

**PROFESSIONAL LEARNING COMMUNITIES
AND PROFESSIONAL DEVELOPMENT**

by

Jennifer Lynn Kelly

B.Ed., University of Victoria, 2000

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

Master of Arts

in

The College of Graduate Studies

(Education)

THE UNIVERSITY OF BRITISH COLUMBIA

(Okanagan)

April, 2012

© Jennifer Lynn Kelly, 2012

Abstract

This case study examines the concept and practice of participating in a professional learning community as a form of professional development by a group of teachers in an interior British Columbia school district. The reflections and discussions of this group of teachers-as-learning community are examined in order to understand how the subjects construct their realities relative to their involvement in a professional learning community. The transcripts from semi-structured interviews of the subjects, which were reflective in nature, were analyzed to determine patterns or themes. As a result, four main themes emerged: benefits of a professional learning community, isolationism, criteria for self-sustaining professional development, and suggestions for improvement.

From the data it became evident there were many perceived benefits to participating in a professional learning community for this group of teachers, each surrounding the main aspect of collaborative learning. Interdependence among the group members was the most significant benefit of this professional development practice. Other beneficial characteristics of this form of professional development included shared leadership, a shared set of ideas and values to strive towards, perturbation-based learning, and continual motivation to develop professionally.

This study has potential educational importance because it informs teachers and administrators about the practice of a group of teachers' professional learning communities and corroborates their value in professional development. The concept of self-sustaining professional development is also discussed in the final chapter as a query regarding professional learning communities and their implicit value in the long-term.

Preface

The University of British Columbia Okanagan Behavioural Research Ethics Board has reviewed the protocol for this research project. The Committee found the procedures to be ethically acceptable and a Certificate of Approval was issued.

UBC BREB number: H10-02205

Table of Contents

Abstract.....	ii
Preface.....	iii
Table of Contents	iv
List of Tables	vii
Definition of Terms	viii
Acknowledgements	x
Dedication	xi
Chapter One Introduction	1
1.1 Introduction to the study.....	1
1.1.2 Professional learning communities versus learning communities	2
1.2 Purpose of the study.....	2
1.3 Background information.....	3
1.4 Significance of this study.....	7
1.5 Research questions.....	8
1.6 Literature review.....	9
1.7 Methodology.....	9
1.7.1 Case study.....	9
1.7.2 Organization of PLCs: Content of the study.....	13
1.7.3 Data collection – interviews	15
1.7.4 Data analysis	16
1.8 Conclusions and recommendations	17
1.9 Researcher’s assumptions.....	17
1.10 Obstacles to the study	18
Chapter Two A Review of the Pertinent Literature	21
2.1 Overview.....	21
2.2 Purpose of PLCs	22
2.3 Benefits associated with PLCs.....	24
2.4 Relationships.....	27
2.5 Design models	29
2.5.1 High-capacity learning community model	32
2.5.2 Low-capacity professional learning community model	33
2.6 Analysis of the two models and self-sustaining professional development	34
2.7 Examples of two cases involving PLCs and their effectiveness.....	37

2.7.1	A collective case study of four schools	37
2.7.2	One school's participation in a PLC	39
2.8	Summary	42
Chapter Three Methodology.....		43
3.1	Overview.....	43
3.2	Case study.....	44
3.3	Data collection - interviews.....	47
3.4	Recruitment of subjects	52
3.5	Subjects.....	52
3.6	Time line of events	53
3.7	Data analysis.....	54
3.7.1	Coding the data.....	55
3.8	Limitations of the study	56
3.9	Summary.....	57
Chapter Four Data Analysis		58
4.1	Overview.....	58
4.2	Research findings and conclusions.....	58
4.2.1	First area of finding: Benefits of PLCs.....	59
4.2.2	First area of conclusions: Benefits of PLCs	61
4.2.3	Second area of finding: Isolation.....	62
4.2.4	Second area of conclusions: Isolation.....	64
4.2.5	Third area of finding: Characteristics for self-sustaining professional development.....	66
4.2.6	Third area of conclusions: Characteristics for self-sustaining professional development.....	69
4.3	Suggestions for improvement.....	71
4.4	Summary.....	76
Chapter Five Conclusions and Recommendations		77
5.1	Overview of study recommendations	77
5.2	What benefits do these teachers perceive in participating in a professional learning community?	78
5.3	What do participants view as some of the essential features of a PLC?.....	78
5.4	What do participants view as the characteristics needed to create meaningful professional development for each teacher involved?.....	78

5.5	What are the necessary characteristics for implementing a realistic, practical model of a professional learning community to ensure effective professional development?	79
5.6	Vulnerability	79
5.7	Main issue – self-sustainability	81
5.7.1	The connection between self-sustaining and a PLC	82
5.8	Recommendations for further research.....	84
5.9	Summary.....	85
	References	87
	Appendices.....	92
	Appendix A: Professional learning community template	92
	Appendix B: Interview questions.....	93

List of Tables

Table 1: Comparison of two PLC models..... 36

Definition of Terms

The following terms are used throughout this research with a specific application to education though some of the terms are employed in other institutions and organizations.

Authentic learning: Students construct their own meanings from their work and produce products and performances that have value or meaning beyond success in school.

Case study: “a research strategy that focuses on the in-depth, holistic and in-context study of one or more cases” (Punch, 2009, p. 356).

Collaborative learning: Teachers working together with the purpose of improving student learning. Through collaborative learning, teachers discuss, share, and take an active, reflective approach to the educational questions and challenges people face.

Collective learning: Teachers learning together; teachers sharing new knowledge through dialogue or discussion.

Community: Collections of individuals who are bonded together by natural will and who are together bound to a set of shared ideas and ideals (Sergiovanni, 1994).

Dialogue: a conversation between two or more people, used as a practical, effective way to gain insight and redefine perspectives.

Perturbation-based learning: acknowledging a disturbance in the learning process and engaging in continuous reflection to improve the situation.

Professional learning communities (PLC): a form of professional development used to improve student learning or support curriculum, through the component of continuous learning and collaborative learning among a group of teachers.

Reflective practice: the capacity to reflect on action so as to engage in a process of continuous learning.

School capacity: a model which takes a respectful view of learners and educators and a lifelong view of learning and teaching.

Shared leadership: the shared vision, beliefs and efforts of a committed group of teachers who have a sense of belonging, a sense of being valued members of their school community and a commitment to collective action for whole-school success (Crowther, Hann & Andrews, 2002).

Shared vision: A set of goals, decided on by the professional learning community, which are focused on making teaching and learning more effective.

Acknowledgements

First and foremost, I will always be thankful for my wonderful husband, Steve. He was a constant source of love and support. When I began the Masters program, he was building our first house and we were living in a travel trailer. Throughout the whole program he helped see me through this endeavour, even when it was a sacrifice.

My loving parents, Molly and Derry Cloarec, are the reason I had the courage and confidence to pursue my dreams at every stage of my academic achievements. They are my biggest cheerleaders. Thank you.

I would also like to thank a very dear friend, Lerae Gidyk. Her unwavering support and encouragement always brought me back to the what is most important in life. She made the ride more fun.

Special thanks to my supervisor, Dr. Blane Després, whose incredible level of patience and dedication to my work is the reason I completed my thesis. I would not have finished it without his gentle encouragement and faith in me. His kindness is very appreciated. To my thesis supervisory committee, Dr. Sabre Cherkowski and Dr. Phil Balcaen, thank you for providing me with many thought-provoking questions and believing in the value of my research.

I wish to dedicate this thesis to Karen Wesley. You saw greatness in me and gave me a push when I needed it. I will forever be thankful to you, my mentor and friend.

Chapter One Introduction

1.1 Introduction to the study

One issue with professional learning community initiatives in education, according to Mitchell and Sackney (2009b), is that they have had remarkably little impact on the ways in which teachers teach, students learn, or leaders lead. Although in theory, professional learning communities (PLCs) allow for collaborative dialogue and time to reflect on students' learning, in order to adapt to students' needs and motivation, there are deep concerns about the implementation process of PLCs that are unfolding in some schools. That is, according to Mitchell and Sackney, a "professional learning community" is becoming a generic phrase used to describe any meetings taking place between colleagues, rather than a regular practice of collaborative learning which creates a level of interdependence within a school environment.

From my experience, a major complaint that teachers have is that formalized professional development, which typically—in British Columbia—is relegated to specific days throughout the school year, is not relevant and not individually focused in order for teachers to find it meaningful enough for them to continue on their own. Although, in theory, participating in a PLC could correct that problem, there is something missing between the theory and the practical implementation of a PLC as a form of professional development: PLCs seem to be difficult to develop and certainly to sustain themselves for long periods of time, whether over the school year or longer. Thus, this case study seeks to reinforce the concept and practice of participating in a professional learning community and the characteristics necessary to benefit teachers with this form of

professional development, which I will discuss further below under “Purpose of the Study.”

1.1.2 Professional learning communities versus learning communities

“Professional learning community” is a general term used to describe collaborative development for educators. Dufour (1998) describes a specific format that can be followed in order to achieve a professional learning community model within the school environment. This model is described in detail in chapter two of this thesis.¹ I present this model because it is the model followed by the PLC group in the research for this thesis. For the purposes of this thesis, I refer to professional learning communities in much of the research and the data analysis due to the fact that most of the literature likewise uses this term.

1.2 Purpose of the study

This case study examines the concept and practice of participating in a PLC by a group of teachers through an analysis of the self-reflective interviews I conducted with them. The case study offers a level of “reader or user generalizability” by leaving the extent to which the study’s findings apply up to the individual and their own situation (Merriam, 1988, p. 177). Merriam argues the purpose of a case study involves the reader deciding on the applicability of a study’s findings to other similar situations, rather than making generalized statements of truth. There are limited numbers of case studies that examine PLCs. Thus this one adds to the knowledge base of PLCs and professional

¹ Mitchell and Sackney (2009a, 2009b) describe a different model referred to as “learning communities,” which is derived from some of the same theories as professional learning communities, but differs in the practical implementation. This model is also described in chapter two for further understanding of the similarities and differences between the two models.

development for teachers. This study of PLCs also raised the question of self-sustaining professional development, a related problem that I will discuss in the final chapter.

1.3 Background information

The impetus of the study traces back to discussions with my teaching colleagues about the perceived lack of meaningful learning opportunities available in professional development in British Columbia. During the past ten years of teaching, I have listened to many co-workers express dissatisfaction with the opportunities available through professional development. For example, many co-workers with whom I have had conversations within my teaching career were adamant that professional development opportunities were a waste of time and provided no practical implementation within the classroom setting, due to the lack of relevant activities available through the one-day seminar approach that typifies professional development days. With too many competing demands, combined with the lack of time to learn new skills, reflect and collaborate with colleagues, teachers are left frustrated and stressed with the implementation process of new strategies and activities in the classroom (Fullan & Hargraves, 1992; Joyce, Wolf & Calhoun, 1993).

Professional development is a necessary and continuous component of our local education system, which needs to be supported by a model that is effective for all educators. In order for teachers to continue to improve their professional practice, there is a need to continue their personal learning and reflection on current teaching practices. My interest in learning more about the effects of a professional learning community, and the allure of self-sustaining professional development, led me to the work of Mitchell and Sackney (2009a, 2009b). Mitchell and Sackney explore the

reality of implementing learning communities in a Canadian context with a specific focus on self-sustaining professional development systems. Their research suggests the underlying foundation of an effective learning community provides the necessary environment for self-sustaining professional development, perhaps it is the community aspect that provides a self-sustaining environment.

The absence of a collaborative, collegial environment makes it very difficult for teachers to implement innovative change, in order to benefit the student. In my experience, many of the conversations among colleagues surround topics such as sharing resources, trading classroom management horror stories and transmitting knowledge from a recent workshop. The lack of reflective practice and perturbation-based change, providing an opportunity for individuals to reconsider a conception in light of a new experience, could impact the number of teachers who feel isolated. This is not a new problem. Considering the past and present research surrounding the subject of effective professional development for teachers (Fullan, 1993; Hargreaves & Fink, 2006; Mitchell & Sackney, 2009a; Sergiovanni, 1994), it is important to explore PLCs and assess their potential as a viable and self-sustaining form of professional development.

When teachers participate in effective professional development, which generally changes their practices in the classroom, it positively affects students' learning (Musanti & Pence, 2010). The National Staff Development Council reiterates that point by stating the purpose of professional development involves "every educator [engaging] in effective professional learning every day so every student achieves" (NSDC, 2010, n.p.).

Embedded within the British Columbia Teachers Federation's document on the purpose of professional development, they point out the importance of "initiating curriculum and

instructional reform directed to improve teaching and learning and developing, discussing, revising and applying educational theories” (BCTF, 2010, n.p).

A common aspect of professional learning is the consideration of benefiting the overall student education experience. Sparks (2009) connects student benefits to teacher benefits in his claim that if students are to experience high-quality teaching and learning, their teachers must also experience continuous, real-time professional learning. DuFour (1991) states the purpose of professional development is to persuade educators to approach their responsibilities from a different perspective with the intent to use new techniques and strategies, in other words, to experiment with the purpose of improving their teaching. Fullan and Hargreaves (1992) suggest a comprehensive framework to understand the purpose of teacher development through the following categories: the teacher’s purpose, the teacher as a person, the context in which teachers work and the culture of teaching.

The literature outlines the importance of professional development, although the reality of individual teachers’ experiences with learning may not reflect the same ideal, at least according to conversations with colleagues throughout my teaching experience. The British Columbia Teachers Federation states their guidelines for completing professional development as follows:

- a) The PD associate will consult with the group in creating a workshop to meet their specific needs. This consultation is an integral part of the BCTF service.
- b) Workshops should be booked at least one month prior to the date.
- c) There will be at least 12 members who participate in a BCTF workshop, unless there are extenuating circumstances (e.g., small schools, department, or local).

- d) Workshop facilitators should normally be PD associates. BCTF staff should only facilitate these workshops in exceptional circumstances.
- e) No PD associate should be out of pocket for any expenses incurred in providing a BCTF workshop. That any member who provides workshop services to BCTF members as a PD associate, through a Federation-recognized program or service should not receive an honorarium (BCTF, 2010, para. 15).

The guidelines generally refer to the one-day workshop approach to teachers' learning. Sergiovanni (1994) believes the one-day workshop approach "typically represent[s] others' ideas about needed skills and knowledge but seldom reflect teachers' thoughts about what they need to learn" (p. 2). Professional learning, on the other hand, is a long-term, self-directed, evolutionary process. Kearney (2010) states, "the holistic-learning approach is knowledge constructed and embedded within authentic professional practice" (p. 1). In addition, the British Columbia Teachers Federation (2010) has outlined their purpose for professional development and what their guidelines are for such activities:

One of the primary goals of the BCTF is to promote the continuous career long, professional growth of our members. Professional development (PD) is considered to be a process of personal growth through programs, services and activities designed to enable members, individually or collectively, to enhance professional practice. (para. 4)

Under the basis of this description, and the union's primary goal, districts within British Columbia need to focus on consistent professional growth and the process of professional development, rather than a one day event.

In order for professional development to be considered beneficial, the opportunities need to be meaningful to and relevant for the teachers. There needs to be a shift from a focus on teaching to a focus on learning. When teachers consider professional development as an on-going, everyday process, rather than a one day event, the result is a greater benefit for the community (Fullan, 1999). Further research is necessary to determine if the requisite list of the BCTF actually benefits its members for professional development or if perhaps alternatives might work better.

It is within the context of this self-direction and “authentic professional practice” that I explored a PLC as a case study.

1.4 Significance of this study

This study examines recorded, personal reflections drawn from interviews of the experiences of eleven teachers participating in a first year cycle of a PLC as a practical example of an alternative, professional development practice.² This study has potentially wider, educational significance because it further informs teachers and administrators about the benefits and, possibly, greater success of professional learning as experienced in this group of subjects. It is an analysis, from the experience of one group of teachers, of themes related to both teaching and professional development. Those themes—collaborative learning, teaching in isolation, accountability, self-sustaining professional development—emerged because of the significant number of times they were mentioned by the subjects which formed a means of further making sense of the data and PLCs. The diversity in experiences guides a collection of

² I will elaborate on the specifics of this study below and in successive chapters.

strategies to improve the implementation of PLCs in the future, and the feasibility of continuing such an educational investment.

Ideally, I intend to continue analyzing the concept and practice of PLCs over the span of years, rather than only months, to better understand how the factors of self-sustaining professional development and effectiveness fit into the complexity of PLCs and professional development in schools. Whenever humans are involved in a process, complexity is assumed to be a factor. There are many questions that are left unanswered due to the complexity and lack of time for exploration. For example, how does staff turnover affect the capacity of the professional learning community over time? Are all parties involved benefiting from the professional learning community (teachers, students, stake holders)? Are students more confident and self-assured in the future, due to their involvement in relationship building? Is there less attrition in the teaching profession? The limitations of time and resources restrict the scope of this study.

1.5 Research questions

This study seeks to better understand the concept and practice of participating in a professional learning community as a form of professional development. The following additional questions assist in further understanding the practical implementation of such PLCs:

- a. What benefits do these teachers perceive in participating in a professional learning community?
- b. What do participants view as some of the essential features of a professional learning community?

- c. What do participants view as the characteristics needed to create meaningful professional development for each teacher involved?
- d. What are the necessary characteristics for implementing a realistic, practical model of a professional learning community to ensure effective professional development?

With consideration to the limitations of the study (one day interviews, lack of generalizability, time and resources), my findings will be extrapolated from the data in addition to the literature associated with professional development and PLCs.

1.6 Literature review

Throughout the literature review in chapter two, I analyze the concept of professional development and how it relates to the purpose of PLCs. First, it is necessary to analyze the different aspects of education in regards to professional development. The focus is on how benefits are represented in PLCs based on the research of other authors in professional development literature. I further examine two distinct models of PLCs, emphasizing the connection to effective professional development. The theories supporting PLCs are respected within our education system; however, the realities of practice are an important consideration. The findings of this study will add to that body of knowledge in a limited scope.

1.7 Methodology

1.7.1 Case study

This case study focuses on eleven individual teachers who participate in three distinct PLCs, within one school. This qualitative research approach focuses on the lived experience of the subjects, continually bringing the personal connection to the research

component. This method is necessary to discover the underlying characteristics that influence practice in professional development, with the understanding of the importance of viewing the subjects as individuals and exploring their uniqueness. The approach demonstrates a focus on the reflections of the people involved. In chapter three I discuss the methodology in depth. The PLCs are categorized by the teacher's grade level: kindergarten/grade one, grade two and three, and grade four and five. Focusing on a small number of subjects allows me to research their role within the PLCs and their personal thoughts of their experience regarding this form of professional development.

Merriam (1988) relates the importance of a case study approach to the researcher's desire to understand the particular depth, rather than the wish to know what is generally true in many situations; therefore, the act of generalizing from "a single case selected in a purposeful rather than random manner makes no sense at all" (p. 173). Case study results relate directly to everyday experience and facilitate an understanding of complex real-life situations. The case study method is useful to add strength to or corroborate what is already known through previous research. The method seemed the best choice to explore concepts of professional development through a bounded group of eleven teachers' experiences. I gathered data through individual, semi-structured interviews in order to elicit as much information as possible within the limited time frame of a day. The study presents subjects' experiences and perspectives on their eight (8) month participation in a PLC (this information is elaborated on within the following section).

Scott and Morrison (2007) believe the inherent need for identifying similarities over a specified timeframe is an important part of the research process, although a case

study focuses on the specific results of one case and its implications to further knowledge in an area of research. The authors argue the point of conducting a case study is not to necessarily generalize the results, rather to identify the “key issue [of] how readers of the case study make use of the case study research outcomes” (p. 21). Merriam (1988) believes that by providing a rich, thick description of a case study can help others develop their own interpretations and opinions about practice or study. The author agrees with Stake’s (1978) notion of “naturalistic generalizations” where people look for patterns that explain their own experiences and events (p. 176). These generalizations develop from their own experience, although they cannot be predicted in a scientific manner.

Mitchell and Sackney (2009a) believe collaborative learning among teachers can provide a powerful form of collective improvement, often becoming the needed component for self-sustaining professional development. Through this study, the practical implementation of a new PLC is compared to the theory behind collaborative learning (referred to in chapters two and three), in order to examine the level of interconnectedness of teachers and the power of relationship in this particular PLC. The effectiveness³ of the PLC in this study was analyzed based on the following criteria that I extrapolated from Mitchell & Sackney (2009a):

- a. reflective thinking and dialogue
- b. use of collaborative work strategies
- c. emergence of authentic curricula
- d. use of assessment for learning

³Effectiveness, severely restricted in this case, is mentioned here to link to the criteria I used in assessing this PLC although I do not use it in this investigation. It is a useful term to indicate a positive outcome of the PLC. Further limitations are outlined further below.

e. interdependence and collective responsibility

This list of criteria also assisted my formation of the questionnaire developed for the interviews and informed the conceptual framework for my data analysis. I chose Mitchell and Sackney's criteria due to their knowledge and expertise in the area of PLCs and effective professional development. The transcribed interviews are coded based on the criteria extrapolated from Mitchell and Sackney. Each time one of the criteria was mentioned throughout the interview, it was coded under the specific criteria. Themes emerged by the number of times they are located in the data. The importance of the data is determined by the number of times it appeared through the analysis, which elevated the emerging theme.

Professional growth among teachers involves observations, trying new things, testing different perspectives, and developing their intellectual curiosity about teaching and learning (Musant & Pence, 2010). This reflective practice theory is often used to show a learning dialogue present in education. According to Jordi (2011), "reflection is predominantly conceptualized as the rational analytical process through which human beings extract knowledge from their experience" (p. 181). Reflective practice can facilitate dialogue between our experience and the conceptual aspects of our consciousness. The combination of reflective practice and collaborative learning are explored in this thesis to better understand the concept and practice of this particular PLC, a benefit of which could extend to other such learning communities; however, that depends on the reader-practitioner in such a PLC (see Merriam, 1988).

1.7.2 Organization of PLCs: Content of the study

It was the first year for this school to introduce the teachers to this type of professional development. The PLC meetings began in October, 2010 and continued until May, 2011. Many of the teachers expressed the opinion that they were novices and were still trying to figure out how the process could work more effectively. There was a definite learning curve evident in the data collected, which suggested the deepening of understanding from the beginning of the year, as teachers began to explore the value of participating in the meetings.

The meetings were scheduled once a month for each PLC. They were forty minutes in length and took place in the afternoon, before the end of the school day. The coverage in the classroom was provided by child educational assistants (CEA's), a learning resource teacher and the administration team for the forty-minute period the teachers were meeting. Due to complications in scheduling or overlapping responsibilities, the meetings would be cancelled from time to time, with the inability to be rescheduled.

There were three groupings of teachers who participated in the separate professional learning community meetings: kindergarten/grade one teachers, grade two/three teachers and grade four/five teachers. All the groupings consisted of three to four teachers. Although this study is focused on the whole group's experiences with participating in a PLC, it is important to note the differences in how each grouping conducted their professional development. Each group organized their professional learning community slightly different, depending on the needs of the group and the subjects within the group. The PLCs were connected to the overall school-wide goal of

writing. They were given the freedom to decide how to best utilize the time they spent together each month, and how to organize their community. There was an accountability aspect to the meetings. That is each group had to fill out minutes on a specific form (see Appendix A) and submit it to the administrator at the conclusion of each meeting, as part of the agreement which defined the structure of this form of professional development provided for the teachers, by the administrator.

The kindergarten/grade one group focused on a perturbation-based professional development, often expressing the need for assistance from the group members. For example, one teacher stated, “whenever I have those things bouncing around in my mind...this hasn’t been working for me, I need some help with this...that’s the time I can say, I’m struggling with this, can we talk about it next time?” Some teachers within this group commented on their ability to reflect on their teaching practice and share with the group with the intent to help the others.

The grade two/three group used the majority of their time together to increase their knowledge of writing styles and strategies. One of the teachers was chosen to go to professional development workshops within the school district and share the information learned with the other subjects of the professional learning community. One of the teachers commented that she felt it was important for somebody to “step out and be refreshed,” and then bring back knowledge for the rest of the teachers who want to develop their writing skills.

The grade four/five group focused on literacy and language arts, with a strong emphasis on writing. Similar to the grade two/three group, the four/five meeting time was used mostly as “more of a debriefing of new information.” There was an opportunity

to learn new teaching strategies and discuss with the group how well lessons worked with their particular group of students and what could improve the learning in the future.

Many teachers discussed the strong belief their administrator had for the concept of PLCs. The administrator was the ultimate person who introduced the concept to the staff, organized the coverage time for the meetings to take place and supported the development of the PLCs.

1.7.3 Data collection – interviews

In this study I analyze the data collected through reflective interviews, carefully attentive to emerging themes involving collaborative professional development, time given for reflection, and interdependence within the PLC. An anticipated outcome of this study was to determine what characteristics were present in the teachers' professional development. The data collection involved one day of eleven, semi-structured interviews. The one-day interview schedule was a necessary component of the research, in order to gather information about the subjects' experiences and perspectives on their participation in the PLC. It provided a snapshot of their development. Each of the subjects chose to relay their information through a single, one-on-one interview, after their eight (8) month experience was completed, with the knowledge that they were going to be queried about their involvement.

The interview questions were reflective in nature and sought an adequate amount of information to be disclosed throughout the twenty-minute interview. The data is focused on experience-based, narrative responses of the participants. In my analysis of this data, I was able to determine emerging themes throughout the subjects' experiences. I analyzed the data after transcribing the interviews by searching for themes that focused

on a positive outcome of professional development, based on the criteria for effectiveness, and the research questions. Coding was used through a qualitative data analysis computer software program called *Atlas.ti*. This software supports the work of the qualitative researcher by integrating information using a variety of tools, such as conceptual frameworks of information and data organization, which assist in analyzing large quantities of data. When using the software, the researcher is given the needed components to systematically approach unstructured data.

1.7.4 Data analysis

Chapter four is divided into four main parts: benefits of a professional learning community, isolation, criteria for self-sustaining professional development and suggestions for improvement. Within each of these sections are themes which emerged from the data analysis. Within each of these sections, I report the findings, and then discuss the conclusions drawn from my findings.

The most significant benefit that emerged through the interview data is the concept of collaborative learning. Collaborative learning is divided into three distinct areas: sharing, perturbation-based and group planning. Among those three areas, sharing is mentioned the most often. An important conclusion regarding the benefits of participating in a PLC is that it was a positive experience for all subjects and there is a notable positive result of showing vulnerability within the community.

Many of the teachers who participated in the study discuss the need for collaborative learning to combat the isolated practice of teaching, not only for the professional interaction, but for the sake of their students' learning. When working in

isolation is compared to participating in a PLC, an increased level of professionalism, interaction and cooperation is evident.

The subjects of the study were asked, based on their experience of participating in a PLC, what characteristics increased the possibility of sustainable professional development. Overwhelmingly, the subjects focused on two main aspects: accountability and ‘buy in.’ By having ‘sacred time’ put aside to show the value of this form of professional development, the overall message is one of effectiveness and importance. With the two characteristics present, according to the subjects, there may be a greater chance of continuity and growth within the PLC.

1.8 Conclusions and recommendations

The final chapter outlines recommendations for future implementation of PLCs and concludes with a discussion about the connection between PLCs and self-sustaining professional development. The recommendations include a description of the implementation process and how one might (a) implement a professional learning community and (b) create the conditions to promote self-sustaining professional development.

1.9 Researcher’s assumptions

In reflecting upon their experiences as a member of a PLC, it is assumed that the subjects see the need to dialogue among their colleagues, while using an effective *discuss, reflect, revise* model of communication, in order to continually improve student learning and motivation. The intention is that teachers openly discuss ideas that will improve their teaching practice and the practice of others. There is an assumption that teachers effectively use their collaborative time to engage one another in a perturbation-

facilitated learning model, a problem-based model of development used to learn through the act of continuous improvement.

In addition, the self-reflection and sharing of ideas may prompt a questioning of practices and an examination of successes and failures. For example, if in a lesson students were highly engaged and motivated to learn about a specific topic and performed well on a formative assessment, then the lesson would be considered a success. Upon reflection, the teacher could consider, “Why was it a success? Was it the topic, or my teaching style, or a combination, or some other factor? How can I adapt future lessons to increase my level of success with students?” If the lesson did not go well: students were not motivated, students were not engaged, students performed poorly on formative assessment; questions need to be considered. “Why was it a failure? What could I adapt to ensure success next time?” It is anticipated that by asking questions and discussing these questions with colleagues, there may be an increased awareness due to the collegial approach to the problem.

1.10 Obstacles to the study

As a result of conducting a research study with voluntary subjects, there were many different obstacles to overcome throughout the period of research. My original study included much more contact with an intended group of subjects, along with an active role in the research itself through action research. In a predetermined plan, I wanted to experience the PLC along with the volunteer teachers as a facilitator of the professional learning community. This plan changed significantly due to the following series of events.

First, there was a surprising (to me) lack of interest on the part of administrators to approach the teachers with this opportunity. I approached eighteen administrators, within School District X, with my research proposal over a period of a month; three of the administrators showed interest in the study and passed on the information to the teachers. As per requirements, the PLC meetings needed to take place after school hours, and many administrators explained it would be too much for teachers to take on, especially early in the school year. As a teacher myself, I understand the heavy workload teachers have on a consistent basis and revised the plan to adapt my schedule, in order to facilitate the group during school hours. Even with the adapted plan, many administrators said they were not interested in taking on something else this year and felt the one-day professional development days were adequate learning time for the teachers⁴.

After discussing the situation with the District, I had a possible lead to follow. I contacted the administrator referred to me and we came up with another, adapted plan. I would be able to sit in on existing professional development meetings, but not facilitate them. I attended PLC meetings in the month of December, one meeting with each of the three groupings. This plan worked well until I obtained full-time employment and realized I could not attend the meetings in person, due to the fact that the meetings were held during the school day when I was teaching. In January, I suggested to the PLC members that they record themselves but the teachers were not comfortable with that idea. Finally, in February, we devised a final plan which included in-depth interviews

⁴ Further research is needed to explore the relationship of administrative decision-making, hegemonic structures in schools, and teachers whose professional development rests in the hands of someone else.

with each of the members of each PLC close to the end of the school year, which coincided with the end of the PLC meetings.

Due to the nature of professional development and my life change, this series of unfortunate events shaped my collection and analysis of the information, and gave me a broader view of teachers' willingness to improve their practice through collaborative discussions.

Chapter Two A Review of the Pertinent Literature

2.1 Overview

In this review of the literature on PLCs I examine theories which seek to better understand PLCs and discuss the concept and practice of this form of professional development. I begin my review with a brief discussion of the purpose of PLCs, and continue to narrow my focus towards the benefits of participating in PLCs. In order to thoroughly explain the foundation of PLCs and build upon that concept further, it is relevant to discuss the benefits associated with the philosophy behind this form of professional development.

Once I have reviewed specific literature on the strengths and weaknesses of PLCs, I discuss the literature on PLCs and their effectiveness. I conclude my literature review by analyzing two different design models for PLCs—Dufour and Eaker (1998) and Mitchell and Sackney (2009)—and their relation to effectiveness (see Table 1, section 2.7 for a depiction of these two models). The two models I will be analyzing both focus on the importance of collaborative learning, but have alternate ideas and different philosophies regarding the purpose of this form of professional development and the overall structure. DuFour and Eaker's (1998) model is very popular and widely known for its ease of implementation, whereas Mitchell and Sackney's (2009) model introduces a Canadian perspective and offers a variety of implementation strategies. Other examples exist of PLCs, but the two models chosen are both more popular and, in the case of Mitchell and Sackney, have a distinct, Canadian emphasis.

My research studied PLCs as a form of professional development in education. In this chapter I analyze the different aspects of effective professional development in

education. I then delve into how effectiveness has been represented in PLCs, based on the research reported in professional development literature. The ideas of PLCs are respected within our education system; however, the reality of their effectiveness is the biggest hurdle.

2.2 Purpose of PLCs

PLCs are taking an increasing role in the professional development realm for teachers in Canada and the United States (DuFour et al, 2005). DuFour et al states the basic premise of PLCs involves the highly social nature of learning and the increasing popularity of collaborative learning in the workplace. The majority of authors on the subject of PLCs agree that the foundational purpose for recommending the implementation and maintenance of PLCs always remains the same: to enhance student learning (DuFour et al., 2005; Hargreaves & Fink, 2006; Mitchell & Sackney, 2009a, 2009b; Sergiovanni, 1994; Stoll & Seashore, 2007). Stoll and Seashore expand on this purpose by explaining that the objective was never to improve teacher morale or their skills, but to focus on student learning and the importance of caring as the main component of school cultures. With analysis of student achievement in PLC schools, the data indicated a significant difference in the measurable improvement of student success and therefore, more conclusive evidence of the effectiveness of practice (Stoll & Seashore).

Sergiovanni (1994) argues a slightly different point favouring the focus on teachers' learning opportunities, explaining that improved student learning depends upon teacher learning. The author continues to describe the importance of the kind of teachers' learning opportunities and their commitment to work collaboratively to improve their

instruction, which ultimately leads to enhanced student learning. Mitchell and Sackney (2009a) concur with Sergiovanni by describing a caring and supportive atmosphere as inherent in an effective PLC. When a caring and supportive atmosphere is obtained it actually increases the likelihood of teachers experimenting with new ideas or new practices, which often translate into interesting learning opportunities for students.

In a strong statement Schmoker (2005) sums up the consensus by reporting, “if there is anything that the research community agrees on, it is this: This right kind of continuous, structured teacher collaboration improves the quality of teaching and pays big, often immediate, dividends in student learning and professional morale in virtually any setting” (p. xii). The author’s optimism about the successful implementation of a professional learning community in “virtually any setting” is a comforting thought, although numerous questions arise about the criteria for measuring effectiveness and the sweeping statement involving his colleagues’ opinions. For example, although PLCs are highly recognizable in the professional development community and offer a formalized model of collaborative efforts of teachers, what makes this process effective? What makes the development self-sustaining? The main question—what are the characteristics necessary to benefit teachers with this form of professional development?—is not new either; there are many different aspects of effectiveness and self-sustaining professional development in current research literature (DuFour et al., 2005; Hargreaves & Fink, 2006; Mitchell & Sackney, 2009a, 2009b; Sergiovanni, 1994; Stoll & Seashore, 2007).

To summarize, it would appear that the main purpose of PLCs is to provide the atmosphere for collaborative learning to take place. Having examined some of the key purposes of PLCs, I will now turn my attention to some of the key benefits.

2.3 Benefits associated with PLCs

PLCs allow teachers to take ownership of their own learning, with continued support from a select group of colleagues. Servage (2008) believes that throughout the school year educators who are members of a PLC are focused on learning, rather than teaching, while utilizing an effective ‘discuss, reflect, revise’ model of communication within their community, in order to continually improve student learning and motivation. The author states, teachers use their collaborative time to engage one another in hopeful, critical and creative dialogue through open-ended conversations oriented to communicative learning.

Many of the positive benefits of PLCs further aid the development of curriculum and curriculum reform in a gradual, holistic manner, which allows teachers to confidently and competently introduce innovative change into the classroom setting (Fullan, 1999). The PLC ideally provides moral support when teachers are attempting to develop entirely new cognitive structures as foundations. Collaborative discussions facilitate a cohesive community of education professionals, which allows engagement in an active learning process (Dopplet et al., 2009). The key components of this form of professional development are interaction and cooperation, which extends to the major components of professionalism, assisting in making educators accountable for results and continue the life-long process of continuous learning. Teachers need to want improvements and accountability to move forward in their profession through professional commitment, professional autonomy, dynamic conception of learning, cooperation and interaction (Kalin & Zuljan, 2007). Often using essential questions to guide collaborative discussions, followed by a perturbation-facilitated learning model to provide an

opportunity for individuals to reconsider a conception in light of a new experience, enhances the value of this professional development duration of time for the individual (Olsen & Barrett, 2004).

Implementing PLCs into the school environment provides teachers with the necessary tools to critically and competently engage in collaborative learning. The underlying process of this is a transition from the prevailing conception of instruction as transmission of knowledge towards interactive, student-oriented instruction aimed at quality learning (Kalin & Zuljan, 2007). Kalin and Zuljan state that this model presupposes the ability and readiness for professional communication and cooperation with colleagues at school and between schools, and for facing uncertainty and conflict. Educators need to be equipped with the support and tools to connect to the curriculum and make meaning, while constantly adapting to their students' learning. This kind of change takes time and repeated opportunities to discuss with other professionals, based on a problem solving method of interaction. Fullan (1999) states, "you often learn more from people who disagree with you than you do from people who agree, but you underlisten to the former and overlisten to the latter" (p. 23).

The evolving process of collaborative learning allows the learning to continue among educators. There is never a point of completion for this form of professional development, the importance lies within the process. Fullan (1999) states, "effective organizations are not ones that innovate the most; they are not ones the send personnel on the most number of staff development conferences. No, they are organizations that selectively go about learning more" (p. 28). A thorough learning environment allows for teachers to truly understand and work in a collaborative learning environment with their

students, in order to make the curriculum relevant and motivational for all involved in the learning process. With the continuous learning and adapting, teachers cannot fall into the trap of having “innovations [that] are introduced before previous ones are adequately implemented” (Fullan, 1999, p. 27).

Ideally, implementation decisions largely reside with the teachers who are the ones that need the support to adequately share the knowledge and excitement of learning with their students, rather than simply delivering knowledge through the vehicle of classroom lectures. Professional development that is heavily reliant on instrumentalism, standardization and artificial replication does not capture the distinctive nature of a subject or challenge any of the deeply held paradigms of its practitioners (O’Sullivan, Carroll & Cavanaugh, 2008). The basic understanding of this form of professional development is that teachers will take the information, the learning process and the teaching style from their professional conversations and personal reflections, and continue a similar process in their classroom, with their students. In order for students to benefit from the process, a collaborative, supportive environment for teachers to learn, both independently and with their colleagues, is set up and fostered by the school community.

Collaborative learning is the foundation for PLCs. This component has many different positive effects on the learning process, but more importantly, on the culture of the school. Nelson (2008) believes a re-culturing must occur that involves examination and potential change in the collective norms, values, and beliefs that comprise the school’s persona. As the PLC begins to work together towards common goals, often involving reform or restructuring, the culture of the school will begin to adapt and change

as educators move forward in the same direction and with a vested interest. The restructuring of teachers' work can signify a broadening professional community where teachers feel more comfortable exchanging ideas, and where a collective sense of responsibility for student development is likely to emerge.

Shared leadership continues to strengthen the culture of the school, through the building of confidence in many different roles and allowing educators to become directly involved in the decision-making process. Teachers need to have opportunities to learn, to participate with ownership, to reflect, and to enhance their professional identities through customized, relevant and timely support that involves teachers exercising professional leadership (O'Sullivan, Carroll & Cavanaugh, 2008). PLCs allow teachers to step up to leadership positions within the collaborative setting. Teachers may have areas of expertise that they can share with others, in order to assist in the learning process and move forward as a team working together. Working collaboratively allows subjects to learn from each other and highlight strengths within the group to build upon. Shared leadership is a model which encourages all subjects to take on the role of leader, as well as learner (Servage, 2008). One of the major benefits of participating in this form of professional development is the interdependence formed through relationships with colleagues.

2.4 Relationships

PLCs have underlying assumptions of an interdependent community that is based on trust. Within the community, each person has a role and an integral part that requires a dynamic identity, not a dependent, passive recipient of knowledge (Mitchell & Sackney, 2009a). When there is a trusting, caring environment the members of the

community are more likely to engage with others in the learning process, and therefore, take more risks with a level of support evident on a daily basis. Mitchell and Sackney state, “teachers who feel supported and cared for by colleagues and administrators are more likely to experiment with new ideas or new practices than the teachers who feel threatened or vulnerable in their school, and experiments by teachers often translate into interesting learning opportunities for students” (p. 17).

Directly related to teacher growth, working collaboratively with a team of colleagues can reduce the fear of risk-taking by being surrounded by encouragement, moral support and tolerance. In an analysis of studies by Johnson and Johnson (1987), working collaboratively in small groups resulted in greater student achievement, more positive interpersonal relationships, increased social support with colleagues and enhanced self-esteem for the teachers (as cited in DuFour, 1991). Within the culture of collaborative learning, teachers are consistently stimulated and supported to experiment with innovations and have a sense of professional entrepreneurship (Hargreaves & Fink, 2006).

Psychologists express a fundamental need that humans share: To belong to something greater than ourselves (Sergiovanni, 1994). The need for community is universal. A sense of belonging, of continuity, of being connected to others and their values make people’s lives more significant and, ultimately, increase the quality of life. Sergiovanni clearly states that the “potential for becoming a ‘we’ is stronger than the propensity to remain an ‘I’” (p. xvii). The bonding together of people and the connecting aspects of shared values are the defining characteristics of schools as communities. Due to the fundamental need to belong to a community, if schools are not fostering this

community ethos in their schools, there is the great possibility that the members of the school will look elsewhere for a sense of community.

In summarizing, considering the fundamental need for belonging to a greater community, PLCs provide the necessary components to benefit teachers and allow room to adapt, with disturbances, within the system. Regarding PLCs, I will explore a more practical connection to effectiveness by dissecting design models and what necessary characteristics appear to be needed to allow for effective growth and continuity.

2.5 Design models

In this review of literature on two contrasting design models of PLCs, I focus my attention on the characteristics which will, ideally, create the opportunity for an effective environment of continued growth for teachers. The first model, by DuFour and Eaker (1998), referred to as low-capacity building, focuses on a set of activities which they argue ought to be followed when implementing a professional learning community:

1. Identify the criteria with which it will monitor the advancement toward its vision, the presence of its values, and the accomplishment of its goals.
2. Systematically gather information on those criteria.
3. Share data with the entire staff.
4. Engage the entire staff in collective analysis of the information gathered.
5. Develop new strategies for achieving its objectives more effectively.
6. Carefully monitor the results of implementing those strategies. (p. 127)

By following these steps to effectively implement a professional learning community, each school has the ability to become a community and increase student achievement through focused collaborative learning and an emphasis on reflection.

The second model, by Mitchell and Sackney (2009a), referred to as high-capacity building, focuses on organization capacity and the daily habit of working together, which depends on three sets of activities:

1. Developing a child-centred vision.
2. Cultivating a pedagogy-focused discourse.
3. Building school-wide systems for key aspects of school life. (p. 33)

The two different models have the same foundations of a professional learning community with a focus on collaborative learning, but offer two different philosophies and structures of professional development. It is important to understand these two models because the characteristics of each model are evident in the case study in this thesis. My examination focuses on specific characteristics of PLCs that are described in these two models. In Chapter 5 I describe the benefits of the PLCs I studied and how they relate to the existing models of PLCs in literature. Throughout the discussion in Chapter 5 there are aspects of each of these two models, but not one model in its entirety will be evident; therefore, I suggest a hybrid model of PLCs.

The educational reform arena is often full of many “Christmas tree schools,” which pursue every new fad so that it can be added, like an ornament, to the structure of the school. Ornaments are weak and fragile, therefore they can never be self-sustaining based on their inorganic existence (DuFour et al., 2006; Fullan, 1999; Sergiovanni, 1994). According to Sergiovanni, the field of education is prone to faddism; a few reasons encompass the easy answers and the canned solutions offered to a community of searching educators desperate to increase productivity. Time frame is impacted by fad programs taken on because they sound and look good for a short time, until the next fad

program comes along and looks even more enticing. The school culture is the biggest showcase rather than effective program or ideological reasons. Similarly for PLCs, educators must not confuse mere congeniality or “collaboration lite” with the serious professional collaborative dialogue that is necessary for effective school improvement (Schmoker, 2005, p. xiii).

Mitchell and Sackney (2009a) believe in the importance of an authentic community, which requires more than throwing around the word “community.” It requires a level of deep thinking and believing in the community itself. Essentially, it means changing the basic metaphor for the school itself to community. Sergiovanni (1994) raises the issue of authentic community by stating “we are into authentic community when community becomes embodied in the school’s structure itself, when community values are at the center of our thinking (p. xiii). Servage (2009) argues that educators are confusing PLCs with a certain set of behaviours and learning priorities, often apparent in professional development initiatives, rather than a transformation of the school culture.

The transformation from a traditional school to a professional learning community requires a change of perspective of all members of the community involved. The change cannot consist of a program add-on or a focus on one aspect of school improvement. A professional learning community is an ethos that infuses every aspect of a school’s operation – holistically (Hargreaves & Fink, 2004). The transformation is not instantaneous, nor is it measurable in the short term; many of the benefits will be observable after long term implementation. The beliefs, assumptions, expectations and habits that make up the norm for the members of the community, are the foundational

materials that are, ultimately, required for the transformation of culture (DuFour et al., 2006).

2.5.1 High-capacity learning community model

Mitchell and Sackney (2009a, 2009b) refer to this type of transformational change as high-capacity building, in comparison with low-capacity, which is determined by the level of commitment and interdependence of the learning community. The design of a high-capacity school cannot be learned through a workshop, it needs to be practiced on a daily basis; learning by doing, consistently, on purpose, in order to adapt school culture (Fullan, 2005). The environment created invites educators to constantly examine and question their own practices, reflect on outcomes, and share their personal learning voyages with others (Mitchell & Sackney, 2009a). The tendency towards perturbation-based learning, along with action research and experimentation, allow for community members to be in a constant state of renewal and growth, creating a self-feeding environment for learning. Due to the multi-dimensional aspects of culture, organizational capacity is dependent upon three sets of activities: “developing a child-centered vision, cultivating a pedagogy-focused discourse, and building school-wide systems for key aspects of school life” (Mitchell & Sackney, 2009a, p. 27). Building capacity within an organization is effective, if practiced on a daily basis. The high capacity-building model takes a respectful view of learners and educators, by assuming that everyone is a competent learner; furthermore, all people approach learning with a foundation of rich experiences, information, and capacities (Mitchell & Sackney, 2009a).

Successful capacity-building depends on each individual school, defining their own practice of schooling, with their own community members at the center of the

construction. With this knowledge, building a learning community cannot be a standardized, homogeneous process, in which to be micromanaged; instead, the building of a high-capacity learning community will look different in every school, due to the uniqueness of each community. The ultimate shift from the traditional deficit model, teaching in isolation, to a capacity-building one is a long-term process, which requires complete absorption of the members of the community. This is one of the biggest obstacles when instituting this type of organizational transformation.

Teachers are the most important resource in PLCs and they need to be the driving force for success. Many educators welcome the idea of PLCs and the opportunity to enhance their professionalism, but transformational, capacity-building change is uncomfortable for many people (Mitchell & Sackney, 2009a). It is easy for educators to fall back on the known, rather than venture into the unknown. For instance, because there is no recipe for capacity-building, no workshop agenda or training package, educators may opt out and begin looking for a recipe to follow. Recipes tend to be too easy to implement and, for that reason, they are a comfortable place to turn to when frustration levels rise and results are not easily distinguished (Sergiovanni, 1994).

2.5.2 Low-capacity professional learning community model

An alternate professional learning community design model is presented by DuFour, Eaker and DuFour (2004; see also 1998, 2005). The authors promote the need for a clear vision of what a learning community looks like and how people operate within it. This clarity offers insight into the steps needed to transform a school into a learning community (DuFour & Eaker, 1998). In contrast to Mitchell and Sackney's (2009a) holistic view of learning communities, DuFour, Eaker and DuFour (2004) promote a

standardized approach to building a professional learning community. The step-by-step approach allows for effectiveness, by the nature of ease of implementation. By giving a recipe approach to this form of professional development, each school has the ability and capacity to follow the steps and adopt the necessary vision to make a professional learning community a reality, rather than a sought-after, deep-organizational change.

According to DuFour et al. (2004), the single, most important step a school will take on the journey to becoming a professional learning community will be the adoption of learning, rather than teaching, as the central purpose of the school. This step can be defined by focusing on the following characteristics: shared mission, vision, and values, collective inquiry, collaborative teams, action orientation and experimentation, continuous improvement, and results orientation (DuFour & Eaker, 1998). By focusing on the preceding characteristics, the members of the learning community will not confuse activity with effectiveness.

All results should be measurable within the implementation process of a professional learning community, according to DuFour et al. (2004). The measurability and accountability will be the factor to determine effectiveness of student learning. Data collection is not to be distributed to an outside force, but rather to monitor student performance, to inform practice, and to observe what is working well in the school. A critical or vital purpose of the learning community is to positively influence teachers' work, which can provide the opportunity for increased student achievement.

2.6 Analysis of the two models and self-sustaining professional development

Without a doubt, the two models—high capacity (Mitchell & Sackney, 2009a) and low-capacity (DuFour & Eaker, 1998)—are far superior to the traditional factory

model of education, which can be characterized by teachers instructing large groups of students, with little to no time to reflect on practice (see Table 1 below for a summary depiction of the key aspects of these two models). The other tasks of teaching – preparation, planning, curriculum development, collaborating with colleagues – are often left to the decisions of the individual teachers with little time provided by school districts to enhance the teaching experience (DuFour & Eaker, 1998). Typically, the factory model (Sergiovanni, 1994) perpetuates the cycle of teaching in isolation, disregarding the need for improvement or collaborative learning whereas PLCs are in-sync with our current education trends towards life-long learners, moral purpose, critical thinkers, and self-sustaining professional development.

Although the models presented are both based on the fundamental need for community, as well as enhanced student learning, there is a definite division in the level of community which needs to evolve: core and surface. When analyzing the high capacity-building model of community, presented by Mitchell and Sackney (2009a, 2009b), the emphasis is placed on a natural, humanistic need for building a web-like organization, dependent upon the inter-connectedness of the members. Increased motivation, accountability, and intrigue are all aspects that result from the natural interdependence of the members of the community. The community is holistic in nature, involving everyone from educators, students and “essential partners;” therefore, the underlying hierarchy evident in many school settings, becomes a systemic structure (Mitchell & Sackney, p. 28, 2009a). Instead of relying on external control measures, high-capacity schools rely on purposes, professional socialization, collegiality, and natural interdependence (Sergiovanni, 1994). Mitchell and Sackney’s (2009a)

interpretation of community is linked with effectiveness and self-sustaining professional development.

DuFour et al. (2004) present a more structured construction of community, for the purposes of a PLC. The authors refer to the need for collaborative learning and a clear, shared vision; although, the community exists to provide continuity of the goals presented. The community is still mandated by a set of external rules describing how the community interacts with each other, and a clear purpose for that interaction. The level of community still exists on the surface. DuFour et al. state the importance of professionals building a collaborative culture, engaging in collective inquiry, participating in action research, and creating continuous improvement processes – which are all important aspects of professional development – although, the missing aspect is the inherent interconnectedness that results from a community-based uniqueness.

Table 1: Comparison of two PLC models

	DuFour and Eaker (1998)	Mitchell and Sackney (2009a)
Implementation	Recipe approach	Each school is unique
Community	Hierarchical	Interdependent
Accountability	Accountable to administration	Accountable to each other
Measurement of success	Student academic achievement	Lifelong learning
Learning	Collaborative learning	Collaborative learning
Self-sustaining	Short term	Long term

The analysis of the two distinct models informed my study by allowing me to see the DuFour and Eaker (1998) model in action, through the eyes of my subjects. This model was chosen by the administrator as the ideal PLC model to follow for the teachers’ professional development. In contrast, exploring the Mitchell and Sackney (2009a)

model allowed for an alternative philosophy of PLCs to inform further analysis of effective professional development particularly with a greater emphasis on Canadian content although this did not seem to be a factor.

2.7 Examples of two cases involving PLCs and their effectiveness

In order to illustrate the components of PLCs and their effectiveness as a form of professional development it is necessary to capture a brief view of case studies completed recently. Two different case studies are discussed in this section; each one has components of the models discussed in the previous section, although neither follows one specific model entirely. The two case studies were chosen because of the presence of some similar factors to the case study conducted in this thesis, such as methodology, definition of effective professional development and the purpose of the research design. Goetz and LeCompte (1984) state the importance of describing how “typical the program, event, or individual is compared with others in the same class, so that users can make comparisons with their own situations” (as cited in Merriam, 1988, p. 177).

2.7.1 A collective case study of four schools

Kilbane’s (2009) article contributes to theory and practice on the effectiveness and, more specifically, the self-sustainability of effectiveness with/in PLCs. The author shares a study of four (4) out of ten (10) schools that participated in a four year reform effort to examine the ongoing sustainability of a PLC. The funding was provided by the Indiana Essential Skills Network (IESN) in an effort to initiate comprehensive school reform in ten (10) schools across the state of Indiana. There was a hopeful intention that PLCs would build the capacity for effective change. According to Kilbane, effective PLCs were identified by:

- a. common vision for student learning
- b. collaboration among the participants
- c. sharing
- d. reflecting on practice
- e. inquiring into the teaching and learning process (p. 186)

The collective case study examined the current impact of a prior intervention, in order to determine effectiveness and sustainability of this form of professional development. The data was collected through interviews, document analysis and observations. The analysis of the data used a phenomenological approach to draw conclusions about teachers' perspectives on current classroom practice and the impact of their effort. Group interviews were the primary vehicle to collect data on the "perceptions of teachers" (p. 190). According to Kilbane (2009), "the research was not designed to determine causal relationships but rather to suggest possibilities for further research in this area" (p. 193).

Three themes emerged through the data analysis in this study involving change, loss and hope. Kilbane (2009) describes a significant theme surrounding the concept of individual change versus change supported by "a web of connections" (p. 195). He states that teachers doing individual inquiries does not result in an "inquiry-minded school" (p. 195). There is something about the group component that aided teachers when they encountered difficulties, especially when teachers could observe their group effort making an impact on the school culture. The second theme described the limits to pursuing change in effective practice due to change in leadership within the school. All the teachers agreed that in order to continue effective PLCs they needed to build a high

capacity environment to hold themselves accountable to each other, rather than being held accountable by an external community or leader. The final theme demonstrates the importance of cultural change, which means “attending to the culture—consistently working on it, developing accountability for it, and working on multiple aspects at once” (p. 197). A few of the PLCs in this study were determined effective because the “inquiry practices and collaborative approaches have become meaningful to the teachers and have been maintained” (p. 197).

In conclusion, Kilbane’s (2009) study determined that without collaborative structures, time embedded within the school day and leadership support in the form of resources, the teachers were limited in their professional learning. When faced with a less than favourable working environment, most teachers chose to disengage and return to their previous way of teaching, rather than trying to extend their professional learning in isolation. Kilbane stated the factors for self-sustaining PLCs as follows:

- a. staff development becoming routine
- b. school culture supporting innovation
- c. collaboration
- d. consistent leadership
- e. reform support (p. 186)

2.7.2 One school’s participation in a PLC

In Maloney and Konza’s (2011) case study on a primary school’s experience participating in a PLC, the authors determined that engagement, collaboration and participation “ebbed and flowed” throughout the study (p. 75). The school deputy principal and two university researchers conducted the research at Berrivale Primary

School in a project that spanned one and half years. The researchers' aim was to explore the teachers' perceptions, knowledge and understanding of early childhood pedagogy through the development of collaboration and a shared view among staff. The case study is analyzed according to Hord's (1997) five dimensions of a successful PLC, which include:

- a. supportive and shared leadership
- b. shared values and vision
- c. collective learning and the application of that learning
- d. shared practice
- e. supportive conditions for the maintenance of the learning community

(as cited in Maloney & Konza, 2011, p. 77-78).

The research sought to explore the following questions:

1. What processes are used to develop an effective professional learning community?
2. What factors impact on the development of an effective professional learning community? (p. 78)

The researchers utilized a case study approach in order to develop a holistic understanding of the process undertaken by the participants of the PLC. The subjects of the study were twelve (12) teachers and eight (8) educational assistants. Data was collected through observation, interviews of the participants, focus groups and a survey. The data was analyzed using direct interpretation method in order to obtain a description of the participants' experience.

According to Maloney and Konza (2011), many ongoing challenges became evident throughout the study. In order for teachers and educational assistants to participate in professional development (PLC meetings), they were allocated release time through a collaborative research grant. Despite the organizational structures to aid and support the PLC meetings, only five (5) out of twenty (20) participants attended all the professional learning sessions. In addition, some participants were reluctant to share beliefs that conflicted with those of the strongest voices in the PLC. Equality was not maintained within the group structure. Finally, some teachers did not see the development as a key priority, therefore limiting the overall commitment of the PLC. As a result, the degree to which the PLC was effective as a form of professional development is not entirely clear. For some teachers the process facilitated further action research and professional development, for others, participating in a group was problematic.

In summary, Maloney and Konza (2011) identified factors that may have influenced the teachers' level of engagement and contribution, therefore impacting the capacity level of the PLC. The factors consist of:

- a. The personal and professional investment individual teachers are willing and able to make, based on their perceptions of the relevance of the professional learning task.
- b. The value put on professional development both individually and in terms of the shared culture of the school.
- c. Egalitarianism (p. 85)

Maloney and Konza propose that PLCs have a greater chance of being effective professional development if “teachers contribute as equals to setting the agenda, bringing about change, and ultimately improving their own practice” (p. 85).

2.8 Summary

This review has defined, described, and explained characteristics necessary for effectiveness within professional development, as identified in recent literature. These conditions include, but are not limited to, open dialogue with colleagues, a shared leadership, personally meaningful purpose, collectively defined, and, at the foundational level, community. The importance of community, in relationship to effectiveness, is a strong common thread throughout the literature. Many of the ideas discussed within this chapter, for instance, relationships, moral purpose, and inherent learning, are realistic ideas. PLCs are a realistic idea – they follow a natural structure when teachers are given a place to return and reflect. Throughout the next chapter, I will identify the research methodology and methods necessary to find out about the concept and practice of participating in a PLC.

Chapter Three Methodology

3.1 Overview

This third chapter is organized into seven sections including the overview, research questions, recruitment of subjects, case study approach, interviews, data analysis and limitations of the study. The chapter describes the research design for this study to analyze the concept and practice of PLCs as a form of professional development in an effort to better understand the experience of participating in a PLC, and the characteristics associated with this form of professional development. As noted earlier in this thesis the PLC in this study developed in September 2010 in an elementary school in rural BC. Initiated by the administrator, the teachers were introduced to the concept of PLCs and given the time and space to develop their interdependence within the structure of meetings. The PLCs were set up in the format of DuFour and Eaker's (1998) model (see Table 1, section 2.7 for a comparison of the two models of PLC discussed in this thesis). The administrator chose to set up three different PLCs, based on grade group assignments for teachers. This decision was made in hopes of promoting relevant topics of discussion among the participants.

My involvement with the school began in December 2010 and I collected the data in May 2011. In December I began observing the PLC meetings and recording observations. In January, my involvement changed due to changes in my teaching schedule and I was no longer in the position to observe the PLC meetings. An alternate data collection method was decided upon: interviews. The teachers had sufficient time to practice and reflect upon their experiences in a PLC with the knowledge that they would share their reflections during individual interviews in May 2011.

3.2 Case study

This study is a qualitative study that I am utilizing case method as the means of inquiry. When I was constructing the format for my study, I compared qualitative and quantitative methodologies in order to decide which would fit with my general ideas for a study and which method would best suit inquiry into a single group of education practitioners to make sense of their PLC experience. Schostak (2002), referring to the significance of qualitative research, states, “to explore the world is to engage with the particular processes through which it is imagined” (p. 17). In this inquiry, case study method seemed to me to best explore this PLC.

A methodology that explores the ways and nuances in which an individual exists within their world piqued my interest and led to further reading in qualitative studies (Punch, 2009; Schostak, 2002; Scott & Morrison, 2007; Walliman & Buckler, 2008). In this case, the inherent nature of social research, which does not solely involve constructing concepts and measuring variables related to quantitative research, allowed me to explore the relationship aspect that evolved through conducting personal interviews and analyzing the data that emerged. In this case, I focused on the concept and practice of PLCs as a form of professional development for one group of teachers participating in a PLC.

My research objective originally was to develop as full an understanding as possible of PLCs as a form of professional development. As has already been presented earlier in this thesis, I conducted my research involving eleven teachers in a PLC who teach at the same school as a case study. Focusing on a small number of subjects allowed

me to research their roles within their PLC as well as their personal reflections and experience within this form of professional development.

According to Scott and Morrison (2007), case study examines “naturally recurring situations in which variables are not, or cannot be controlled” (p. 17). Goldenburg (2004) argues that case studies permit a more detailed description and analysis which is not afforded by other forms of research particularly when the sample is small and related. The purpose of using case study method best supported the primary purpose of my research, which was to collect reflective data and examine it for trends and emerging themes pertaining to the PLC in one school (three groupings of teachers). Case studies offer the ability to capture authenticity by using the subjects’ own accounts of events. Lincoln and Guba (1985) state the importance of obtaining a rich description of the study’s context in order for the reader to gain insight into all aspects of the case and gain a thorough understanding of the findings (as cited in Mirriam, 1988, p. 177). As a result I was able to gain a deeper understanding of why this particular PLC evolved as it did, and determine what factors might become important to look at more extensively in future research. Specifically, I conducted an evaluative case study by which I mean I evaluated the responses of the participants; therefore, it allowed the inquiry process of analyzing and judging “worthwhileness” of the professional learning community by the researcher (Scott & Morrison, 2007, p. 18).

Based on Punch’s (2009) definition of a case study, initiating the study of a phenomenon, which occurs within a bounded context, the boundaries are defined in this case as a specific group of elementary teachers within a specific school. The focused

interest was centered on their involvement in the PLCs that were arranged within the school context.

The relationship aspect is important in the analysis of the data because it relates directly to the concept and practice of this form of professional development (PLCs). There is a connection between relationships and the capacity level of the PLC. High capacity PLCs have members who are interdependent and move towards goals as a consolidated group (Mitchell & Sackney, 2009a). Interdependence is referred to in this thesis as a group of people who are mutually dependent upon one another and engage in collaborative learning regularly.

The questions asked during the interview were open-ended. This was an advantage because it allowed the subjects to expand the dialogue in an area they were comfortable discussing. The case study approach embraces the complexity of human life, with the understanding that I will never be able to know it all. Researching through analysis of a case demands not the recipe of scientific approaches, but openness to creative exploration. As the researcher, I continually searched for emerging themes when analyzing the data.

According to Scott and Morrison (2007), due to the popularity of case studies in education within contemporary research, there is often a need to define the specifics of a case study in order to prove the choice of this particular form of research. This study can be defined in relation to the amount of information collected, the nature of the data and the purposes of collecting detailed data.

3.3 Data collection - interviews

The subjects in this study expressed a desire to relay their experiences regarding their participation in a PLC through a single interview, which would be reflective of their experience of the previous eight (8) months. The subjects had the opportunity to have their meetings observed (first in person, then audio-taped), and write in a reflective journal about their experiences throughout their participation in the PLC. They chose to continue with a single interview at the end of the school year with the knowledge that they were going to be queried about their experience. The subjects felt they would be able to provide insight from a reflective point of view, considering it was their first experience with participating in a PLC. Although the subjects felt they were experiencing a significant learning curve as participants in their PLC, they believed they had time to both practice participating in a PLC and reflect upon it during that time period, with the agreement that I would be asking them to share those reflections with me in an interview at the end of May. This initiation into a PLC does provide another limitation on the study in that the dynamics of participating in a PLC for the first time might differ from PLCs that have more years of continuation. But that is a point for further research and outside the scope of this thesis.

Consequently, the subjects' decision led me to gather informational data through semi-structured interviews in order to elicit as much information as possible within the limited time frame. Due to the fact that I was not connected to the school in any way, conducting an interview as an external researcher I was able to limit personal bias. That is, the absence of a previous relationship with the subjects ensured that my connection to the individuals reduced to a negligible effect on the data collected by maintaining a

distant or bracketed perspective. By remaining an outsider, I was able to look in with an analytical focus without connecting personally to the subjects as they shared information. The assumption here is that subjects spoke truthfully and freely without coercion in the interviews.

As explained earlier in this thesis, my focus was to complete an evaluative investigation of a group of teachers in a PLC. Eleven subjects volunteered to participate in this study. The richness of data comes from the authentic situation of having a conversation with someone about their practice, which was reflective in nature. The subjects discussed real life situations, and the “realness” came through in their dialogue, which I discuss in the next chapter. There was an emphasis upon the use of narrative in order for contextual analysis to be used afterwards. The subjects told the story in their own voice of participating in a PLC. Similarly, they were using their own accounts of events in order to tell the story and relay the information. As the researcher, the contextual understanding allows me to sharpen my understanding of why an event happened as it did, and how that can affect (future) research.

An interview is an adequate data collection method to access people’s perceptions, understandings and constructions of reality (Punch, 2009). I chose to conduct a semi-structured interview because I wanted to elicit as much information as possible within the limited time frame. Semi-structured interviews allow for a conversation to develop among the interviewer and interviewee, which allows the subject to delve into areas they would like to discuss within a given structure of the original question. According to Punch, the subject then becomes a co-creator of the data and the story told through the data, by carrying on a conversation about mutually relevant issues.

The interview was reflective of the experience; therefore, it was appropriate to conduct it only once, with each of the subjects. Each interview was treated as a sub-case, with the primary task of generating data, which gives “authentic insight” into the subjects’ experiences (Punch).

The realities of teacher’s day-to-day work lives are important in the articulation of smaller details. By exploring each participant’s individual story of discovery within the PLC, I was able to observe the benefits and challenges they encountered. This method of research had to be consistent with the intimate nature of the close, personal interaction between the subjects within the PLC, and give the appropriate time and space for those relationships to be reflected upon and discussed. The data collection method had to ensure the opportunity was present for disclosure.

By allowing the subjects to have an open-ended reflection, guided through semi-structured questions, each person is defined by their own construction of reality. The subjects were given adequate time to sit and think about their experiences participating in the PLC, in an environment that allowed for self-reflection to be the underpinnings of the conversation. Each participant had adequate time to answer the five questions posed throughout the interview, as well as expand upon their experience of participating in a PLC through free response. By audio-taping the conversation, I attempted to provide a relaxed environment for a conversation to take place, rather than have the participant supply facts while I scribed them. The subjects were given plenty of time for the interview to add more details if they desired; therefore, there was not a sense of time pressure. In addition, the interview was conducted in a small room that was quiet and calm, away from the busyness of an elementary school atmosphere. In my opinion, the

subjects did feel relaxed after the first few minutes of the interview, due to their relaxed posture and slow, calm speech. It is necessary to obtain as much information through the interview process as possible in order to examine the micro-level of participating in a PLC. Initially, I searched for the detailed interactions of the individuals; more specifically, the discussions and exchanges that took place during their PLC meetings. This allowed me to take that knowledge and compare data to pursue emerging themes.

The interviews were set up to occur on one day in May, 2011. Each participant was given 20 minutes minimum to discuss the questions listed below. I ended up allowing 30 minutes per interview on average because some subjects required more time. I digitally audio-taped the interviews, and transcribed them afterwards. The interviews took place in a small room in the school that is usually used for meetings between professionals or one-on-one assessment with students. The overall environment was known to the subjects, which helped elicit a safe and relatively comfortable atmosphere. There was a substitute teacher covering the participant's class while they were being interviewed. Each participant did not give up any of their non-teaching time to participate in my study. The substitute teacher was paid for by the school district which allowed me to collect my data for this study.

Finally, the artificial situation, a one-on-one interview in which the data was collected also places limitations on my findings because obviously the subjects were not able to provide a complete, step-by-step explanation of their whole experience during the time from December through to the interviews in May. Thus the interviews and findings, although guided by pointed questions to pinpoint the key details of their PLC journey, represent the critical points or characteristics that I initially set out to examine and which

I discussed earlier in this thesis. Also as mentioned earlier the primary purpose of this research is not necessarily to generalize but to analyze the context of the research, to understand a living PLC as it developed and was reflected on, to compare this case with other PLC research, and make suggestions for further research. In addition, the discussion of the data may connect to our knowledge and understanding of PLCs regarding what is already known through previous research.

Interview Questions – Subjects of PLCs

Following are the questions that I used in the interviews.

1. Has participating in the professional learning community throughout the past eight months affected your teaching practices? If so, how?
2. Has participating in the professional learning community throughout the past eight months affected your students' learning? If so, how?
3. What were the benefits of working collaboratively with your professional learning community?
4. In your experience, are PLCs an effective form of professional development? By effective I mean a profound shift in how educators think about, talk about and value learning. Please explain.
5. In your experience, what characteristics are necessary to ensure self-sustainability of a professional learning community?

Although the questions are simple in nature, the responses allowed the subjects to expand, with their own willingness, and reflect. The subjects responded in a positive manner towards all questions. Generally, the subjects took more time for reflection when

answering the last three questions. The questions were set up to increase the level of reflection needed as the interview went on.

3.4 Recruitment of subjects

To address my research questions, it was important to recruit subjects that would allow an analysis of their participation in a PLC, which would be reflective in nature. The subjects expressed uncertainty about their competence within the context of their role within the professional learning community due to their inexperience. This was the first year each of the subjects were given the opportunity to be a member of a professional learning community; therefore, they were in the process of defining their roles within this type of professional learning. That is to say, the subjects were put into professional learning community groupings by their administrator and given release time to meet once a month. The issue of top-down decision making related to professional development raises many questions deserving further discussion and research, perhaps, but are outside the scope of this thesis. The subjects, however, made no mention of it.

3.5 Subjects

The subjects included a group of eleven teachers who expressed interest in answering questions, which would be reflective in nature, related to their involvement in a PLC, within one school. Subjects were permanent teachers at one elementary school, ranging from kindergarten to grade six teachers. All the teachers who participated in a PLC at this school accepted the opportunity to participate in this study. Their teaching experience ranged from eight to thirty-one years of teaching, and they were all qualified to teach within British Columbia. The qualified teachers all held a valid teaching certificate issued by the BCCT and had a Bachelor degree in education.

The subjects have been identified by pseudonyms in order to protect their anonymity. Of the eleven subjects, nine were female and two were male. All subjects signed consent forms to assist in the research process. The PLCs were categorized according to the teacher's grade level: kindergarten/grade one, grade two and three, and grade four and five. The principal organized the specific groupings based on the idea that similar grade groups would want to discuss similar topics in their PLCs. The data was collected throughout one day of semi-structured interviews. The interview questions were open-ended and reflective in nature and sought a detailed amount of personal information to be disclosed throughout the twenty-minute interview. The data collected was focused on experience-based responses, with a narrative focus that elicited themes throughout the participant's discussions.

3.6 Time line of events

The research data was collected near the end of the school year, in the month of May. This allowed the interviews to be reflective in nature and the questions to focus on the subjects' experience throughout the majority of the school year. As the PLCs evolved throughout the school year to become beneficial for the members, each participant could reflect on the emergence of their role and their learning. Subjects were selected in February and signed up for interview times. (Refer to the section in Chapter One regarding obstacles of the study, in order to understand the late start, and change of design, of the research study.) Recruitment was necessary in order for teachers to anticipate questions about their involvement in a PLC. Subjects were asked to participate on a voluntary basis. Signed consent forms were collected. An email message was sent to the staff indicating the interview schedule. At that time, there were eleven teachers

signed up for interviews, ranging from kindergarten to grade five teachers, and all generalists.

3.7 Data analysis

The purpose of this case study research is to examine the concept and practice of PLCs within a school setting. The professional learning community in this study has been analyzed based on the following criteria for effectiveness that I have extrapolated (and noted earlier in the first chapter) from Mitchell & Sackney (2009a):

- a. reflective thinking and dialogue
- b. use of collaborative work strategies
- c. emergence of authentic curricula
- d. use of assessment for learning
- e. interdependence and collective responsibility

The criteria helped formulate the interviews questionnaires and provided the conceptual framework for the data analysis. For example, when reviewing the data I looked for examples or non-examples of each of the points of the criteria.

The interview data was transcribed and analyzed to identify emerging themes within each participant's personal experiences in order to sort through the words and find the underlying meaning of the collective group of subjects. Based on the criteria, the data analysis focused on a constant comparative approach. That is I continually searched for words that related to the criteria, and coded those words or phrases appropriately. The themes emerged from the data, increasing in importance as the number of times they were coded increased. This approach provided a continual comparison of the data and the various categories of data. For example, initially all the data was reviewed for

common themes based on the criteria of effectiveness. Following that review, a comparison was completed based on the specific language used to describe events. Categories were modified throughout the process to reflect emerging themes and produce more general patterns. The themes fell into four categories: the benefits of participating in a professional learning community, inherent findings of isolation in the teaching profession, characteristics for self-sustaining of professional development through PLCs and subjects' suggestions for improvement for future PLCs, based on their experience.

3.7.1 Coding the data

Coding the transcripts was a lengthy task that involved many steps. I transcribed the audio files from the interviews into a qualitative data analysis software program called *Atlas.ti*. I used open codes in order to locate patterns and search for emerging themes within the transcribed data, which related to the criteria for effectiveness extrapolated from Mitchell and Sackney (2009a) mentioned in the previous section.

Originally, I created twenty-one codes. After a review of the codes and the data collected, it became obvious to me that some of the codes needed to be expanded upon and some of the codes merged with existing codes. I felt compelled to alter codes as I was going through the process of analysis in order to separate general themes into more specific themes. The altering of codes allowed me to look at the data critically as themes emerged, even in areas I did not expect. For example, I had constructed a code named 'buy in,' although after further analysis this needed to be redefined into sub-codes named: teacher buy-in, administrator buy-in and whole-school buy-in. In addition, initially I had a code named 'collaborative learning,' but after reviewing and comparing the data, I separated that code into three different sub-codes named: sharing, perturbation-based

learning and group planning. After re-coding, there were forty-three codes. These codes were then grouped into four families of codes to organize and sort data accordingly. The family codes names were chosen by viewing the information within the codes and deciding upon a general idea that encompassed the data but without compromising the emergence of themes. These families included benefits of a PLC, isolation, criteria for self-sustaining professional development and suggestions for improvement. These family names are also considered the main themes that emerged from the data analysis. The themes provided the sub-headings for the next chapter of the thesis. The findings are reported like this in order to present the collected data in a focused and critical presentation, which leads to a gradual growth of understanding of the significance of this research.

3.8 Limitations of the study

Due to the nature of most case studies, my intent is not to generalize outside the boundaries of this case. The inherent need for identifying sameness over time is an important part of the research process (Scott & Morrison, 2007). The authors argue the point of conducting a case study is not necessarily to generalize the results, rather to identify the “key issue [of] how readers of the case study make use of the case study research outcomes” (p. 21) in their own settings. In this case, there is one school represented in the study, in one town in B.C.

A limitation of this study that became more apparent after the data collection is the lack of time with each subject and the inability to triangulate results over a period of time, with a limited number of subjects and a single interview with each subject.

Nevertheless, reliability of the findings, as with case study method, is dependent on further applications of the findings and/or recommendations by other PLCs in this case.

3.9 Summary

This chapter presented the qualitative research methodology of a case study including the case study approach, data collection method, data analysis, recruitment practices and research questions. The next two chapters present the analysis of the data collected from the interviews, and finally, an analysis of the study and recommendations for further practice and research.

Chapter Four Data Analysis

4.1 Overview

This chapter discusses the research results in this case study on PLCs involving eleven teachers in one school in B.C. This study examines the concept and practice of participating in a professional learning community. The chapter is divided into four main parts: benefits of a professional learning community, isolation, characteristics for self-sustaining professional development and suggestions for improvement. These sections are made up of the themes which emerged from the data analysis, based on the criteria on effectiveness extrapolated from Mitchell and Sackey (2009a; mentioned earlier). Within each of these sections, I will first report the findings, and then report the conclusions drawn from the findings.

4.2 Research findings and conclusions

In this section I describe three themes that emerged from the research data collected and then summarize conclusions for each theme presented. Theme one outlines the benefits of participating in a PLC, with a focus on collaborative learning. Theme two shows the presence of isolation in the teaching profession, thus the need for collaborative learning. Theme three summarizes the subjects' characteristics for self-sustaining professional development through PLCs. I finish this chapter with a discussion of the subjects' suggestions for improvement for future PLCs, based on their experience. Note quotations from the subjects' transcribed interviews are included throughout this chapter. Pseudonyms are used to protect the anonymity of the subjects.

4.2.1 First area of finding: Benefits of PLCs

The most significant benefit that emerged through the interview data was the concept of collaborative learning. I redefined the code of collaborative learning into three distinct areas, which have a basis in the literature (see Chapter 2 of this thesis): sharing, perturbation-based and group planning. Among those three areas, sharing was mentioned the most often.

Kayla stated an overview of collaborative learning as, “everything just goes better when you get to talk about it.” Lerae commented, “I think it’s the best way to learn, from other teachers who are in the middle of it all.” Overall, the teachers felt the time spent in PLCs was beneficial due to the professional interaction. For example, Clea explained, “If someone is passionate about something, they make you wish to try it yourself.” Learning from one another was a central part of the theme of collaborative learning. “I think because we all have different strengths, we can learn from each other,” Lerae commented in support of the learning aspect of sharing.

Others articulated the necessity of sharing as a professional consideration. Clea commented, “If someone has already done it and tried it, then they can tell you the pitfalls and it just saves you some headaches that might occur.” By learning from others’ experiences, we glean more knowledge and understanding, than continually trying different strategies or ideas ourselves. Brennan commented that he would “take from that my own spin for a unit or whatnot...I liked that fresh influx of ideas.” Due to the uniqueness of each teacher’s teaching styles and the different group dynamics of each classroom, the teachers were able to learn from one another, while putting their own “individual touch” in their lessons. Some of the learning was incidental, by just listening

to colleagues, and some of the learning was intentional. Grace reported that “one of the things about teaching that I never realized until I was a teacher is that it’s really hard to be a learner while you’re teaching.” All the teachers mentioned sharing ideas, strategies or experience as a benefit to their professional development.

Another area of collaborative learning that was mentioned by some teachers was perturbation-based learning. The teachers spoke about the basic idea that within a classroom it is very common to have ideas, lessons and experiences not turn out the way they were intended. Evelynn pointed out, the PLCs gave the teachers a venue to say, “I’m struggling with this; can we talk about it next time?” Joan stated there were times when she felt, “I can’t do this, then we all gather ideas and materials, we all come back together and we all have a big brainstorming session and now I have ten ideas that have come back, so an area that I said, ‘I need help,’ all these ideas come back.” Molly commented that “we all share ideas when you are running down a hallway asking quick questions, when things not are going as planned in the classroom.”

Several comments indicated the necessity of group planning and its implications for diversity and continual adaptation of teaching styles and ideas. For example, some subjects used the professional learning time specifically for group planning, while others commented that they would listen, take ideas from others and adapt their current teaching practices. Kayla commented on the benefit of group planning when stating, “when you are meeting with your colleagues, you are always checking back and forth to see how the other class is doing or what point they are at, it just keeps you going and keeps the students more involved because you are actually teaching what you have talked about.” Clea explained, “we set a guideline as to how we would work on it, what we would do for

the first time, the second and the third, and then we got back together and talked about how did it go and what our plans for next year would be.” The ability to work as a group throughout the planning, implementing and reflection process was a beneficial use of professional development for many of the subjects. Kristy commented on the group discussions taking place in the professional learning community by stating, “that’s what we’re discussing in our PLC’s and so that is what I’m trying out on my class, looking for results.”

4.2.2 First area of conclusions: Benefits of PLCs

The first significant conclusion regarding the benefits of participating in a PLC was that it was a positive experience to all the subjects. There was a sliding scale of how beneficial the professional development was, and in what ways it was most beneficial. Although, all subjects felt the time to get together with colleagues and discuss practice was a good use of professional development time. Servage (2008) explains that teachers need to use time to engage one another in “hopeful, critical and creative dialogue” (p. 75). Grace exclaimed she thought, “this is the future, I think PLCs are going to be as much of the school culture as recess duty or assemblies. It’s just that this is the part of being here as a staff, that we have to meet together and share together and talk about things beyond a staff meeting.” Mitchell and Sackney (2009a) agree that professional development is not an activity, but a way of life. In order for a PLC to be effective at an optimal level, it needs to be infused in the culture of the school. It seemed that one of the factors indicating the level of benefit for each participant depended upon their own experience within the professional learning community, and their level of ‘buy in’ to this form of professional development.

The second conclusion involves the use of perturbation-based development. By opening up to colleagues in a vulnerable way, the teachers were able to gain greater benefits by their own admission. When the teachers discussed areas they needed help, they were allowing for a greater exchange of ideas to take place within their community, thus, allowing an inter-dependence to form among the subjects. Nelson (2008) stated the importance of the shift in the nature of collaborative work, from “tinkering” with classroom activities to prompting perturbation facilitated learning, brought about a greater interaction between teachers, which ultimately benefited the students’ learning (p. 575). The increased level of interdependence within the group increased the level of support the teachers obtained from one another, allowing for more risk-taking, which often equals a more meaningful teaching/learning environment. There has to be room for teachers to make mistakes and have the time to reflect on actions, and re-plan for next time.

4.2.3 Second area of finding: Isolation

The subjects discussed their involvement in the PLCs this school year and one main theme emerged: isolation. This concept appeared so often in the data, I altered it to be a central theme for this research. Isolation within the teaching profession was not an answer to any interview question, but a point of discussion which emerged throughout all the subjects’ interviews. A general view of the subjects was that teaching is an isolating profession. Once the classroom door is closed, teachers act with more autonomy. Combined with this autonomy is isolation. Kristy stated, “we do so much work on our own, we are planning on our own, we’re teaching on our own, we are assessing the

students on our own. It's just wonderful to share with your colleagues." Clea commented on a similar strand of thinking when she said,

we are in our classrooms which is a separate world. We're very independent. If you never get a chance to talk, you don't know what's going on in the classroom next door to you. So, this way, we get a glimpse of the other worlds out there, the other classrooms, and you get to see the different teaching styles. You forget that your style is fairly unique to you.

In addition, many teachers discussed the need for collaborative learning to combat the isolated practice of teaching, not only for the professional interaction, but for the sake of their students' learning (Lortie, 2002). Some comments from Molly, Brennan and Steve regarding the negativity of isolation for their teaching practice included, "sometimes you just get caught in your own little classroom, just doing the same thing every year," "you can get stuck in your own rut sometimes," and "it gets you out of your own little world, for one, and so you hear what other people are doing." By participating in a professional learning community, the subjects were starting to feel the sense of collaborative learning replace some of the isolation inherent in the teaching profession.

The general structure of the school building was mentioned as a deterrent from collaborating with colleagues. The school is set up with separate classrooms, sometimes on opposite corners of the school from the members in the specific PLCs (grade groupings), with the staff room used as a common room. Sadie stated, "the only times I see them is at lunch and recess and at that time you don't always want to talk about shop." One of the realities of the teaching profession was brought up by a few of the teachers. A few subjects explained the exhaustion of the profession, and the

improbability of teachers using their time after school or at lunch time for professional development. For example, Joan observed, “we are very isolated in our classrooms or we tend to be as teachers, and any opportunity to get together with people is good, because we are so tired by the end of the day, we don’t.”

4.2.4 Second area of conclusions: Isolation

The concept of isolation was an unexpected outcome of this research. It is connected to the theories behind PLCs (DuFour et al., 2005; Hargreaves & Fink, 2006; Lortie, 2002; Mitchell & Sackney, 2009a, 2009b; Sergiovanni, 1994; Stoll & Seashore, 2007), but it was not a concept I expected to be at the forefront of teachers’ thoughts. Nelson (2008) reiterates the standard practice of teaching in isolation by stating the components of teaching (instruction, reflection, evaluation) all occur typically occur individually, without the input of others. The structure of schooling severely handicaps attempts to get together for collaborative initiatives by the physical set up of individual classrooms and the inability to dialogue within a tight teaching schedule.

Many of the subjects explained the necessity of collaborating with colleagues, often using their lunch time breaks as a time for discussion. With a lunch break being the only available time in a school day to have collegial conversations, it is obvious why the majority of the teachers feel that teaching is an isolating profession. All the subjects in this research have a significant amount of teaching experience, but all felt isolated in their practice. The majority of subjects commented on the desire to dialogue with colleagues regarding their teaching practice, as a form of professional development. It was not the popular attitude that they could continue learning and growing on their own. Two of the eleven teachers expressed that, although they benefited from conversing with colleagues,

they did not think it changed their practice significantly. One of these two subjects said there was definite potential for enhancement, if the circumstances and structure of the professional learning community meetings were different.

Based on the positive comments about collaborative learning and the direct benefits of working in a professional learning community, it is natural that isolation would be a common theme, as the opposite reality of collaborative learning. As the teachers reflected upon their participation in the professional development this school year, the changes from previous years would be part of the reflection process. Evelynn enthusiastically explained one highlight of participating in the professional learning community, by stating, “we are running, literally in the middle of the day, literally, middle of teaching; I will be running over there with papers and say, okay, this worked; before I forget I need to give you this and you need try this and vice versa and I never would have done that before.”

Kalin and Zuljan (2007) describe the key aspects of extended professionalism as teachers working in small groups to plan and try out teaching processes, evaluating their effectiveness and solving various professional problems collectively. When working in isolation is compared to participating in a PLC, based on the key aspects stated by the author, an increased level of professionalism is evident. The majority of the subjects desired that extended level of professionalism, even though many of the teachers explained that it provided them with more work. With a greater understanding of the benefits of participating in a professional learning community, along with the desire to collaborate, rather than teach in isolation, I will explore criteria to sustain this form of professional development.

4.2.5 Third area of finding: Characteristics for self-sustaining professional development

The subjects were asked to give their views, based on their experience participating in a PLC, what characteristics they thought were necessary for this form of professional development to be or become self-sustaining. When sharing their personal experiences, the teachers appeared to focus on two main aspects of self-sustaining: buy-in and accountability.

The concept of 'buy in' needed to be redefined in terms of who was buying-in: the administrator, the teachers or the whole school community. Many teachers believed having the support and enthusiasm from the administrator was significant to the self-sustaining of the professional learning community. Examples of this view include comments from Sadie, Molly and Steve respectfully: "it has to come from the top because teachers might want to do it, but you can't do it without approval from administration," "if they are not on board, then it's not going to happen" and "obviously, the administrator has to be really behind them, because they really do make it happen." The comments regarding the administration support of the PLCs showed the necessity of having approval for a school-based activity.

Another aspect was mentioned by several teachers regarding the participation of the administration, not just support. The participation by the administrator in this school was crucial to the organization of the professional learning community meetings. For instance, Sadie commented, "you have to have the funding or you have to have a principal that can cover, or make sure that there are people that can cover all the classes." Kristy spoke specifically to this year's organization of the meetings, "certainly the

support from leadership which we have this year, which we didn't have last year, well we didn't even really have this opportunity to have the time set aside and to have it formalized." A combination of support and participation of the administrator was a key aspect to self-sustaining of the PLCs.

Some teachers reflected on the importance of the subjects of the PLCs completely buying in to the process and valuing the time spent on this form of professional development. The understanding that the time spent at the meetings "was sacred" and not to be confused with socializing, seemed to be an important comment among the subjects. For example, Steve stated, "I think people have to really feel like they are, like the time is worthwhile...they have to feel it is quite a benefit." Grace commented, "I think there needs to be, almost a feeling that the group and the time the group spends together is extremely important and that all input is valued and not let other things come in the way." Some teachers looked at buy-in from an individual perspective, linking it to personal motivation and willingness to put in extra work.

Another common view was the buy-in of the whole school community. The underlying concept was the whole school community was needed for the PLCs to run effectively. Both the belief in the concept of PLCs and the ability to manoeuvre schedules and coverage were important for this form of professional development to be or become self-sustaining are demonstrated in comments from Molly, Brennan and Sadie respectfully: "the whole school needs to be supportive of the idea and not thinking that it's a waste of time," "I think everyone else needs to be supportive and buy-in to it and want to prepare just a little bit to be there, for that day," and "have everyone buy into it or everyone believe in it." Many of the teachers discussed the amount of time and effort

that went into planning, and organizing the professional learning community meetings would have been impossible without the whole school supporting the idea and putting in extra effort. Grace stated for this form of professional development to be or become self-sustaining in the future, “it’s going to involve a lot of people deciding that it’s equally valuable to them, and that’s where the change will have to happen.”

The other major characteristic of self-sustainability, in the subjects’ experience, is the necessity of accountability. I divided the comments about accountability into two sub-codes: accountability to administration and accountability to colleagues.

Overwhelmingly, the subjects discussed the importance of being accountable to colleagues, rather than administration. The subjects consistently identified the need to report back to their PLCs, based on their findings in their own classroom. Lerae stated, “it keeps you kind of accountable for what’s going on because you have a group to report back to, so we set a goal and then during that month or few weeks, it’s always on the top of my mind what our goal was, what I’m trying to do before we meet back.” Kayla commented, “quite often something will come up and interrupt, so you will not do that today and then you sometimes don’t get back to it, but when you are accountable because you are going to meet again and discuss how it went, I think you stay more on topic and get through curriculum that you might not do as good of a job on if you didn’t have that accountability.”

Some other subjects discussed accountability in terms of goal-setting and assigning roles. It appears that the teachers wanted a structure attached to the format of the PLC meetings, in order to maintain a level of accountability within the group. Lerae supported this view by stating, “I think setting a goal, making sure everybody has

something to do before they report back...if you don't have a goal you tend to slack off and have nothing to share.” A few teachers commented on the fact that it was easy to relax, once they had a chance to sit down in their busy school day, and difficult to maintain effort unless a goal was attached to the outcome of the meeting. Having a level of accountability allowed for the continued involvement by all subjects, at a level the group felt was beneficial.

4.2.6 Third area of conclusions: Characteristics for self-sustaining professional development

The concepts of ‘buy-in’ and ‘accountability’ are found throughout the literature on PLCs (DuFour et al., 2005; Mitchell & Sackney, 2009a; Sergiovanni, 1994). Sergiovanni suggests buy in occurs when people feel what they are doing is meaningful and valuable to themselves and the greater community. Therefore, there is a strong connection between believing in the value of a professional learning community and buying-in to the concept of this form of professional development. Many of the teachers discussed the importance of the belief in the concept of PLCs, not just among the teachers, but the whole school community. Mitchell and Sackney support this opinion when they discuss the ecological perspective of learning communities and the inherent nature of interdependence within a healthy, striving community. An ecological perspective is a framework to examine the multiple effects and interrelatedness of social elements in an environment. That is the link to self-sustaining professional development. Once the whole school community is putting time, energy and belief into the concept of PLCs, the continuation will be much more likely to happen. Grace was referring to the

buy-in of the whole school community, when she stated, “I believe it would just carry itself, I think it’s in the nature of our profession, as long as the other bits are in place.”

The difficulty I anticipate with ensuring buy-in by the administrator, teachers and, ultimately, the whole school community, is the transient nature of school communities. What happens when a new administrator takes over? What about staff turnover? Within the teaching profession, there is not a lot of security and consistency from year to year. Mitchell and Sackney (2009a) discuss the importance of not relying on one source of inspiration and energy, but diversifying and sharing roles of leadership with other educators. By not relying on one sole leader for direction and support for the PLCs, it is more probable to maintain self-sustaining professional development. Although, as many subjects stated in the interviews, it was very important to have the support and encouragement from the administration, to ensure the logistics of the meetings were organized. In a utopian world, the energy and commitment from the whole school community would be healthy and strong enough to invite new members in and continue to strive. In reality, this may be one of the most significant struggles of self-sustaining professional development.

The accountability factor, in comparison, is a more simple solution. Many teachers are very comfortable with goals and the structure involved with accountability. Eight out of the eleven subjects discussed the need for accountability, as well as the desire for it. Accountability was often linked to the benefits and the value of the time spent in the PLCs, almost as if the teachers needed to prove the worth of the time spent together by sharing accomplishments. DuFour and Eaker (1998) explain that groups are most effective when they are clear about the results they intend to achieve. This provides

a purpose and a direction for the group to strive towards and an end point when the goal is reached.

Mitchell and Sackney (2009a) take a less structured approach to accountability, moving away from goal-setting and achieving, towards ‘peer pressure’ interdependence. The authors discuss the relationship aspect of accountability, relating it to a natural sense of intrinsic motivation to accomplish and grow along with the rest of the community. Rather than meeting specific goals, the relationship aspect involved in a high-capacity learning community is the force that provides the continuation of development. In regards to self-sustainability, perhaps both forms of accountability, goal-setting and interdependence, are needed to meet the needs of all the subjects and the continuation of professional development.

4.3 Suggestions for improvement

The subjects offered suggestions during the interview process on how the PLCs could be improved in the future, based on their experience this school year. These suggestions emerged through the dialogue surrounding the five interview questions stated in Chapter Three. Two main themes emerged from the data collected: the need for more time and the need for a shared leadership model to be implemented. Overwhelmingly, the issue with time was mentioned as the most significant improvement that is necessary for the continuation of PLCs.

The lack of available time in the school day is a chronic problem when scheduling professional development. It was clear that the majority of the teachers—all except one—mentioned the value of having the PLC meetings during the school day, rather than after school or at lunch time. An example of this is in this statement from

Brennan: “I really need my two hours after school to prep for the next day, and every meeting that cuts into that has a dramatic effect on my kids, and so if you block out an hour of that time, voluntarily or involuntarily, it will affect the kids’ learning the next day.” Steve agreed by stating, “I think once you start scheduling it outside the regular school hours, you to some extent are going to have a lot less participation.”

Many of the subjects discussed the need for more time to be devoted to PLCs. Some teachers commented on the frequency of the meetings. Kayla stated, “once a month wasn’t quite enough maybe every two weeks would have been good, I don’t know, maybe if it was the same length of time and it was every two weeks or if it was a little longer, every month would be enough.” Joan indicated, “a month is too far and every week would be even a bit too frequent. We wouldn’t have time to put to practice what we had talked about where every two weeks I think it would make it a more consistent.” Molly echoed the comments above by stating, “it would be more beneficial to have it every other week.” Based on the comments from the subjects, the ideal frequency of meetings for this group of teachers would be bi-weekly. The frequency of meetings will obviously depend on the group’s composition and commitments. The important aspects are the ability to have negotiated scheduling for teachers to believe in the positive outcome of collaborative learning and have a sustained desire to continue their participation in the professional learning community. Such practices will help to ensure greater self-sustaining professional development.

Some other teachers had other ideas regarding the use of professional development days, to assist the PLC model. Grace commented, “I always think that maybe pro-d days could be used, you know, versus that idea of workshops or that idea of

sitting down to talk. But, often, administration takes over that time and it is sort of driven towards school goals and less around what we need as learners.” Many teachers agreed that learning within a professional learning community was more beneficial than the one-day workshop approach to professional development. Comments from Lerae, Molly and Joan include, “you can spend a whole day in a workshop and maybe get one or two ideas and here we spend an hour together and we get really practical ideas,” “sometimes you go to workshops and you spend a whole day there and, it may be all very interesting, but it’s not something that you take back and use right away,” and “when you go to pro-d conferences some things aren’t exactly as you expected them to be, or not much is offered that is really of interest to you” spoke to this theme. The idea of taking time and money used for the one-day workshop approach to professional development, and re-directing it to PLCs was a definite idea that emerged from the data.

Time is one of the most significant factors in successful implementation. It also shows value and importance when the time factor is considered and compensated at the district level. DuFour and Eaker (1998) believe “when teachers are expected to implement substantive changes at the same time that they manage everything else in their already overburdened schedules, there is little chance that the initiatives will be sustained” (p. 111). Teachers and administrators will know a district is serious about transforming schools into PLCs when they are given the time they need to handle the complexity of that task. Of course, with time comes the issue of funding; money is needed to provide for that release time for teachers.

Traditionally, the lack of time for collaborative learning has been a product of the factory model upon which schools were organized. The American vision of teaching has

traditionally called for teachers to instruct large groups of students for virtually the entire school day. In a PLC, time is considered a critical component in learning, and the school becomes resourceful in providing additional time. If learning is to be the constant for the whole school, time must become a variable (Dufour et al., 2004).

Sergiovanni (1994) believes external learning resources, such as workshops associated with special projects or "in service," sessions represent others' ideas about needed skills and knowledge, but seldom reflect teachers' thoughts about what they need to learn. That is reflected in the attitudes of the teachers interviewed for this research, as well as many of my colleagues throughout the past ten years in the profession. With the amount of time and money put into the one-day workshop model of professional development, paired with teachers' experiences of the level of benefit from the workshops, it appears that putting money into supporting the implementation of PLCs would be more effective.

The structure of the PLC meetings was another area in need of improvement in the future. Although the groupings structured their meetings differently, there was a definite facilitator position within each group. The subjects commented on the need for that role to exist, in order to keep the structure and level of accountability present, although, many felt that role should be shared amongst the members. Grace reported that, "I just think that we would all learn so much if those roles were shared a bit more." Kristy said, "my only concern this year is because I was the one who went to the workshops, I feel like I have dominated the PLC's and I don't want that role, I don't think that's the best way for professionals to learn." The PLCs were focused on writing this school year, but ideally, some of the subjects discussed the need to share areas of

expertise with each other. For instance, Brennan believed, “in a perfect world there would be something like that for math and there would be something like that for maybe the content areas, or your social responsibility or whatever.” The idea of allowing each member to exhibit leadership and share their strengths with the rest of the group seemed to be a direction of self-sustaining and growth within the PLCs.

Another conclusion is that efforts to create a shared leadership model would add to the self-sustaining of professional development. Not only does increased leadership among the members increase their level of buy-in, but it assists the model of PLCs to sustain itself through growth and interdependence. Mitchell and Sackney (2009a) comment on the necessity of shared leadership on all levels of the educational hierarchy to be a central component of self-sustaining and effectiveness of PLCs. The authors state the learning community will not maintain a level of effectiveness,

if teachers encourage students to become lifelong learners but provide no evidence of their own intellectual curiosity, if principals extol the virtues of collaboration but use autocratic leadership styles, if superintendents advocate innovation and risk-taking but punish those whose experiments fail to produce the desired results. (p. 28)

Sergiovanni (1994) asked some similar questions about the shared leadership model: “Does hierarchy equal expertise? Or equal superior moral responsibility?” (p. 2). The fact that the teachers were seeking out greater leadership roles within the school is a positive sign of their commitment to this form of professional development. Once the level of interdependence is sustained among the school community, perhaps the hierarchical structure will not be as defined.

4.4 Summary

This chapter presented the data analysis of the study on PLCs in one school with 11 subjects. The subjects concluded the major benefit of participating in a professional learning community was collaborative learning, which included sharing, perturbation-based learning and group planning. The general experience of the subjects was that teaching is an isolating profession. Based on the characteristics of self-sustaining professional development identified by the subjects, the major need for continuation of PLCs depended upon buy-in from people involved and the need for accountability. Subjects suggested two main areas of improvement in the format of PLCs involving more time and shared leadership. The last chapter provides recommendations for further practice and research. This paper will now proceed with a discussion of the recommendations based on the data mentioned in this chapter.

Chapter Five Conclusions and Recommendations

5.1 Overview of study recommendations

This final chapter presents recommendations as a result of this study and a description of the implementation process to determine how one could (a) implement a PLC, and (b) create the conditions to develop self-sustaining professional development. Recall from chapter one that a PLC is defined as a form of professional development used to improve student learning or support curriculum, through the component of continuous learning and collaborative learning among a group of teachers. The following research questions and recommendations in each of the areas of study will be discussed:

- a. What benefits do these teachers perceive in participating in a professional learning community?
- b. What do participants view as some of the essential features of a professional learning community?
- c. What do participants view as the characteristics needed to create meaningful professional development for each teacher involved?
- d. What are the necessary characteristics for implementing a realistic, practical model of a professional learning community to ensure effective professional development?

I have also included a section describing a point of interest which emerged through the data analysis. I conclude the chapter with a discussion regarding self-sustainability in professional development and suggestions for further research.

5.2 What benefits do these teachers perceive in participating in a professional learning community?

The overall benefit for the subjects in this research was collaborative learning. Within the collaborative practice of this learning community, there was a noted difference between surface learning versus interdependence learning that was evident among the subjects, which is connected to the criteria of collaborative learning. Many teachers found it beneficial to share resources and exchange lesson plans with other teachers. This appears to be surface collaborative learning, learning which takes place in the head. Some teachers found it beneficial to discuss problems and collectively look for solutions. This appears to be interdependence collaborative learning, or learning that takes place in the heart.

5.3 What do participants view as some of the essential features of a PLC?

Interdependence and self-sustainability are two main critical features of a community. According to Sergiovanni (1994), communities are collections of individuals who are bonded together by natural will and who are together bound to a set of shared ideas and ideals. In order for a community to maintain self-sustainability and growth, a sense of interconnectedness needs to be present. The “bond” is an important part of the necessity to keep a community healthy and striving towards their goals.

5.4 What do participants view as the characteristics needed to create meaningful professional development for each teacher involved?

Based on these subjects’ experiences, meaningful and relevant professional development is probable with the characteristic of small group interaction at the same grade level and shared leadership. By keeping the PLC groupings small, there is a greater

chance of hearing everyone speak and share their opinion. There is a sense of intimacy that is difficult to achieve with a facilitated workshop or even a staff meeting.

Implementing shared leadership into the format of the meetings was one of the main suggestions for improvement from the subjects. By constantly changing the roles of leadership within the group, each participant has the responsibility to share information, conduct the meeting appropriately and transfer enthusiasm about an aspect of teaching and learning.

5.5 What are the necessary characteristics for implementing a realistic, practical model of a professional learning community to ensure effective professional development?

The characteristics discussed by participants include:

1. time
2. time embedded within the school day
3. buy in
4. shared leadership
5. collaborative learning
6. interdependence

5.6 Vulnerability

As a result of the case study approach, which allowed for a wide range of data to emerge through the open-ended interviews, a point of interest—vulnerability—emerged from the data analysis. This finding will be discussed based on how it a) can emerge into further research and, b) affected my study.

The interview questions were open-ended and allowed the subjects to openly share information that was relevant to their experience, which in the case of one group, led to the emergence of the concept of vulnerability. Vulnerability was linked to perturbation-based learning in the data analysis. It appears that by allowing the other group members to see what was not going well in the classroom and what he/she needed assistance with, the participant gained a greater level of professional development.

The teachers who showed vulnerability and became dependent on the other group members allowed for greater improvement to be evident. For example, Evelynn disclosed, “it’s helped the four of us become closer as colleagues and a better team and supporting one another better. We have really come to trust one another and I know there are three other people that I could go to any time for ideas and I know they are non-judgemental and they will just support me.” Joan stated, “I can’t tell you how many times I run to the other K teacher—we have interlocking doors—so I will be doing something and I will literally run across to her room and say, you have to come and see this right now, just come in and look.” Molly commented that, “one of the biggest things was to sit in one of those meetings and say to colleagues, ‘I don’t know what to do.’ Or, everybody says this works, it didn’t work for me. And what was really releasing was having other people say, ‘it didn’t work for me either.’” In order to understand this further, it would be useful to conduct research on vulnerability and its effects on the individual teachers and the learning community as a whole in order to better understand how relationships affect teachers’ motivation and desire to improve practice. This concept relates to interdependence. For interdependence to flourish, it seems necessary to allow oneself to

be vulnerable, in addition to accepting vulnerability as a sign of strength, and not weakness.

The concept of vulnerability affected my study when I analyzed the data based on the criteria, and realized each PLC used their professional development in different ways. I was able to isolate the group that did show vulnerability, as it related to the criteria of interdependence, and examine their dialogue. The noticeable point of interest was the relationship that developed among the subjects of the group that showed interdependence, which was complex rather than superficial. This is similar to Mitchell and Sackney's (2009a) concept of a high-capacity versus low-capacity learning community. The high-capacity environment invites educators to constantly examine and question their own practices, reflect on outcomes, and share their personal learning voyages with others (Mitchell & Sackney). Mitchell and Sackney argue that it is the sense of community and interdependence that increase the possibility of the PLC becoming self-sustaining.

5.7 Main issue – self-sustainability

From the conception of my idea to research PLCs and seek understanding about their effectiveness as a form of professional development, I had a heightened interest in the concept of self-sustainability. Why is there an emphasis placed upon new, innovative teaching ideas when the main problem is self-sustaining professional development, I wondered? Throughout my own teaching career I have observed colleagues becoming motivated by a new, innovative way of teaching they learned through a workshop, only to become overwhelmed with the day-to-day demands of a classroom teacher and not follow through with their plans for reform. In my experience, accountability and organizational

support are important characteristics to have in place in order for follow-through to even be possible.

As an underlying query throughout my research, I often asked questions about the possibility of increased self-sustaining of PLCs, due to the nature of the reflective practitioner model, the consistency, the peer accountability and the role of shared leadership. When reflection is considered part of the teaching profession, will that increase the level of teacher efficacy? Is peer accountability a more powerful form of accountability when there is a level of interdependence among the community? Is consistency the key to maintaining motivation in educators? A strong leadership is important, but is it stronger than shared leadership? What are the characteristics that will increase the likelihood of teachers staying in the teaching profession, even when faced with challenges? How is professional development maintained throughout a teacher's career? All issues stand for further research, but perhaps self-sustaining of PLCs is the important connection that the education community has been searching.

5.7.1 The connection between self-sustaining and a PLC

According to Mitchell and Sackney (2009a), the concept of sustainability is simply “the evidence of authentic learning emerges naturally when people attend to conditions in their environment and respond in ways that have personal meaning for them” (p. 13). By combining the natural human reaction to learn in a social setting, and enhance it by creating personally meaningful opportunities for both teachers and students, the result of improved student learning is an expected result. Sergiovanni (1994) states that student learning will improve when teachers focus on learning themselves; “the ultimate payoff of teachers’ learning opportunities depends upon teachers’ opportunities

and commitment to work together to improve instruction for the students in their school” (p. 3). When teachers are focused on student learning they seek out methods to extend the depth of that learning. Perhaps, the idea of peer accountability leads to the concept of increased self-sustainability and effectiveness in teachers. Mitchell and Sackney demonstrate that by the very nature of interconnectedness in relationships: learning is cyclical and self-feeding.

Furthermore, the concept of self-sustaining means not relying on one source of inspiration and energy. Diversifying and sharing roles of leadership with other educators allows teachers to not depend solely on one leader. By logical conclusion, if there is not one, solid leader that the whole school is relying on for improvement, the opportunity to take away that leadership role through attrition, and leave teachers in a vulnerable, dependent state, is taken away as well. To become a professional learning community, a school must transcend its dependence on a single leader and develop a culture that sustains improvement despite the departure of key individuals (DuFour, Eaker & DuFour, 2005). Within our current education system there is so much movement with principals and key teachers that the shared leadership model is needed—at a foundational level.

Fullan (1993) relates sustainability to the capacity of a system to engage in continuous improvement consistent with values of human purpose. In order for a PLC to show self-sustainability it needs to continue to exist, but at a level that is meaningful for all members. In simplistic terms, the professional learning community will involve:

- a. shared leadership
- b. interdependence among the members
- c. a shared set of ideas and values to strive towards

- d. perturbation-based learning
- e. continual motivation to develop professionally

5.8 Recommendations for further research

The self-sustaining aspect of learning communities is difficult to research, due to the nature of time needed to ensure the continuation of a professional learning community. It is important for the educational community to see valid results of self-sustaining over a length of time, in order to adjust policies and procedures of professional development.

I would have preferred to have conducted a study over three to five years to be able to further define the characteristics for self-sustaining in professional development, or conducting “a cross-site or cross-case analysis” in order to improve generalizability (Merriam, 1988); however, the lack of time and resources prevented me from carrying out that initiative. Several questions arise when I consider such a longitudinal study. Are PLCs effective professional development, based on the criteria extrapolated from Mitchell and Sackney (2009a)? Does deep, reflective thinking ensure effective professional development? Does the transient nature of teachers and administrators affect the self-sustaining and effectiveness of PLCs? What is the effect of “buy in” at the district level, concerning the self-sustaining PLCs? Is there a decrease in attrition in the teaching profession, when teachers focus on collaborative learning rather than isolation?

Another important element I would want to explore is the students’ learning throughout the three to five years of study. How do students’ learning environments change when their teachers are involved in collaborative learning? What are the differences in academic achievements and critical and creative thinking with the students

of “learning community” teachers compared with students of “non-learning community” teachers?

5.9 Summary

This thesis examined literature on learning communities, as well as empirical data analyzed for this case study. The data was analyzed to assist in responding to the four research questions presented in chapter one. Chapter one provides an introduction to the study; chapter two a review of the literature on PLCs and effectiveness; chapter three describes the research design; chapter four analyzes the data; and chapter five responds to the research questions and gives further recommendations.

Based on the findings from this study, the PLC in this case did corroborate the concept and practice of participating in this form of professional development. Also self-sustainability is a possibility, given the time and commitment from all people involved. A significant element of success seemed to be the interdependence of the PLC. The interdependence of a school cannot be found in a recipe approach to professional development, but needs to be developed within the community.

Mitchell and Sackney (2009a) argue that no two learning communities look similar, and that if they develop interdependence, it is unique to that community. The authors state the capacity-building model takes a more respectful view of learners and educators than the traditional view of education. It also takes a more sustainable view of learning and teaching. Fullan (2005) agrees, “capacity building is a daily habit of working together, it cannot be learned through a workshop. It needs to be learned by doing it, consistently, on purpose” (p. 69). Self-sustaining professional development is important if PLCs are to have a lasting impact on both the subjects and on the learning

environment of the school. Further research is necessary to determine if interdependence, collective buy-in from the subjects and shared leadership are sufficient to ensure the continuity of this form of professional development.

References

- British Columbia Teachers Federation (2010). Backgrounder: Purpose for professional development. <http://bctf.ca/professionaldevelopment.aspx> July, 2010.
- Capra, F. (2002). *The hidden connections: Integrating the biological, cognitive, and social dimensions of life into a science of sustainability*. New York, NY: Doubleday.
- Capra, F. (2007). Sustainable living, ecological literacy, and the breath of life. *Canadian Journal of Environmental Education*, 12, 9-18. Retrieved from <http://www.eric.ed.gov/PDFS/EJ842778.pdf>
- Crowther, F, Hann, L, & Andrews, D. (2002). *Rethinking the Role of the School Principal: Successful School Improvement in the Postindustrial Era*. The Practicing Administrator, Australia.
- de Mare, P. (2008). An apologia for the human mind. *Group Analysis*, 41, 5-33. doi:10.1177/0533316408088409
- Doppelt, Y., Schunn, C. D., Silk, E. M., Mehalik, M. M., Reynolds, B., & Ward, E. (2009). Evaluating the impact of a facilitated learning community approach to professional development on teacher practice and student achievement. *Research in Science & Technological Education*, 27: 3, 339-354. doi:10.1080/02635140903166026
- DuFour, R. P. (1991). *The principal as staff developer*. Bloomington, IN: National Education Service.
- DuFour, R. & Eaker, R. (1998). *Professional learning communities at work: Best*

- practices for enhancing student achievement.* Bloomington, IND: National Education Service.
- DuFour, R., DuFour, R. Eaker, R. & Karhenak R. (2004). *Whatever it takes: How professional learning communities respond when kids don't learn.* Bloomington, IND: National Education Service.
- Enthoven, M., & de Bruijn, E. (2010). Beyond locality: The creation of public practice based knowledge through practitioner research in professional learning communities and communities of practice. *Educational Action Research, 18*(2), 289-298. doi:10.1080/09650791003741822
- Fullan, M. & Hargreaves, A. (1992). *Teacher development and educational change.* Bristol, PA: Falmar Press.
- Fullan, M. (1993). *Change forces: Probing the depth of educational reform.* Bristol, PA: Falmar Press.
- Fullan, M. (1999). *Change forces: The sequel.* Philadelphia, PA: Falmar Press.
- Goldenburg, C. (2004). *Successful school change: Creating settings to improve teaching and learning.* New York: Teachers College Press.
- Hargreaves, A. & Fink, D. (2006). *Sustainable leader.* San Francisco, CA: Jossey Bass.
- Jordi, R. (2011). Reframing the concept of reflection: Consciousness, experiential learning, and reflective learning practices. *Adult Education Quarterly, 61*:2, 181-197. doi:10.1177/-741713610380439.
- Joyce, B., Wolf, J. & Calhoun, E. (1993). *The self-renewing school.* Alexandria, VA: Association for Supervision and Curriculum Development.

- Kalin, J. & Zuljan, M. V. (2007). Teacher perceptions of the goals of effective school reform and their own role in it. *Education Studies*, 33:2, 163-175.
doi:10.1080/03055690601068329
- Kearney, D. (2010, July). Professional development and professional conversations. *Advancing Professional Practices and Leadership in Education*, 3, 1-4.
Retrieved from <http://bctf.ca/uploadedFiles/Public/ProD/APPLE/APPLE-July2010.pdf>
- Kilbane, J. (2009). Factors in sustaining professional learning community. *NASSP*, 93(3),184-205. doi:10.1177/0192636S093S8923
- Lortie, D. (2002). *School-teacher: a sociological study*. Chicago: University of Chicago Press.
- Maloney, C. & Konza, D. (2011). A case study of teachers' professional learning: Becoming a community of professional learning or not? *Issues in Educational Research*, 21(1), 75-87. Retrieved from <http://www.iier.org.au/iier21/maloney.pdf>
- Merriam, S. (1988). *Case Study Research in Education: A Qualitative Approach*. San Francisco, CA: Jossey-Bass.
- Mitchell, C & Sackney, L. (2009a). *Sustainable Improvement: Building learning communities that endure*. Rotterdam, The Netherlands: Sense Publishers.
- Mitchell, C. & Sackney L. (2009b). Sustainable learning communities: From managed systems to living systems. International Congress for School Effectiveness and Improvement. Vancouver, BC
- Musanti, S. I., & Pence, L. (2010). Collaboration and teacher development: Unpacking

- resistance, constructing knowledge, and navigating identities. *Teacher Education Quarterly*, 37(1), 73-89. Retrieved from <http://search.ebscohost.com.ezproxy.library.ubc.ca/login.aspx?direct=true&db=eric&AN=EJ872650&site=ehost-live>
- Nelson, T. H. (2008). Teachers' Collaborative Inquiry and Professional Growth: Should we be optimistic? *Science Teacher Education*. doi:10.1002/sce.20302
- O'Sullivan, K., Carroll K. & Cavanagh M. (2008). Changing teachers: syllabuses, subjects and selves. *Issues in Educational Research*, 18(2), 167-182. Retrieved from www.iier.org.au/iier18/osullivan.pdf
- Olson, J. & Barrett, J. (2004). Coaching teachers to implement mathematics reform recommendations. *Mathematics Teacher Education and Development*, 6, 63-78. Retrieved from http://www.merga.net.au/documents/MTED_6_Olson.pdf
- Punch, K. F. (2009). *Introduction to research methods in education*. Los Angeles, CA: SAGE Publications.
- Schostak, J. F. (2002). *Understanding, designing and conducting qualitative research in education: Framing the project*. Buckingham, UK: Open University Press.
- Schmoker, M. (2005). Here and now: Improving teaching and learning. In DuFour, R., Eaker, R., & DuFour, R. (Eds.). (2005). *On Common Ground: The power of professional learning communities* (p. xi-xiv). Bloomington, IND: National Education Service.
- Scott, D. & Morrison, M. (2007). *Key Ideas in Educational Research*. New York, NY: Continuum.
- Sergiovanni, T. J. (1994). *Building Communities in Schools*. San Francisco, CA:

Jossey-Bass.

Servage, L. (2008). Critical and transformative practices in professional learning communities. *Teacher Education Quarterly*, winter, 63-77. Retrieved from http://www.teqjournal.org/backvols/2008/35_1/10servage.pdf

Servage, L. (2009). Who is the “Professional” in a professional learning community? An exploration of teacher professionalism in collaborative professional development settings. *Canadian Journal of Education*, 32, 149-171.

Stoll, L. & Seashore, K. (2007). *Professional learning communities: Divergence, depth and dilemmas*. Maidenhead, UK: McGraw-Hill/Open University Press.

United Nations. (2011). Backgrounder: United Nations decade of education for sustainable development. http://www.gdrc.org/sustdev/un-desd/intro_un-desd.html Nov, 2010.

Walliman, N. & Buckler, S. (2008). *Your dissertation in education*. Los Angeles, CA: SAGE Publications Ltd.

Appendices

Appendix A: Professional learning community template

Professional Learning Communities:

Staff Attending: _____

Who will record: ☺ _____

Who will share with Administrator: ☺ (It would be great to meet on that day so it is fresh in everyone's mind!) _____

Question or Topic: _____

Plan: _____

Followup (If Required): _____

Resources (If Required): _____

Appendix B: Interview questions

Interview Questions – Subjects of Professional Learning Communities

1. Has participating in the professional learning community throughout the past eight months affected your teaching practices? If so, how?
2. Has participating in the professional learning community throughout the past eight months affected your students' learning? If so, how?
3. What were the benefits of working collaboratively with your professional learning community?
4. In your experience, are professional learning communities an effective form of professional development? By effective I mean a profound shift in how educators think about, talk about and value learning. Please explain.
5. In your experience, what criteria are necessary to ensure self-sustainability of a professional learning community?