on this concept. The superintendent commented on the passion that the small group had when they went to the first DuFour presentation and how that passion provided the drive they needed to design and implement PLCs within the division. One elementary administrator told a story about how a group of parents was passionate about making

sure that students were fed so they created a very successful breakfast program--the insightful point that the elementary administrator made with this story was that passion for a project or an educational initiative is very difficult to pass on to others. The passion that the superintendent's group had in designing and implementing DuFour's PLCs was difficult to pass on to the people who would carry it out. Although small pockets of PLC teams saw success, especially in primary and elementary grades, the superintendent admitted that the *vast majority have missed the real understanding and potential of this work*. The superintendent stated that one of the aims for the future is to *develop this passion with everyone in the field, or with a vast majority in the field*. Some ways the division had attempted to achieve this were by having teachers teach teachers, circulating locally made videos of teachers implementing PLC work in classrooms, and piloting change mandates in selected schools prior to all school implementation.

Another interesting point of this study was that empowerment and ownership had much to do with feeding passion. As the elementary administrator stated, the people that drove change were the ones who saw the problem and they figured out a way to solve the problem on their own—they owned the problem and the solution, and they empowered themselves to cause change. Similarly, the superintendent and the group of eight to ten people who initially went to hear DuFour saw the problem and the solution and they empowered themselves to cause change. The majority of interviewees did not feel this way. There was a lack of passion among the interviewees to drive the PLC work possibly because they did not identify with the problem in the first place—their priorities and their passion lay elsewhere. In contrast, all teachers found value in early PLCs, which were more grade-alike in nature, because the groups had autonomy that fed

their passion, as one teacher confirmed: *It went very well. I think there were some groups who kind of took that and ran with it if it was an idea that they were passionate about.* Pre-DuFour (2004) learning communities, and grade-alikes may have been successful because the teachers felt that they owned the problem and the solution; this ownership fed their passion. For interviewed teachers the DuFour model did not offer this ownership in a meaningful way.

Naylor (2007) concluded that the present form of PLCs is not needed; what is needed is a form of a learning community that focuses on a "sharing of ideas in the context of where you are" (p. 11). This new form of a learning community is "built on trust, [and] offers approaches that engage teachers, and with processes that they can control" (p. 11). There is a sense of ownership from this perspective that was missing from participants' experiences of PLCs. A learning community may be able to cultivate passion in those who are part of it.

Implementing PLCs. This section connects the school division's implementation of PLCs with the research. As stated in chapter two, there were two main theories that became very prevalent in most of the research on change theory: Loosely-tightly coupled systems and complexity theory. Fullan (2001, 2007b) consistently used these two theories in his writings—often drawing upon others' works to draw conclusions. Some researchers (especially Goldspink 2005, 2007a, 2007b and Fullan 2001, 2007b) have bridged these two theories so that loosely-tightly coupled systems morphed into multiple linkages which then became permeable connectivity, which is encompassed by complexity theory. Concepts such as "edge of chaos", "top-down", "too-tight", "shared governance", "distributed leadership", and "complex

adaptive systems" are main terms in these theories. Fullan's concept of moral purpose is intrinsically connected with strange attractors—a concept from chaos theory which is now a subcategory of complexity theory.

This section is divided into loosely-tightly coupled systems, complexity theory and challenges to successful implementation.

Loosely-tightly coupled systems. One of the main sources of anger and frustration, if not *the* main source, for interviewed teachers and some administrators was the perception of an overly prescriptive, top-down, and mandated PLC experience. All interviewed teachers felt a lack of autonomy during implementation. In contrast, upper level management stated the *roles were predetermined and top-down* but the essence of the work itself provided teachers with autonomy in that they could choose *subjects with whatever they wanted to do BUT they had to somehow improve student learning.*

The finding in this area was there was tension between top-down control and autonomy. Where to draw the line between the two became a matter of perspective. It appeared that the higher one was in the organization the more autonomy was perceived to have been given. The balance between top down control and autonomy would become increasingly complex when leadership or personality traits are included: a micro-manager may view "giving an inch" of autonomy as something very substantial, and that person could read all the literature about empowering teachers and truly feel that the task has been accomplished. Teachers may feel otherwise.

In-school administrators were caught in the middle of this top-down/autonomy debate. On one hand most administrators understood the need for some top-down

control. On the other hand, and at the same time, most administrators were sympathetic to teacher concerns as forcefully stated by one administrator:

Don't say this isn't top-down when it darn well is! Everyone understands in an organization there are some no choicers. But if there is any heavy lifting to occur you have to have the people who are doing the lifting on side.

Research on this topic was typically vague and general and offered little in terms of solutions. The consensus among most researchers was that more autonomy must be given to teachers but where and to what extent to draw that line remains a mystery.

According to the superintendent purposeful peer interaction was problematic for many teachers for two reasons: Tools were not in place to guide teachers and teachers did not know how to work together. Interviewed teachers supported this finding in that they were at a loss about what to do during PLCs.

While the loose-tight line is still subjective, Fullan (2008c) provided a general idea of what to focus upon to make the line more clear—relationships with purposeful peer interaction. Complexity theory has much to comment upon in this area.

Complexity theory. Complexity theory studies *complex adaptive systems*—diverse and independent agents that are constantly changing and interacting in a non-linear manner. Studying the parts of a complex system (as opposed to a complicated system) produces an incomplete understanding of the whole. The interactions from within a complex system are more important in explaining overall results than the make-up of the parts themselves.

In terms of this study, the concept of complex adaptive systems means that attempting to understand PLCs is not a simple task. Attempting to identify the problem or problems with PLCs is complex because it is not a matter of identifying one or two

missing or broken parts. Rather, each part is dynamically connected with other parts so the solution is messy, holistic, and involves many aspects of the PLC experience.

Complexity theory allows for an organization to change while retaining integrity. A successful complex organization operates on the delicate edge of chaos, balancing itself between static and chaotic modes. This edge provides for the spontaneous emergence of creative ideas that enable the organization to adapt to change and evolve over time—a complex adaptive system.

The balancing act on the edge of chaos sounds much like the balancing act between autonomy and top-down control—the line the division draws, from the perspective of complexity theory, may lie on the edge of chaos. Teachers would find autonomy and creativity while upper level management would ensure that the integrity of the structure remains intact. Most complexity theorists maintain that people who believe in order and reason would find this line to be uncomfortable.

An interesting finding of this study was that all interviewed teachers found there to be little or no autonomy given yet upper level administration believed that there was autonomy. The superintendent stated that "*We thought [PLCs] would improve the autonomy of teachers.*" All interviewed teachers felt otherwise.

Distributed leadership, a concept used by many researchers including Birky, Shelton and Headley (2006), Elmore (2000), Fullan (1992) and Mansfield (2003) is a common concept in complexity theory. It involves empowering others in decision-making-- solutions to problems require the insights and actions of many people rather than the actions and insights of a few administrators. Birky et al (2006) found that when teacher leaders functioned within a collaborative leadership model "teachers found more

meaning and were motivated to continue in leadership roles" (p. 1). This internal motivation may have a connection with developing the passion that was lacking in many of the interviewees.

There is a problem, once again, of differing perspectives and subjectivity. Upper level management may perceive that distributed leadership has been implemented while teachers may perceive that it was not. More specifically, for management, the fact that teachers could choose their own subjects for PLC work could be an example of distributed leadership from the perspective of upper management. Teachers argued that there was no distributed leadership because PLCs were mandated for them.

One administrator commented on another school division that used pods of teachers to initiate and implement a multitude of different initiatives. Administrators led pods of teachers who would work towards achieving various grants, which, according to the administrator, were very successful. When asked how this model was different from this division the same administrator responded that, *shoulder tapping would occur; it wasn't a mandate that everybody has to do it*. The point is that distributed leadership was used by upper level management to empower administrators and teachers without mandates. This model may provide a concrete example of the development of meaning and motivation within teachers (and administrators) that Birky et al (2006) were referring to.

Collaboration is another significant concept in complexity theory and it was a point of much concern raised by participants in this study. DuFour's (2004) concept of collaboration differed from what teachers thought it meant. In DuFour's model collaboration consists of a systematic process where teachers work together to analyze

and improve classroom practice. Collaboration does not mean comraderie; it is productive work time, not just a friendly gathering.

All interviewed teachers found the DuFour (2004) version of collaboration to be contrived. DuFour's collaboration model did not work for interviewed teachers. A new, more meaningful, model may be needed if PLCs are to be successful.

Challenges to successful implementation. This section describes what the main challenges were in the implementation of PLCs. The findings include limitations of Dufour's model, and problems with too many initiatives, school differences, time constraints, curricula challenges, and the absence of common tools.

Limitations of DuFour's model. Perhaps one of the most important findings of this study is that PLCs did not succeed in bringing about change for most of the participants. Upper level management stated that the reason for this could be that PLCs were not implemented correctly. One other possibility for the unsuccessful PLC experience may be in the limitations of the DuFour model itself. DuFour's model did not focus on a caring and trusting environment that interviewed teachers craved and expected.

Naylor (2007) reviewed PLC literature in order for teacher unions to consider its policies. He stated that there is no wide support for DuFour among teachers. Naylor also questioned Fullan's referral to DuFour as the "gold standard for fostering the development of PLCs" when the communities in DuFour's model are forced, mandated, and "require compliance to norms established outside the community—hardly encouraging safe spaces for teachers" (p. 7).

Naylor's (2007) comments were supported by the findings of this study in two ways. First, the term "collaboration" was misinterpreted by teachers as including a relationship component that is absent from DuFour's model. Second, all interviewed teachers resented the perception of top-down control. The failure of the PLC experience from the interviewees' perspectives may have more to do with the limitations of DuFour's model than with implementation problems. The organic and trusting elements to PLCs that interviewed teachers craved are not a part of the DuFour model.

Another possible limitation of DuFour's (2004) model may be that the role of a teacher is limited to a technical and managerial perspective of what a teacher represents. The "professional" in DuFour's professional learning communities may be a limiting version of what a teacher actually does in a classroom. Servage's study (2009) found limitations in what PLCs can offer teachers. Her main point is that DuFour's version of "professional" is limiting and is imposed from the outside which does not empower teachers and makes PLC content predetermined.

Initiative heavy: Stress and burnout. One of the main points of concern from all interviewees was the sheer amount of division initiatives that were being carried out during PLC implementation. Not all of these initiatives were related to PLC work, and not all of these initiatives affected everyone, yet there was a general consensus that teachers and in-school administrators were suffering from stress, fatigue, and burnout. PLC work was put on hold for a year which alleviated a large portion of this stress. The superintendent admitted to feeling embarrassed that this situation was not identified earlier.

One interesting aside from the PLC hold for a year was that many teachers thought that PLCs were finished permanently. Many teachers, the researcher included, did not know that PLCs would be returning. Interviewed teachers almost breathed a sigh of relief that the PLC experience was behind them. The superintendent stated that Central Office is aware of this situation and it is using the time to improve the structures surrounding PLCs.

Elementary/secondary school differences. The consensus from the interviews was that elementary schools had more success with PLCs than secondary schools. The younger the grade the more success teachers had with PLCs. Primary teachers are familiar with collaborating and using structures to assist the child.

High school teachers and classrooms, in contrast to primary, are much more isolated, which had an effect on collaboration. Another high school problem related to collaboration was what to do with single subject teachers—teachers who taught unique subjects and so had no other teachers with whom to collaborate.

The challenge of time. Two findings were evident in terms of time: First, most participants encouraged regularly occurring embedded time in order to do PLC work. As stated in chapter four, this was the intention of upper level management but the school board was not in favour of losing student-teacher face to face time in lieu of PLC embedded time. The second finding was that time used for PLC work should be effective time. For many of the participants the amount of paperwork required for each PLC day was a definite source of contention.

Curriculum challenges. Part of the reason for a shaky implementation for PLCs may be attributed to curricula that did not cater to PLC work. PLC work involved essential outcomes of new curricula which the older curricula did not use—the older curricula used more specific objectives. Objectives in older curricula refer to the teaching of a subject area that needs to be covered, whereas outcomes are more student-centered and refer to what the student should learn—these outcomes are measurable. One of the concerns regarding this situation may be that if people had trouble understanding what PLCs were to begin with, then the rewriting of curricula during designated PLC time would probably not have helped that understanding.

Absence of common tools. One of the problems early on in PLC implementation was that there were no common assessments because prior to the new curricula there were no common outcomes. As a result there was no agreement among teachers about what proficiency actually looks like in a given area.

Common tools for teaching and evaluating were not developed in the initial years of PLC work, which could be a reason why people did not understand what PLCs were intended to accomplish. The interviewed teachers who commented on common assessments were very supportive of them yet those same teachers were very clear about their resentment about PLCs. The "elephant in the room" is if common assessments and common teaching practices were the intent of PLCs in the first place. If these were the intent of PLCs it is significant that not one participant commented on this when asked the question "What is a PLC?", except for the superintendent.

Conclusions

The key criticisms (Naylor 2007; Servage 2008, 2009; Tarnoczi 2006; Woods 2007) of DuFour's (2004) model of PLCs were that it had a controlling and incomplete view of collaboration, it had an absence of teacher authority and empowerment, it had a narrow idea of the teacher as professional which restricted teacher learning, it included processes which controlled teachers, and it had limited potential and narrow focus for change. The interviews of all teachers and most administrators supported these criticisms. The key criticisms of the PLC experience consisted of a lack of understanding of what PLCs were, an unclear or changing focus and vision, collaboration problems, lack of teacher autonomy, lack of proper training and mentoring, low passion, ineffective time usage, and a lack of proper tools and resources. The PLC experience was, for most of the interviewees, a dreadful time. To go back to the DuFour model of PLCs would probably be a mistake as the bitterness of that experience still lingers.

After much reflection, I would like to share two points concerning this investigation. First, it is clear from the literature and the data that the pendulum between loose and tight coupling must swing more towards loose coupling. This is especially evident in the emotionally charged data obtained from interviews, and the literature derived from complexity theory. The problem is that there are limited detailed accounts of what loose and tight coupling actually looks like within complexity theory. This is definitely an area that needs more study. One danger would be to swing too much towards loose coupling, because top-down control is viewed in a derogatory light. There is need for top-down control in order to organize change in a larger way, beyond

individual classrooms and schools, to connect with other school divisions and governments--a point reminiscent of Fullan's (2001) tri-level development. The importance of the organizational power from top-down control may not be evident from the data derived from this investigation. The key, as vague as it is, would be to encompass autonomy, as perceived by those who would be carrying out the work, within an overarching framework.

One last point concerning this investigation: It is a relatively easy endeavor to pick apart something that obviously went wrong. It was clear from all interviews, including the superintendent, that the PLC experience was not successful. Using complexity theory in this light, it would be too simplistic and mechanical to assume that the reasons for this failure can be pinpointed to specific problems. The danger would be to assume that "fixing" these problems would result in the solution. The solution is never that easy in a complex system such as education. Perhaps the best that one could hope for is to use the knowledge gained from these problem areas to progress towards a closer approximation of the intended goal, rather than an attainment of the goal in its entirety. The intended goal would have to be clear enough to provide a sense of direction for schools and teachers, tight enough to provide the organizational power to connect with other teachers, schools, divisions, and governments, and loose enough to provide the autonomy that teachers need for individual transformational change.

Recommendations

This study suggests that the following elements are required to sustain a meaningful change initiative or a meaningful PLC experience:

First, there should be a focus on building a learning community built on trust, the sharing of ideas, and collegiality rather than a prescriptive and mandated menu of what the community needs to consist of and accomplish. This community should empower all forms of the "professional" in teachers within the PLC—the scientist, the care-giver, the social advocate, and the learning manager (Servage, 2009).

Second, PLCs need to be led by teachers themselves in order to encourage individual transformative change. The use of distributed leadership and shared governance can encourage this change. PLCs need shared responsibility, collective work *and* a focus on relationships.

Third, one should seek the edge of chaos when determining where to draw the line between top-down mandates and bottom-up autonomy. Keep in mind that there is a need for both elements.

Fourth, ensure that a consistent definition, focus and vision for the initiative is implemented and communicated effectively.

Fifth, continue to seek regularly occurring job embedded time for PLC work; understand that meaningful change takes a long time, and provide adequate training and mentoring to properly communicate the initiative and to show how it works.

Sixth, understand that the passion one may have for a project or initiative is inherently difficult to pass on to others.

Seventh, have the proper tools in place before initiating division-wide change, be aware of the number of initiatives that the division is undertaking and its effect on people, and understand the differences between primary, elementary and secondary schools and modify the initiative accordingly (or let the schools modify them).

Finally, the term "PLC" should be replaced with a new, less emotionally charged term.

Suggestions for Further Research

It is recommended that:

First, research be conducted to better identify the optimum place to draw the line between top-down control and bottom-up autonomy during change initiatives. Second, a study could be initiated to determine which initiatives in a school division are reform oriented and which are change oriented in order to provide clarity about the purpose of specific mandates. Third, a study could be undertaken of selected teachers and/or administration who have experienced transformative change in education to shed further light on how that change happened. Fourth, a study be initiated about how other school divisions are faring with the DuFour (2004) model of PLCs. And fifth, a study be conducted to investigate what superintendents or directors deem to be teacher autonomy and what teachers deem to be teacher autonomy.

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Appendix A: Director Consent Form

January 28, 2011

Dear Director of Education:

I am currently working on a Master of Education Degree in Educational Administration at the University of Regina. To complete the requirements of this program, I am involved in a research thesis supervised by Dr. Paul Clarke and Dr. Paulette Brooks. This qualitative study will examine how professional learning communities were used as a tool for educational change within the school division. The study may assist school divisions in the successful implementation of educational change initiatives.

I plan to interview one superintendent, one consultant, two principals, and two teachers for this study. The superintendent is aware of my study and has agreed to assist me.

Please be assured that great care will be taken to ensure anonymity and confidentiality of those who choose to participate. If you have any questions or concerns, please contact me at rawlyk.ray@prairiesouth.ca (Central Collegiate) or Dr. Paulette Brooks, at pbrooks@sasktel.net (306-585-4522). If you have any questions regarding the ethics of this study, please contact the Chair of the Research Ethics Board of the University of Regina (306) 585-4775.

Thank you for your time and consideration of my request.

Sincerely,

Ray Rawlyk

Appendix B: Research Participant Consent Form

Research Participant Consent Form

Title of Study: An Investigation of Professional Learning Communities as a Tool for Educational Change within one Saskatchewan School Division

Investigator: Ray Rawlyk

Purpose of the Study:

The purpose of this study is to investigate how professional learning communities were used as a tool for educational change within one Saskatchewan school division. This study is being undertaken to complete the requirements of the Master of Education Degree in Educational Administration at the University of Regina.

Role of the Participant:

If you decide to participate, you will be asked to share in an interview format your role and experiences with professional learning communities.

The interview should require approximately sixty to ninety minutes of your time. The interview will be audiotaped and then transcribed.

Potential Risks, Discomforts or Inconveniences:

There are no anticipated risks or discomforts for the participant during the interview. If you do experience discomforts, you may withdraw at any time.

Potential Benefits of Participation:

There are no direct benefits to you other than the knowledge you may acquire about the topic and the research process. However, you may find the study interesting and it may enhance your understanding of professional learning communities and educational change.

Confidentiality and Withdrawal from the Study:

Ethical considerations are extremely important in this study, and the nature of personal data will be handled with respect in order to provide anonymity and confidentiality as much as the scope of this study will allow. In other words, teachers will be guaranteed anonymity and confidentiality due to the sheer number of teachers within the division (to be noted is that the researcher is also a co-worker within the school division). It will be more difficult to guarantee anonymity and confidentiality for higher level

management due to the fewer number of people in those positions within the division. In the report of the study, appropriate pseudonyms and altered details will be used when referring to you and your experiences. Teachers will be referred to as "teachers", principals will be referred to as "middle-level management" and consultants, the director and the superintendent will be referred to as "upper level management". Any segment of the transcript which might identify you will be reworded or removed. All raw data will be held in safekeeping throughout the course of the study and will only be accessible to the researcher and the supervisors of the study. Transcripts and audiotapes will be destroyed three years after completion of this study. Your decision to participate is voluntary, and you may withdraw at any time during the course of this study without question or penalty. Participants also have the freedom to not answer particular questions without consequence or penalty.

Information about the Study:

You will be sent a brief summary of the results and investigations and you will have access to the completed thesis document through the University of Regina library. This project has been approved on ethical grounds by the University of Regina Research Ethics Board. Any questions regarding your rights as a participant may be addressed to the committee at [585-4775 or research.ethics@uregina.ca]. Out of town participants may call collect. If you have any questions regarding the study, you may contact the researcher or supervisors at the numbers or e-mail addresses listed below.

Consent:

Your signature on this form indicates that you have understood the information provided and agree to participate in the study through an audiotaped interview. In no way does this waive your legal rights nor release the investigators or involved institution from their legal and professional responsibilities. Pending your consent, you will be given a copy of this form.

Date

Signature of Participant

Date

Signature of Researcher

Researcher: Ray Rawlyk (306) 693-6405 rayrawlyk@sasktel.net
Supervisors: Dr. Paul Clarke (306) 585-4621 Paul.Clarke@uregina.ca
Dr. Paulette Brooks (306) 585-4522 pbrooks@sasktel.net
(306) 569-1795

Appendix C: Interview Questions (Teacher)

PLC Guided Interview Questions

Teachers

Role

- 1A. What, in your view, is a professional learning community?**
- 1A. What was your role in the implementation of PLCs?**
- 1B. Who decided this role?**
- 1C. How was this role communicated to you?**

Implementation

- 2. Describe your experience with the implementation of PLCs within your school.**
 - Were PLCs accepted by teachers at your school? Explain.**

Improvements in Teaching Methods

- 3. Did PLCs improve your teaching methods? Please discuss.**

Improvements in Student Learning

- 4. Did PLCs have an impact on student learning? Please discuss.**

Successes and Challenges

- 5A. What were some of the successes with the PLC experience?**
- 5B. What were some of the challenges or failures of the PLC experience?**

Abandonment of PLCs

- 6A. Why do you think PLCs were abandoned as a division initiative?**
- 6B. Are you in agreement with the decision?**
- 6C. In your view, is a learning community beneficial to teachers or students? Please discuss.**
- 6D. Has the PLC experience affected how you view more recent division initiatives?**
- 6E. Can you note any differences in how more recent division initiatives are**

- implemented since PLCs?
- 6F. In your view what should the division be focusing on in terms of initiatives?**
- 6G. In your view how can the school division implement effective and meaningful change within the classroom?**

Personal Growth

- 7. Did you grow and learn from the PLC experience? Please discuss.**

Conclusion

The formal interview is now concluded. Are there other things you would like to state, clarify or rescind? Please do so.

Appendix D: Interview Questions (In-School Administrators)

PLC Guided Interview Questions

Middle Level Management (In-school administrator)

Role

- 1A. What, in your view, is a professional learning community?**
- 1B. What was your role in the implementation of PLCs?**
 - **In what capacity were you involved in the planning for PLCs within your school?**
- 1C. Who decided this role?**
- 1D. How was this role communicated to you?**

Implementation

- 2A. Describe your experience with the implementation of PLCs at your school.**
- 2B. Were PLCs accepted by the teachers within your school?**
- 2C. In what ways do you think PLCs were successful?**
- 2D. In what ways do you think PLCs were unsuccessful?**

Improvements in Teaching Methods

- 3. Were improvements in teaching methods evident in your school because of the PLC initiative? Please elaborate.**

Improvements in Student Learning

- 4. Were improvements in student learning evident in your school because of the PLC initiative? Please elaborate.**

Successes and Challenges

- 5A. What were some of the successes with implementing PLCs in your school?**
- 5B. What were some of the challenges with implementing PLCs in your school?**

Abandonment of PLCs

- 6A. Why do you think PLCs were abandoned as a division initiative?**
- 6B. Are you in agreement with the decision to abandon PLCs? Please discuss.**
- 6C. Do you think the PLC experience affected how more recent division initiatives are implemented?**
- 6D. What division initiatives are occurring at present?**
- 6E. In your view what should the school division be focusing on in terms of initiatives?**
- 6F. How do you think change can be successfully implemented within schools?**

Personal Growth

- 7. Did you grow and learn from the PLC experience? Please discuss.**

Conclusion

The formal interview is now concluded. Are there other things you would like to state, clarify or rescind? Please do so.

Appendix E: Interview Questions (Superintendent/ Consultant)

PLC Guided Interview Questions

Upper Level Management (Superintendent, Consultant)

Implementation

- 1A. What, in your view, is a professional learning community?
- 1B. Why do you think professional learning communities (PLCs) were implemented within the school division?
- 1C. Approximately when did the idea to implement PLCs surface?
 - What fostered the idea?
- 1D. Was there a specific research model that guided the implementation? Please discuss.
- 1E. Please discuss how other senior management (and perhaps the board) encouraged this "move forward".
 - Who was the main person who had the idea to promote PLCs? Was it an individual decision or a small group decision?

Roles

- We will now discuss the roles of teachers and principals in PLCs.
- 2A. How and when were principals involved? How and when were teachers involved? How and when were parents/guardians informed?
 - 2B. What were the roles of principals in this implementation? Who decided the roles? How were the roles communicated?
 - 2C. What were the roles of teachers in this implementation? Who decided the roles? How were the roles communicated?

Improvements in Teaching Methods

- 3A. Literature from DuFour states that PLCs enable schools and classrooms within the division to become more consistent with each other in terms of teaching for common learning outcomes. To what extent, if any, did you see this happen?
- 3B. Were improvements evident in regards to teaching methods? Please elaborate.

Improvements in Student Learning

4. Were results evident in terms of improvements in student learning? Please give examples.

Successes and Challenges of Implementing PLCs

- 5A. What were some of the successes in implementing PLCs?**
- 5B. What were some of the challenges in implementing PLCs?**

Abandonment of PLCs

- 6A. Tell me about the time leading up to the abandonment of PLCs as a school division initiative.**
 - **How did the school division decide to drop PLCs—do you think it was a group decision?**
 - **Did other school divisions' experiences with PLCs assist the decision for abandoning PLCs?**
- 6B. How do you think change can be successfully implemented in schools?**
- 6C. What has this school division learned from the PLC experience that is assisting it in implementing new initiatives?**
- 6D. What are some of these new initiatives?**

Personal Growth

- 7. How did you grow and learn from the PLC experience?**

Conclusion

The formal interview is now concluded. Are there other things you would like to state, clarify or rescind? Please do so.

Appendix F: Research Ethics Review Committee Approval



OFFICE OF RESEARCH SERVICES
MEMORANDUM

DATE: January 27, 2011

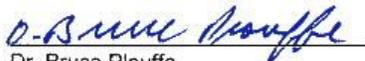
TO: Ray Rawlyk
1174 Duffield Crescent
Moose Jaw, SK S6H 5M4

FROM: Dr. Bruce Plouffe
Chair, Research Ethics Board

Re: **An Investigation of One Saskatchewan School Division's Use of Professional Learning Communities as a Tool for Educational Change (File #51S1011)**

Please be advised that the University of Regina Research Ethics Board has reviewed your proposal and found it to be:

1. APPROVED AS SUBMITTED. Only applicants with this designation have ethical approval to proceed with their research as described in their applications. For research lasting more than one year (Section 1F). **ETHICAL APPROVAL MUST BE RENEWED BY SUBMITTING A BRIEF STATUS REPORT EVERY TWELVE MONTHS.** Approval will be revoked unless a satisfactory status report is received. Any substantive changes in methodology or instrumentation must also be approved prior to their implementation.
2. ACCEPTABLE SUBJECT TO MINOR CHANGES AND PRECAUTIONS (SEE ATTACHED). Changes must be submitted to the REB and approved prior to beginning research. Please submit a supplementary memo addressing the concerns to the Chair of the REB. **** Do not submit a new application.** Once changes are deemed acceptable, ethical approval will be granted.
3. ACCEPTABLE SUBJECT TO CHANGES AND PRECAUTIONS (SEE ATTACHED). Changes must be submitted to the REB and approved prior to beginning research. Please submit a supplementary memo addressing the concerns to the Chair of the REB. **** Do not submit a new application.** Once changes are deemed acceptable, ethical approval will be granted.
4. UNACCEPTABLE AS SUBMITTED. The proposal requires substantial additions or redesign. Please contact the Chair of the REB for advice on how the project proposal might be revised.


Dr. Bruce Plouffe

cc: Dr. Paul Clarke, Dr. Paulette Books – Faculty of Education

** supplementary memo should be forwarded to the Chair of the Research Ethics Board at the Office of Research Services (Research and Innovation Centre, Room 109) or by e-mail to research.ethics@uregina.ca

Phone: (306) 585-4775
Fax: (306) 585-4893

