

The Next Step: A Grounded Theory of How Teachers Network to Learn

by

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B.Ed., University of Victoria, 1981

M.A., University of Victoria, 1991

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Abstract

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The constructivist grounded theory, actualizing collaborative learning, conceptualizes how British Columbia primary grade teachers interacted with the professional learning endeavour Changing Results for Young Readers (CR4YR). CR4YR was a British Columbia Ministry of Education initiated and co-facilitated cross-school Network Learning Community that included educators from four levels of the school system. While Network Learning Communities, such as the CR4YR initiative, have been increasingly utilized as professional learning models for educators, a review of the literature indicated that questions remained as to how teachers, who were unaccustomed to collaborative learning endeavour, adapted to environments in which vulnerability was the primary learning tool. This study addressed this knowledge gap. The theory, actualizing collaborative learning, emerged from analysis of data gathered through semi-structured interviews with 22 CR4YR participants in five British Columbia school districts. The interviewees included school district administrators, Reading Advocates, and teachers. The resulting theory specifies that collaborative learning in CR4YR was built upon the interaction of the four sub-processes: establishing trust, identifying with collaborative learning, becoming vulnerable, and mobilizing collaboration to the school. The participants' utilization of the four sub-processes was impacted by three contextual factors which were skilled leadership, interlinking points of contact, and the extended time period allocated for the CR4YR initiative. The theory extends current

conceptualizations of professional learning in network learning communities by identifying the contextual factors and sub-processes that support teachers as they acclimatize to collaborative learning in cross-school environments with representation from multiple levels of the school system.

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Finally, I express my deep gratitude to my husband, Colin Pike, and my sons Andres and Sergio, whose encouragement, faith, and support enabled me to undertake and complete my doctoral studies.

Dedication

To my family,

Colin Pike, Andres Pike, and Sergio Pike,

for unwavering support, patience, and love.

Chapter One

Introduction

Some years ago, as a member of a regional literacy leadership group charged with the task of discussing the implementation of a newly introduced set of practices for the middle and high school grades, I was curious about the discrepancy between my perspective and that of another participant. I had put forth a model in which I speculated that each teacher's professional practice could be viewed as existing somewhere along a continuum, and that movement along this path toward meeting the objectives being discussed involved recognizing both the affective and cognitive dimensions of the changes in practice. My colleague argued that teachers' professional development would be best implemented by having new best practices modeled by lead teachers; an approach that I felt belied the complexity of the change process.

It was not until recently when I began reading about the problems encountered in various school jurisdictions in the face of educational system reform that I was able to articulate the epistemological beliefs that supported my supposition about how educators adapt to pressure to modify their practice. I came across research that linked changes in teacher identity with change in professional practice, and noted the parallel between a gradual shift in teacher identity and the incremental nature of professional development I had observed in many of my colleagues. As a British Columbia (BC) teacher steeped in a model of professionalism that demands respect for all ways of thinking, I needed no convincing of the need to acknowledge individuality among teacher identities and recognize the importance of according dignity to any teacher in the process of

professional transformation. When I was introduced to the concept of Network Learning Communities (NLCs) I readily saw in them the potential to effect change in teaching practice within communities of professionals in ways that were respectful and accorded teachers ownership for their learning.

I identified with this form of learning and with the potential this model held as a learning environment. My experiences as an educator, which span three decades, provided me insight into the benefits and risks inherent in forms of collaboration that involve deprivatization of practice. My memberships on local committees and learning teams, and in larger professional movements while serving on provincial committees, have taught me the power of cognitive dissonance and of collaboration as learning tools. Therefore, I was highly motivated to investigate how it is that teachers learn professionally in Changing Results for Young Readers (CR4YR), a type of NLC in British Columbia, Canada, and the focus of this research.

CR4YR was brought to my attention by a personal contact at the BC Ministry of Education. As the description of the BC NLC indicated that it was financially well resourced, had appointed respected professional development providers to each district to co-facilitate the network meetings, and was based on a constructivist philosophy of professional learning, I believed that the BC NLC model offered an important research site capable of providing insight into how teachers interacted with these environments in order to learn.

Definition of Network Learning Communities

NLCs are organizational arrangements whereby representatives from two or more schools engage in collaborative processes that systematically build the professional

capacity of the individual members to positively affect the learning of students (Katz & Earl, 2010; Muijs, West, & Ainscow, 2010; Rutherford & Moore, 2012; Trotman, 2009). NLCs have become increasingly utilized as a way of mobilizing knowledge in educational circles (Katz & Earl, 2010; Jackson & Temperley, 2007; Stoll, 2009; Trotman, 2009). Katz, Earl, Jaafar, Elgie, and Foster (2008) report that as professional learning models NLCs are based on epistemologies that emphasize knowledge creation and/or “adding value to existing knowledge” (p. 112) as opposed to knowledge transfer. In particular, networks have the potential to break down the isolation that often exists between teachers, between schools, and between jurisdictions which impedes knowledge dissemination and innovation (Hopkins, 2003).

Rationale for the Inquiry

While the above definition and expressed advantages of network learning communities are commonly espoused in the literature, this form of learning is, for many, a “new vehicle of achieving change” (Katz et al., 2008, p. 112), and one that may require educators to contend with unfamiliar epistemological orientations to professional learning (Dooner, Mandzuk & Clifton, 2008). Creating working networks is not achieved easily (Hopkins, 2003).

Researchers have begun to unravel the components of NLCs that appear to lead to productive learning environments. For example Katz and Earl (2010) designed and field tested their theory in action, a theoretical explanation of how NLCs operate to meet their ultimate goal of informing pedagogy. This theory details key factors that lead to successful NLCs: clear foci, positive relationships among members, collaborative inquiry, and leadership involvement. Hopkins (2003) similarly noted that a NLC must

have membership that shares “consistency of values and focus” (p. 5), have organizational structures that allow access to a range of viewpoints, practice evidence-based knowledge creation, and have skilled leadership.

Although many governments such as that of the United Kingdom, and now British Columbia, have adopted NLCs as ways in which to develop professional learning (Katz & Earl, 2010; Jackson & Temperley, 2007; Stoll, 2009; Trotman, 2009), there is concern that as yet the efficacy of network learning is an under-researched area (Katz & Earl, 2010; Jackson & Temperley, 2007; Muijs, West, & Ainscow, 2010; Niesz, 2010; Stoll, 2009; Trotman, 2009). While NLCs appear to have the potential to be viable ways in which to learn professionally, the outcomes are qualified.

Research findings indicate some NLCs have risk factors that either singularly or collectively jeopardize the effectiveness of this model as a way of mobilizing information to participants (see Trotman, 2009). In particular, the ability of leadership (Lieberman & Grolnick, 2005; Trotman, 2009) to facilitate the process at both the network and school levels is critical, and in many studies has proven to be problematic. As NLCs are framed around a knowledge creation philosophy of learning as opposed to knowledge transmission (Katz et al., 2008), network leadership is required to understand how to facilitate these types of learning situations. Trotman (2009) conducted a longitudinal ethnographic study to observe and interview headteachers as they engaged in NLCs in the United Kingdom, a country where this practice has been heavily supported by the government. Network membership with leadership that was attuned to the intent of collaborative learning and that had the required skill sets to facilitate such situations appeared to be able to engage in deprivatization of practice and to benefit from the

collective expertise in the group. Conversely, those participants who were in networks that lacked leadership with this level of awareness and the necessary facilitative skill sets were unable to realize the above mentioned level of engagement in the NLCs.

In addition, Katz et al. (2008) claim that collaborative inquiry, the ability to critically question and seek ways in which to improve practice in a public forum, is central to learning in NLCs. However, engaging in collaborative learning environments in this manner, as seen through research conducted at the school level has proven to be an area of concern. For example, Dooner, Mandzuk and Clifton (2008) and Hargreaves (2001) found that the participants in their studies who lacked experience with this form of learning were reluctant to engage in it. Collaborative learning, as defined by Katz et al. above, demands viewing dissonance as a learning tool which for some may be a threatening and unfamiliar way to learn. Achinstein (2002) used ethnographic case study research methodology to study two school-wide collaborative professional learning initiatives in the San Francisco area. She documented that the participants in one research school ideologically described themselves as “embracing conflict, upholding dissent, and exploring multiple perspectives” (Achinstein, 2002, p. 446), and in practice engaged in “inquiry and ongoing renewal through challenging deeply taken-for-granted norms” (p. 446). However, Achinstein (2002) reported that the process exacted a toll on some staff resulting in “stress, burnout, and teacher turnover” (p. 449), and that some teachers described the situation at the time as “painful and frustrating” (p. 449). Lieberman and Grolnick (2005) suggest that for teachers whose experience with professional development is predicated on knowledge transmission models of learning, collaborative inquiry may require a reorientation to a new culture of learning. In my experience most

professional learning available to teachers in BC is still individualistic and based on transmission models of learning: that is, the content of the professional learning is determined by the professional development providers or the employers and is delivered in a lecture format. Therefore, I wondered how BC teachers would interact with the CR4YR initiative.

Additionally, the socio-constructionist organizational theory (Muijs, West, & Ainscow, 2010) upon which NLCs are built suggests that the success of the process will be unpredictable. For example, Dooner et al. (2008) and Chapman and Hadfield (2010) state that creating and maintaining a common purpose and focus have proved to be difficult in collaborative models of learning as teachers come together with diverse backgrounds and concerns. Yet researchers assert that the creation of a group purpose, capable of directing work within the network, is essential (Katz et al., 2008). How then do teachers, who come from different contextual realities, create a purpose and focus that has relevance for them as educators?

CR4YR had a further component that offered the opportunity to study how teachers interact with their fellow network members. Relationship, in particular the property of trust, is considered to be foundational in collaborate situations (Bryk & Schneider, 2002; Tschannen-Moran, 2001). However, what is not clear is how relationships conducive to collaborative learning develop. The CR4YR initiative involved four levels of the school system: teachers, school district Reading Advocates (RAs), school district administrators, and Ministry of Education personnel who acted as co-facilitators for the monthly meetings. Therefore, wide power differentials existed between the CR4YR participants. Additionally, the time period during which this initiative and the research interviews

occurred was politically sensitive for educators in BC due to a history of ongoing labour disputes (Fleming, 2011).

Finally, research findings have revealed the inconsistency of the successful transfer of knowledge from NLCs to the school level (Katz & Earl, 2010; Katz et al., 2008; Priestley, Miller, Barrett & Wallace, 2011). For example, in their multi-case, small sample study in Scotland, Priestley et al. (2011) reported that while the highly motivated teachers involved in the network found the experience valuable as professional development, implementation in their home schools was difficult.

Yet Katz et al. (2008) stressed that NLCs have the “potential to engender what Hakkarainen et al. (2004) talk of as networked expertise ... [that is] higher-level cognitive competencies that arise, in appropriate environments, from sustained collaborative efforts to solve problems together” (p. 115). However, still many questions remained, as detailed above, as to how teachers use collaborative environments to realize “higher level cognitive competencies” (Katz et al., 2008, p. 115) and the contextual factors that supported these processes.

Purpose of the Study

I detailed in the foregoing section the characteristics of NLCs that have been identified as positively contributing to professional learning situations for educators. I also identified problematic areas. The British Columbia Ministry of Education version of the NLC model, as noted above, holds the promise to overcome the previously mentioned shortcomings. Espousing a socio-constructionist organizational theory at the individual, school, district, and provincial levels, Ministry-appointed facilitators, who are subject-area specialists and have expertise working in professional development, were

assigned to every school district to work with the district level facilitators and groups of teachers as they established inquiry questions that directly related to both what is known about reading acquisition and their unique teaching contexts. This model appeared to offer the opportunity to study a NLC with a strong organizational framework.

The goal of my research, then, was to develop a constructivist grounded theory that conceptualized the processes utilized by British Columbia primary teachers as they participated in a NLC initiative. As noted above, a review of the literature reveals a significant gap in the conceptual understanding of how teachers function in sociopolitical networked learning environments. Previous studies have detailed the organizational features of NLCs that appear to facilitate professional learning (see Katz & Earl, 2010), but do not fully conceptualize how teachers interact with these program features in order to learn in collaborative environments such as CR4YR. This gap in the research was significant as many jurisdictions were utilizing NLCs as a means of providing professional development for teachers. Therefore, to support both the BC educators who use NLCs and the administrators who organize and facilitate the initiatives, further knowledge was required that illuminated the processes involved as teachers engaged in these initiatives.

The CR4YR initiative also had an overall organizational structure that was somewhat different than the NLCs reported in the literature, and as such offered me the opportunity to conceptualize the ways in which BC teachers: achieve trust in cross-school environments with representation from four different levels of the education system; utilize trust within these NLC situations; realize the ability to deprivatize practice in order to learn in inquiry-based collaborative environments; and mobilize knowledge from

the network situation to schools when working as school-based teams (as did the CR4YR participants). To this end CGT methodology was employed to create a theory grounded in the realities of BC teachers involved in the CR4YR initiative.

Research Questions

The central research question that guided this research was as follows: what processes are involved as teachers interact with a system-initiated cross-school and cross-district professional learning initiative so as to create and utilize cross-district networks and school based collaborative teams in order to impact primary grade readers? Two sub-questions supported the central research question and are as follows: how are formal and informal learning networks created and utilized to further professional development; and what factors influence the use of these networks as professional development resources?

Summary and Overview of the Chapters

In Chapter One I have situated my study in the larger educational context by explaining the theoretical constructs that NLCs are based upon, the advantages of learning in these types of situations, and the risk factors that can interfere with the success of NLCs as learning models. Further, I have identified the CR4YR initiative as a NLC that appeared to be structured in such a way that issues concerning leadership, relevance for the learners, and the disconnect between networks and schools have been alleviated. Finally I posed the questions that guided my research and proposed that developing a CGT that is grounded in the experiences of BC teachers offered the opportunity to provide further insight into how teachers interact with network learning.

In Chapter Two I present a review of the professional literature in the areas of NLCs of critical curriculum, identity, social capital, trust, and personal learning networks (PLNs).

In Chapter Three I discuss how constructivist grounded theory (CGT) was utilized to conduct this research. In this chapter I outline the development and theoretical underpinnings of CGT as a methodology, the ways in which I practiced reflexivity, how research sites and participants were recruited, and the data gathering and analysis methods used to create the CGT **actualizing collaborative learning**.

In Chapter Four, I detail the findings of the study. I outline the basic social problem (BSP) experienced by the participants as they engaged in CR4YR, and the way in which they utilized a basic social process (BSPr), which I have called **actualizing collaborative learning**, to respond to it. The constructivist grounded theory that emerged from the data collected and analyzed for this study provides a conceptual model of how primary level teachers who were involved in CR4YR shaped and utilized their network environment in order to learn professionally.

Finally, in Chapter Five I offer my interpretation of the data, situate my findings in the literature, offer implications for practice, make suggestions for further research, answer my central research question and two sub-questions, and outline the limitations of my study.

Chapter Two

Literature Review

I present here a review of the literature as it pertains to the development of a constructivist grounded theory that represents the experiences of those teachers who participated in a British Columbia Ministry of Education initiated formalized, cross-school professional development network learning situation called Changing Results for Young Readers (CR4YR) during the 2012-2014 school years. These teachers have been/are involved in the ongoing task of supporting their continued professional development needs through the creation, selection, maintenance and utilization of networks, both formal and informal. Involvement in CR4YR encouraged deep examination of teaching practice in a collaborative, inquiry-based model of learning. The organizational features of network learning communities (NLCs) and the philosophical underpinnings that support them have been well detailed in the literature as have the effects that they have on the mobilization of knowledge from a school district level network to the school and classroom levels. I argue, however, that engaging in professional learning endeavours that emphasize collaborative inquiry involves complex processes that involve epistemological belief systems that teachers hold around professional learning (Timperley & Earl, 2012), the ways in which power relationships are exercised (Foucault, 1980), and the skill levels that teachers have with collaborative learning (Dooner, Mandzuk & Clifton, 2008), and is an area that is incompletely understood.

Overview of the Chapter

The review begins with a discussion of how the literature review is utilized in grounded theory methodology. Following definitions of professional development, knowledge and learning, and epistemology, I outline the *sensitizing concepts* (Charmaz, 2006) that provided the theoretical frameworks that guided my data gathering and analysis processes in my research. In this regard I describe the broad characteristics of two epistemologies: the constructivist and the social constructivist theories of learning. I further develop the meaning of social constructivism within a network situation by introducing the work of Vygotsky, and theories on identity, social capital, trust, power as seen through the work of Foucault, and network theory. I then situate my study by describing the structure of NLCs, a type of formal network, largely through the work of Katz and Earl (2010) and Katz et al. (2008), as well as discussing the effectiveness of NLCs as a professional learning model. In addition, this section includes a description of personal learning communities (PLNs) or informal networks.

Grounded Theory Research and the Literature Review: A Contested Area

Grounded Theory (GT) as an inductive, emergent method that aims to create “fit” (Glaser, 1978, 1992) between the data and the emerging theory has invited confusion and criticisms around the timing of the initial literature review (Charmaz, 2006; Covan, 2007; Dunne, 2011; Lempert, 2007). In opposition to other forms of qualitative research that often build both the study design and the analyses of data on the basis of information gained thorough literature reviews (Creswell, 2009; Dunne, 2011), Glaser and Strauss

(1967) (as cited in Dunne, 2011), in their original work, suggested that bodies of literature that most closely detail their research subject area should be sampled after the primary data analysis (although they did suggest the use of theory to inform analysis). In the name of pure induction they believed that delaying the literature study would avoid imprinting the data with pre-existing notions (Charmaz, 2006; Covan, 2007; Dunne, 2011; Lempert, 2007), a point that continues to be supported by researchers such as Holton (2007) and Stern (2007).

The purpose of the literature study following the establishment of a tentative theory has been established is generally agreed upon (Charmaz, 2006; Stern, 2007). Charmaz (2006) argues that the literature is where “you claim, locate, evaluate, and defend your position” (p. 163).

In contrast to Glasarian practices, Charmaz (2012) believes that most researchers: already have a sound footing in their disciplines before they begin a research project and often have an intimate familiarity with the research topic and the literature about it. All provide vantage points that can intensify looking at certain aspects of the empirical world but may ignore others. (p. 17)

Strauss and Corbin (1990) agree with Charmaz. Charmaz’s interpretation of the place of prior knowledge and, in particular, the literature study, certainly makes sense given that most researchers enter into studies that reflect their fields of interest. The literature study, then, can be used to sharpen awareness of the nuances of situations (Charmaz, 2006; Dunne, 2011; Strauss & Corbin, 1990), as well as serve as a reflexive tool to monitor and make explicit pre-existing assumptions about the topic to be researched.

Constructivist Grounded Theory (CGT) researchers, such as Charmaz (2006), use the initial literature study as a means of providing them with “*sensitizing concepts*” as they provide “initial ideas to pursue and sensitize you to ask particular kinds of questions about your topic” (p. 16). But what are sensitizing concepts? Blumer (1954) describes sensitizing concepts as distinctive from the “definitive concept” (p. 7), which he clearly defined in terms of classification systems. In contrast, sensitizing concepts “lack precise reference and have no bench marks which allow a clean-cut identification of a specific instance and its content. Instead they rest on a general sense of what is relevant” (Blumer, 1954, p. 7), thus preserving the inductive nature of GT research. CGT methodology, as used by Charmaz (2006), then allows for a preliminary literature study to orient researchers and direct the first stages of the research. She is clear, however, that these sensitizing concepts (Blumer, 1969) provide a “departure” (Charmaz, 2006, p. 17) and do not establish theoretical frameworks a priori.

While the literature study can pre-condition researchers to view data through particular lens rather than inductively, Dey (2007), Dunne (2011), Kelle (2007), and Lempert (2007) state that it is erroneous to believe that any researcher enters the field without preconceived ideas whether or not they are familiar with the study issues. Cutcliffe (2000) supports these views by saying that “no potential researcher is an empty vessel, a person with no history or background” (p. 1480). Therefore, as Dunne and Strubing (2007) stress, the issue is not the effect of the literature on the researcher as much as it is the means that the researcher has to manage the effects. The researcher will always bring the self to the process, a condition that CGT

research resolves through reflexivity, a part of which could involve literature study at all stages of the research (Covan, 2007).

Additionally, the adequacy of the researcher's knowledge base will directly affect his/her ability to create relevant purposes that address gaps in the existing literature (Dunne, 2011), as well as understand and analyze data in the initial stages of the study (Bruce, 2007; Covan, 2007). GT strategies such as simultaneous coding/analysis and theoretical sampling depend on the researcher's ability to recognize relevant data and make subsequent decisions for data gathering on what is important (Bruce, 2007). As Lempert (2007) states, "engaging the literature provides the researcher with knowledge of the substantive area in sufficient depth to understand the parameters of the discourse and to enter into the current theoretical conversation" (p. 261). He further notes that "I must recognize that what may seem like a totally new idea to me – an innovative breakthrough in my research – may simply be a reflection of my ignorance of the literature" (Lampert, 2007, p. 261).

When considering how to conduct research the methods must be tailored to the question and to the researcher's conditions. Therefore, to accommodate a lack of expertise in the area of professional development and to allow a juxtaposition of my current belief systems with research in the area, it made sense to do a thorough literature review prior to the start of research in order that I had sufficient theoretical sensitivity to begin and proceed in the initial stages of the study. The initial literature study served as a means of ensuring that my understanding of professional development was current, and I also used it as a reflexivity tool. The process of interacting with the literature allowed me

to externalize my belief systems and better understand how they might “imprint” the data gathering and analysis stages of the research process.

Theoretical Constructs that Inform Network Learning

Professional development (PD) in this study is defined as “those processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they might, in turn, improve the learning of students” (Guskey, 2007, p. 16). Within the context of this study PD can be considered to be learning situations that are formal or informal, mandated or self-directed.

A discussion of how teachers transfer and contextualize knowledge must begin with an understanding of both learning and knowledge.

Learning and Knowledge. Michael Eraut (2000), a scholar and researcher who has had a particular interest in workplace learning for over 30 years, offers the following definition of learning:

Learning is defined as the process whereby knowledge is acquired. It also occurs when existing knowledge is used in a new context or in new combinations: since this also involves the creation of new knowledge, the transfer process remains within this definition. (p. 114)

Knowledge acquired has both explicit and tacit dimensions, and the acquisition processes and the make-up of these knowledge forms will be affected by the contexts in which they are learned and used. This learning involves knowledge gains at both the skill and theoretical levels. A further extension is suggested by Eraut who identifies two general categories of knowledge – codified or public knowledge and personal knowledge.

Codified knowledge is that which has undergone adjudication and has a certain status. For example, it is included in course syllabuses, professional development offerings and curriculum documents. This form of knowledge is explicit.

Personal knowledge on the other hand is “defined as the cognitive resource which a person brings to a situation that enables them to think and perform” (Eraut, 2000, p. 114). Personal knowledge is “codified knowledge in its personalized form, together with procedural knowledge and process knowledge, experiential knowledge and impressions in episodic memory” (Eraut, 2000, p. 114). In other words personal knowledge is in part codified knowledge that has undergone a contextualization process. Personal knowledge may be explicitly or tacitly understood. Eraut (2000) further states that codified knowledge is identified by its “source and epistemological status” (p. 114), and made personal by the context and use. Each time the knowledge is applied in a different setting it must be relearned. Therefore as teachers transition from a network setting at the district level to a work place setting they need to translate their learning, and the context will influence the ways in which the knowledge will be re-encoded.

Fahey and Prusak (1998) add to this definition of knowledge asserting that knowledge is:

in constant flux and change. It is central to day-to-day doing and being. Individuals create it and it is largely self-generating. Moreover it connects, binds, and involves individuals. In short, it is inseparable from the individuals who develop, transmit and leverage it. (p. 266)

While Eraut (2000) and Fahey and Prusak define knowledge, to understand how it is acquired I outline the theoretical constructs that informed my understanding of how

participants in NLCs network to learn. I turn first to two broad learning theories: constructivism and social constructivism.

Constructivism, Social Constructivism, and Network Learning Communities.

The epistemological belief systems of educators are defined here as the constructs held that define what constitutes truth and knowledge; how knowledge is acquired; and how the veracity of knowledge can be evaluated (Hofer, 2002). These belief systems act as the filters that determine the extent to which new theories and practices will be processed by teachers (Coburn, 2004), a point well illustrated by Coburn in her 2004 study that examined the relationship between pre-existing philosophical orientations towards reading instruction and teachers uptake of reform measures. In this regard I argue that the epistemologies held by teachers as to what is and is not professional learning are vitally important to a discussion of ways in which teachers engage with networking.

Two epistemological theories are pertinent to a discussion of professional development in general and NLCs in particular: constructivism and social constructivism.

Constructivism. The constructivist theory of learning arose as an alternative to acquisition models of learning (von Glasersfeld, 1989). Constructivists countered the idea that knowledge was an objective reality with the supposition that what a learner considered to be truth was a perspective created on the basis of complex processes that involved examination of prior knowledge, beliefs, and attitudes juxtaposed against that which was new (Bruner, 1986, 1990; Schwandt, 1994). Scholars who subscribe to a constructivist epistemology of learning believe learning is active rather than passive, built rather than “received” (von Glasersfeld, 1989; Schwandt, 2000); and applied, evaluated,

rejected or assimilated rather than mastered (Cobern, 1993). Constructivists view learners as actively seeking to make sense of new situations in terms of their own philosophical orientations, experiential baselines, goals, and contexts (Schwandt, 1994). Von Glasersfeld (1989) emphasized that “cognition is adaptive and serves the organization of the experiential world, not the discovery of ontological reality” (as cited in Cobern, 1993, p. 106).

While there is disagreement as to exactly how learners build understanding from experience, two theories are prevalent. Constructivists suggest that learners seek coherence between their experiences by internally noting patterns that confirm or dispute current understandings. For constructivists, the processing that leads to learning is entirely situated within the individuals concerned who will interpret experiences in ways unique to them. A common practice in professional development espousing constructivist views is to ask participants to privately reflect on their experiences with the intent of determining how new propositions either cause them to revise or reconstruct their views of education (Alsup, 2006).

Social constructivists, on the other hand, believe that coherence is established socially. Patterns that consolidate understanding are determined through collaboration, and the knowledge gained is both co-created and context specific. Reflection, for example, in these situations is externalized to be examined and debated in collaboration with others (Alsup, 2006).

Epistemologically, networking is based on a social constructivist’s philosophy of learning (Katz & Earl, 2010; Muijs, West, & Ainscow, 2010), where learners, not imposed discourses, are the centre of the knowledge processes. The socio-constructivist

organizational theory is based on the theories of Vygotsky (1934/1998) (Muijs, West, & Ainscow, 2010, p. 9) who believed that learning was deeper, and more easily enacted, when people had the opportunity to do so through social interaction. To further clarify the socio-constructivist philosophy of learning I now turn to a more extensive consideration of Vygotsky's work.

Vygotsky. Three interrelated aspects of Vygotsky's (1934/1998) work served as sensitizing concepts during the data collection and analysis stages of this research. The first concept that informed this study was Vygotsky's (1978) explanation of learning as an essentially sociocultural process. Although there is interplay between the "inter- and intramental processes" (Penuel & Wertsch, 1995, p. 86), Vygotsky claims that learning begins first at the interpersonal level, a process that is influenced by the socio-cultural and historical contexts in which it occurs (Penuel & Wertsch, 1995). The second critical concept examined deals with Vygotsky's Zone of Proximal Development (ZPD) (Vygotsky, 1934/1998, 1978), a concept that describes learning as facilitated when mentoring creates challenge for the learner by focusing just beyond current expertise levels (Vygotsky, 1978). Finally, Vygotsky (Penuel & Wertsch, 1995) emphasizes that learning involves the use of culturally, socially and historically relevant psychological tools that serve to mediate learning.

Learning as culturally and socially situated. Vygotsky (1978) believed that changes in thought processes were neither random nor individually initiated. He asserted that social interaction allowed for expertise to be modelled, and for people to clarify, modify, or recreate thinking through these experiences; thinking was imprinted by the social,

historical and cultural conditions in which it occurred (Vygotsky, 1978). Focused on children, he asserted that:

... every higher cognitive function exists twice over, once in the social environment of a developing human and once as a competence or cognitive skill of that being. The mediation between social environment and individual person is achieved by a process lately referred to as psychological symbiosis ...” (Vygotsky, 1962, as quoted in Harre, 2000, p. 734)

This process is iterative in that it involves nonlinear movement between the collective (“intermental”) and individual (“intramental”) phases of learning (Penuel & Wertsch, 1995, p. 86) as new concepts are formed, thinking and behaviour internalized, transformed, externalized again and further challenged through socio-cultural and historical influences. The key emphasis however is how societal norms imprint the learner.

Zone of proximal development. Vygotsky (1934/1998) also emphasized that learning happens when the instructional level exceeds the learner’s current level of expertise. More sophisticated others “supplement” (Harre, 2000, p. 735) the perceived gaps in knowledge levels of the learners. Called the Zone of Proximal Development by Vygotsky (1934/1998), the aim of this process is to develop competence first at the public level by performing tasks under the guidance of skilled mentors, then at the private or independent level (Harre, 2000). The ZPD was defined as the difference between “actual developmental level as determined by independent problem solving” and the “potential development as determined through problem solving ... in collaboration with more capable peers” (Vygotsky, 1978, p. 96). These collaborative relationships are “temporary,

adjustable frameworks for construction-in-progress” (Cazden, 1996, p. 168), the purpose of which is to move the learner from the intermental level to the intramental level of functioning. Vygotsky described this process as one that involved elevating the understanding of spontaneous concepts to a more abstract level and lowering scientific concepts to that of a concrete level thus cementing understanding. I surmise this process to mean that the practical becomes theoretical, and the theoretical becomes practical, a process I believe is played out in professional learning situations. The organizational structures of networks, then, theoretically provide the mechanism through which practitioners can, through a process of shared expertise, problematize practice with the purpose of growing as professionals (Earl & Katz, 2006; Jackson & Temperley, 2007; Katz & Earl, 2010; Muijs, West, & Ainscow, 2010; Niesz, 2010). Engestroem and Sannino (2010), building on the work of Vygotsky (1978), described the ZPD as:

a terrain to be dwelled in and explored, not just a stage to be achieved or a space to be crossed. The zone is explored by moving in it, to various directions and destinations, back and forth and sideways. The dwellers create trails and the intersecting trails gradually lead to an increased capability to move in the zone effectively, independently of the particular location or destination. The zone is never an empty space to begin with; it has dominant trails and boundaries made by others, often with heavy histories and power invested in them. When new dwellers enter the zone, they eventually have critical encounters with existing trails. They both adapt to the dominant trails and struggle to go beyond them. The latter can lead to new trails that expand the collective shape and understanding of the zone, thus also lead to new boundaries. When the dwellers reach a certain

level of mastery of the zone, they begin to collide with the very boundaries of the zone and to break away from the zone, toward new zones. (p. 21)

Engestroem and Sannino's description of the ZPD in terms of the social and power influences can be understood in terms of the norms that shape professional learning situations and dictate the ways in which learners must behave in order to access knowledge (Au, 2012), a condition described in greater detail in later sections. What is not clear in the literature are the ways in which teachers cope, within a network situation, with the existing power relationships; the learning structures that may or may not be familiar; and the processes used by teachers who, as Engestroem and Sannino (2010) state, "begin to collide with the very boundaries of the zone" (p. 21) as they seek to interact with networks that serve their learning needs.

Interpretative psychological tools. Vygotsky (Penuel & Wertsch, 1995) further argued that learning was mediated, and revealed, through the use of interpretative psychological tools that were culturally and/or historically important in the environments in which they were produced and used. Broadly, psychological tools can be defined as "resources for individuals that shape, empower, constrain, and have the potential to transform action" (Wertsch, 2007 as cited in Penuel & Wertsch, 1995, p. 86). Edwards (2005), building on the work of Greeno (1997), states:

Thus if we want to understand learning through participation in practices, we need to examine the practices and what they represent, allow and constrain together with the interactions that occur within them. If we do this we will get a purchase on what individuals are bringing to these interactions and how they adapt as they engage in practices. (p. 58)

In other words the ways in which psychological tools are used will shed light on the processes utilized, and the power inherent in them, as teachers engage with networking as a professional development mode.

Au (2012), using a Vygotskian lens, has extended the notion of tools in a discussion of curriculum design and power.

Curriculum and power structures. Power structures inherent in curriculum were examined by Au (2012) who proposed that Vygotsky's concept of tools is implicated in the creation of social, political, and cultural messages in the design of curriculum. Building on the work of Huebner (1999), Au (2012) outlines six considerations when viewing curriculum as a tool. He suggests that each of these considerations presents a certain ideology about teaching and learning, and who is served by this ideology. The first consideration is how the intent of curriculum is structured through the utilization of certain physical materials such as textbooks, articles, or the ways in which a meeting space is organized. It is clear that the materials used will represent a perspective on how knowledge is defined. The physical organization of the space in which learning is to occur may offer views as to how knowledge is acquired. For example, a room where chairs are arranged in clusters suggests that learning is a collaborative process. The second consideration is how the use of language and symbols to frame work within a curriculum creates certain messages. For example, the terms collaboration, inquiry, and knowledge mobilization are terms associated with NLCs that may create the expectations that professional learning is collaborative and problem-based. Curriculum is further framed by facilitators who will, based on epistemology and the level of expertise and history with a curriculum, make certain pedagogical decisions as to how to interact with

it. Au (2012) gives the example of lecture versus inquiry to illustrate how curriculum can be framed to give the impression that knowledge is acquired versus constructed.

“Temporality” (Au, 2012, p. 150), the fourth consideration, communicates how curriculum is influenced by the times in which it is created and experienced. The situation (the curriculum, the topic, or the groups involved in the curriculum) all have histories that both limit and define what is possible. At the same time there is also consideration for how the curriculum will impact the future, a view based in part on the histories involved. The participants in my research were involved in CR4YR in the year following a lengthy partial strike that resulted in the prohibition of communication between teachers and administrators, and the data gathering sequences were situated during a second strike situation. Additionally the perceptions held by teachers as to the historical longevity of initiatives introduced by the Ministry of Education, that is they are short-lived, may have influenced the ways in which they interact with Ministry initiated professional learning.

The last two considerations in the use of curriculum as a tool represent the inevitability that the varied beliefs, purposes and expectations of the learners may conflict with that of the curriculum designers. In this regard learners can exercise their autonomy to either change their beliefs to reflect those espoused by the professional learning model or to subvert the efforts of curriculum designers.

Applying Au’s (2012) framework to teacher professional learning then assumes that formal professional learning endeavours, such as CR4YR, are curricular tools that serve particular purposes for the organizers which may or may not be similar to how the learners define and utilize the same tools. It is also assumed by Au (2012) that

professional learning models shape the content of and the ways in which learners can acquire knowledge which creates access to knowledge for some while excluding others (p. 160). Finally, given the previous two assumptions, building on Au's conception of curriculum I assume that the infrastructure of professional learning models represents particular learning cultures, albeit cultures that are responsive and capable of morphing. Power is implied and exerted through these tools by curriculum designers and the learners, an area that can be understood through Foucault's (1980) work.

Foucault and Power. Foucault (1980) identified two forms of power: sovereign and disciplinary. Sovereign power refers to the ways in which power is exercised explicitly through such measures as regulations, laws, policies, and punishments. While sovereign power is characterized by explicitly expressed control over others, disciplinary power refers to the ways in which power is exercised, often surreptitiously, on individuals through various types of surveillance causing people to self-monitor their own behaviour and that of others. As the Ministry is the employer, and therefore may be perceived as having power over those present, when considering how teachers interact in a Ministry-initiated network it is important to look at how disciplinary power is exercised both through internalized discourses and through surveillance.

Disciplinary power and internalized norms. Foucault (1980) believed that power did not exist only in particular authoritative bodies such as governments, but instead was "omnipresent, etched into the minutiae of everyone's daily lives, and exercised continually by those whom critical theory usually describes as the masses" (Brookfield, 2001, p. 3). Foucault (1980) maintained that disciplinary power, largely invisible to those

undergoing its effects, is experienced and exercised passively, in part through internalized discourses that dictate “truths”, truths that reflect versions as to what is considered normal. Discourses define for people appropriate ways of being which are then further reinforced through the power exerted by these same individuals in a continuous cycle of experiencing the effects of power and then exerting these very discourses to amend the behaviour of others. In this regard Foucault (1980) claimed that “power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourses, learning processes and everyday lives” (p. 39). The power that an individual exerts then is based on the ways in which power has acted upon him/her through normalizing ideologies, discourses, and networks of relationships. Therefore, while individuals are the “articulation” of power (Foucault, 1980, p. 98) they are also the “vehicles” (p. 98) of power. In other words power is “something that circulates, or rather something that only functions in a chain” (Foucault, 1980, p. 98).

Certainly the network format utilized in CR4YR provides a medium for the circulation and reinforcement of discourses. The selection of materials utilized in the network, the routines established, and the expectation of externalizing practice to benefit from the collective expertise of the group offer the opportunities to exert power on each other and to begin to create norms.

Surveillance. A second way in which power is exerted through disciplinary power is via what Foucault (1980) called surveillance. Surveillance or the threat of being “seen” can create adherence to dominant discourses which over time become normalized. In the CR4YR model of teacher learning many questions are raised by Foucault’s work in this

regard. For example, are practices such as the dialogic format utilized in CR4YR networked sessions, the encouragement of reflection and externalization of practice, and the data gathering considered forms of surveillance and therefore perceived as a means of exerting power over a group (Brookfield, 2001)? Additionally, the utilization of seating arrangements such as circles can increase a sense of being under surveillance as they in essence remove privacy (Brookfield, 2001). Certainly the perception of surveillance would impact the ways in which networks are formed and utilized.

Resistance. Foucault (1982) emphasizes that inherent in power is the possibility of resistance:

Between a relationship of power and a strategy of struggle there is a reciprocal appeal, a perpetual linking and a perpetual reversal. At every moment of the relationship of power may become a confrontation between two adversaries. Equally the relationship between adversaries in society may, at every moment, give place to the putting into operation of mechanisms of power. (p. 226)

As power is exerted through multiple perspectives, each of which has certain dominant discourses, resistance is reflective of Corson's (1999) assertion that "the struggle for power in any setting is really a struggle for the control of discourses" (p. 15). To Foucault (1982), these struggles in essence are struggles against the "submission of subjectivity;" against the subjugation of the individual (p. 212). Extending Foucault's ideas to teachers within a network situation, all participation whether through contribution or silence, can be understood as acts of power.

Foucault's work with power aligns with the norming processes that lead to identities in individuals and in groups. While Foucault suggests that the possibility of resistance is

inherent in power relationships he does not explain how people who are in situations where the dominant discourses belong to employers and colleagues who they have to work with daily, exert conflicting viewpoints. Being able to externalize belief systems and valued practices is critical to the operation of networks. An exploration of identity further clarifies how power influences the behaviour of teachers in these types of situations.

Identity

Postmodern identity. Beauchamp and Thomas (2009) in their review of the literature on teacher identity noted that generally four characteristics of identity emerged as consistent across recent literature. Viewed through a postmodern lens teachers are considered to hold multiple identities (Beauchamp & Thomas, 2009; Clarke, 2009; Cohen, 2010; Day, Sammons, Stobert, Kington, & Gu, 2007; Gee, 2000, 2004; Rodgers & Scott, 2008), each of which is in a state of fluctuation (Beijaard, Meijer, & Verloop, 2004; Gee, 2000, 2004). Additionally, in opposition to previous modern orientations that saw identity as dependent on internal processing (Gee, 2000), postmodern theorists believe that identity is relational and therefore formed through being ‘recognized’ in particular ways through the myriad of social interactions that comprise the day-to-day lives of teachers (Cohen, 2010; Flores & Day, 2006; Gee, 2000, 2005; Rodgers & Scott, 2008).

Gee. Through a postmodern orientation, identity is socially influenced and cannot exist unless first recognized socially. Gee (2000) described four interrelated types of social recognition, of which three are important in this study. The first of these identities

is called institutional identities (I-identities) or those that are assigned through the institutions with which teachers are affiliated. The second of the identities is called discursive identities (D-identities) or those that are recognized or ascribed to a person by others, and the third are affinity identities (A-identities) or the affinity groups to which teachers belong. Each of the identities has established discourses that dictate the ways in which professionals will be recognized or will recognize others. For Gee, Discourse, with a capital D, implied more than language, as is illustrated by Holstein and Gubrium (2000) in the following example. Holstein and Gubrium (2000, pp. 154-155) describe I-identities as comprised of certain language structures, orientations toward goals, and pre-established behavioural parameters. Like Gee (2005) they saw Discourses as more than simply language discourse, but as an embodied experience that encompasses all aspects of being. A Discourse, then, as described by Gee (2005), is:

a “dance” that exists in the abstract as a coordinated pattern of words, deeds, values, beliefs, symbols, tools, objects, times, and places and in the here-and-now as a performance that is recognizable as just such a coordination. Like a dance, the performance here-and-now is never exactly the same. It all comes down, often, to what the “masters of the dance” (the people who inhabit the Discourse) will allow to be recognized or will be forced to recognize as a possible instantiation of the dance.
(p. 28)

Gee (2000) stresses that individuals are constantly seeking social recognition which entails either assuming the *Discourse*, described by him as an “*identity kit*” (Gee, 1989, p. 7), or influencing the Discourse of the groups that they are striving to join. It is important to note that Gee believed that “the dance” was pre-existing in many cases, but

not inalterable. Individual members, through the introduction of Discourses that are different, but reflective of existing realities, can cause the Discourses of others to morph. Of interest also is that Gee states that each type of identity can be placed on a continuum in terms of how active or passive one is in 'recruiting' them, that is, in terms of how much such identities can be viewed as merely ascribed to a person versus an active achievement or accomplishment of the person.

Clarke. Clarke (2009) echoes Gee's assertion that social recognition is an important aspect of identity formation, while at the same time acknowledging the existence of internally held views, which can be inferred to mean the multiple identities held by teachers. He explains identity formation in terms of three paradoxes: agentive, differential, and excess (Clarke, 2009, p. 188). The first two of these paradoxes are illustrative of how teachers are influenced by both social identities that are ascribed to them, and those that they hold for themselves. The agentive paradox refers to the relational nature of identity. Clarke explains that while individuals have internally held versions of their identities, they can never fully understand themselves as certain aspects of identity remain visible only to others. Teachers, for example, must integrate internally-held identities with the identities that students, administrators, and colleagues determine for them (Varghese, Morgan, Johnson, & Johnson, 2005). These impositions are always value-laden (Clarke, 2009), can be normative (Clarke, 2009; Gee, 2000; O'Connor, 2006), affect individuals negatively or positively (Varghese, Morgan, Johnson, & Johnson, 2005), and present opportunities to edit, construct and reconstruct self-held identities (Clarke, 2009; Varghese et al, 2005).

Clarke (2009) further explains the homogenizing influence of the social construction of identities through a discussion of his second identity formation paradox called “*differential paradox*,” a phenomenon that Trotman (2009) and Muijs, West and Ainscow (2010) label myopia. As stated in the paragraph above identities are never neutral markers (Carroll, Motha & Price, 2008; Clarke, 2009; Gee, 2000, 2004), but express ideologies about “how to be” that categorize certain ideas as appropriate, while devaluing others. Gee (2004) reinforces this phenomenon stating that while identities are socially developed, the “importance of each identity is determined within the contexts that teachers work” (p. 474). The freedom to “perform an identity” (Gee, 2004) is controlled. Both the characteristics that define who is excluded from a certain identity and those that indicate who is included are implied in an identity (Clarke, 2009; Gee, 1989) and must be considered to understand how educators approach, epistemologically and pedagogically, change (Coburn & Russell, 2008; Coburn & Woulfin, 2012). Networked organizations share a common purpose, focus, and often identity which create the basis of members’ work together (Earl & Katz, 2006; Jackson & Temperley, 2007; Katz & Earl, 2010; Trotman, 2009). The following examples illustrate two different ways in which differential paradox or homogenizing influences can impact the networking process. Identity creates inclusion for some; exclusion for others.

Luehmann and Tinelli (2008) provide an example of a differential paradox that occurred for an online network learning community. Science teachers struggling to implement reforms in hostile environments formed an online affinity group (Gee, 2000, 2004), or what might be termed a PLN. The identities for 8 out of 15 of the members strengthened, allowing them to classify themselves, and to be classified by others, as

“reform-minded science” teachers (Luehmann & Tinelli, 2008, p. 324). In this case the social identities of those positively affected were consistent with internally held identities. While a rewarding experience for some, this social influence generated a standard that reinforced certain behaviours, and marginalized others, causing seven of the members to feel dissatisfied and believe that their learning was inhibited (Luehmann & Tinelli, 2008).

Niesz (2010) described a similar situation for the participants in her ethnographic study centered on a professional development network whose purpose was to enhance leadership abilities in teachers and school district administrators. Each of the participants was originally attracted to the initiative because it was collaborative giving them the opportunity for professional conversations they were not finding in their home sites. Participation in this network reinforced and strengthened their existing identities by creating a feeling of normalcy that helped them both distinguish themselves from others and to understand their own identities further through the homogeneity in the network. The educators within the network had a common language, philosophical base and shared interests that were reinforced and strengthened over time. The commonalities allowed them to examine their practice deeply but further separated them from their home groups as their identities solidified. Their sense of the inclusionary and exclusionary criteria allowed them also to identify non-network “allies” who “gets this work intuitively” (Niesz, 2010) that they could enlist when mobilizing their learning to other networks within which they operated. In fact one of the participants said that s/he had been one such “intuitive” educator prior to joining the network.

The relationship between identity and participation in NLCs is further explored through an examination of social capital.

Social Capital

While human capital is about an individual's store of professional knowledge (Hargreaves & Fullan, 2012), social capital is the means to "access [to] other people's *human capital*. It expands your networks of influence and opportunity. And it develops resilience when you know there are people to go to who can give you advice and be your advocates" (Hargreaves & Fullan, 2012, p. 90). Social capital is one component that teachers in network learning situations must be able to create, assess, maintain, and/or utilize. As the questions that guided my research centered around the processes involved as teachers engage in networking, it is important to delineate what is known of how social capital forms, "strategies" that Hargreaves and Fullan (2012, p. 91) believe are underutilized in teacher professional learning situations. They further state that these strategies "are one of the cornerstones for transforming the profession" (Hargreaves & Fullan, 2012, p. 91) as "behaviour is shaped by groups much more than by individuals" (p. 91).

Social capital can be defined as:

How the quantity and quality of interactions and social relationships among people affects their access to information; their senses of expectation, obligation, and trust; and how far they are likely to adhere to the same norms or codes of behaviour. (Hargreaves & Fullan, 2012, p. 90)

Groups where social capital exists are generally characterized as having "collective ties, norms, values, interactions, networks and relationships" (McClenaghan, 2000, p. 566).

Social capital develops in a group as a result of the “sustained social interactions” (Bryk & Schneider, 2002, p. 13) that exist between members (Coleman, 1988). Coleman outlines two conditions that create social capital in a group. The first, *closure* (Coleman, 1988, p. S105), is described as the strong, ongoing interconnections between members of a group that cause them to share and monitor the group’s norms and values as mentioned above, including common ways of expressing themselves. The closure, or *structural dimension* (Nahapiet & Ghoshal, 1998), within a group serves to expedite the dispersal of knowledge, and is the means for individuals to access resources as a result of the ties that exist between members (Moolenaar, Karsten, Slegers, & Daly, 2014), and to censor that which threatens the group’s belief systems. Closure aligns with what is known of group identities that control and direct members’ actions through norms.

The second condition that Coleman (1988) identifies is essential to the use of social capital is *trustworthiness* or the *relational dimension* (Moolenaar et al., 2014, p. 10.2.1) which refers to the extent to which a group can create a sense of reciprocity. *Reciprocity* refers to the expectation that all members are both the beneficiaries of the group’s collective resources as well as part of the capital extended to others. When there is trust between members the strength of the relational ties between members creates a sense of obligation to the group’s norms that allows for members to predict and enforce the behaviour of others (Coleman, 1988).

The social capital available in networks has the potential to increase “problem solving, transfer of complex material, and the diffusion of innovations” (Coburn & Russell, 2008, p. 206). Social capital enables the expertise in a system to be exchanged (Adler & Kwon, 2002; Coburn & Russell, 2008; Daly & Finnigan, 2009) and thus allows

for strengthening of the entire network through a process of moving knowledge from place to place. One key resource that must be available is expertise, and for change to occur in reform movements the focus of the networks must be aligned with the reform goals. As part of formal learning infrastructures, school districts might insert coaches into systems to provide expertise. At times, these coaches become part of both the PLNs and the formal aspects of the school's infrastructure enabling change to occur (Coburn & Russell, 2008; Coburn & Woulfin, 2012; Priestley, Miller, Barrett, & Carolyn, 2011). All the districts in this study had resource educators, albeit of varying numbers, who could assist at both the network and the school levels.

However, social capital, as is evident in the definition above, specifies that for expertise within a network to be mobilized, relationships that create a sense of "trust, cooperation, and participation" (Daniels, Schwier & McCall, 2003, p. 2) must be present. In the case of this study the relationships must be between teachers as well as between teachers and the resource people who facilitated CR4YR. Additionally, personnel from multiple levels of the education system are directly involved in the CR4YR meetings creating the potential for power differentials to exist between the members. These power differentials may cause the development of relationship to vary from group to group.

Relationship. Earl, Katz, Elgie, Jaafar, Foster, and Sammons (2006), utilizing the work of Allen and Cherrey (2000) and Church et al. (2002), describe relationship as: the threads or the 'connective tissue' of networked learning communities (Allen & Cherrey, 2000; Church et al, 2002) and provide the social capital that allows people to work together over time and exceed what any of them could accomplish alone (West-Burnham & Otero, 2004). (2006, p. 26)

In particular trust is considered to be an important aspect of relationship as networks require “joint work that challenges thinking and practices” (Earl et al., 2006, p. 63).

These researchers clarify why trust is a crucial element in network relationships by describing networks as follows:

This kind of interaction presumes a level of trust and personal confidence that allows the participants to be honest, transparent and willing to examine their own beliefs and practices. It also suggests being able to live with ambiguity and to challenge one another in productive ways. (Earl et al., 2006, p. 63).

The authors further suggest that the social capital created through relationship, of which trust is the most critical component, sets up a reciprocal situation in that initially relationships create the conditions that allow for collaboration, while the resulting collaboration in turn strengthen the relationships (Earl et al., p. 26).

Trust. As trust is a crucial component of relationship in the next section I examine the individual components of this construct through the work of Bryk and Schneider (2002), Moolenaar et al. (2014), Tschannen-Moran and Hoy (2000), and Louis (2007). The components that comprise trust in educational settings is an underdeveloped area (Moolenaar et al., 2014; Tschannen-Moran & Hoy, 2000), and the studies that have looked at this phenomenon in detail are focused on the school level (see Bryk & Schneider, 2002; Louis, 2007; Tschannen-Moran & Hoy, 2000) rather than on a cross-school or cross-district network level. However, while the context for each of the above researchers’ work was at the school level the results of studies are useful when considering the components of relationship in the CR4YR network as all studies involve trust within an employer-initiated reform initiative.

Bryk and Schneider (2002) identified three types of trust of which two, contractual and relational, are discussed in this section. Contractual trust is a set of legally binding obligations that all involved parties have agreed to undertake. Generally the conditions for meeting these obligations are clearly defined and the consequences for lack of role fulfilment specified. Relational trust also involves role expectations but has dimensions to it that are not easily defined.

Relational trust, like contractual trust, involves the expectation that people within organizations have certain obligations to fulfill. However, these role expectations are based on “mutual understandings” that develop as a result of “sustained associations among individuals and institutions” (Bryk & Schneider, 2002, p. 20). This explanation of trust aligns with the ways in which norms within groups define behaviour (Clarke, 2009; Gee, 2000). Further, the reasons underlying role fulfillment are important and must be judged to be in the best interests of all concerned. If these intentions do not meet this specification trust is severed and the overall functioning of the organization is jeopardized. Finally, relational trust must be continually verified through the actions of those involved (Bryk & Schneider, 2002, p. 21). Relational trust depends on each person within an organization fulfilling his/her roles. The role expectations create norms within groups that allow for members to monitor each other’s actions. When members fail to meet obligations trust is threatened.

Relational trust is critical in reform movements (Bryk & Schneider, 2002) where new initiatives may threaten professionals’ feelings of competence (Louis, 2007). Organizations with high relational trust are able to sustain change more effectively (Bryk & Schneider, 2002; Louis, 2007) as they have established understandings of the

underlying principles that guide their actions. In schools, for example, this type of trust may involve an understanding that all people are working for the benefit of children rather than for professional advancement and that it is expected that change in teaching practice will temporarily threaten feelings of competence.

It is important to note that schools with high relational trust are characterized by what Moolenaar et al. (2014) refer to as dense social configurations (indicated by size and number of contacts between members). They investigated the relationship between trust and social networks in Dutch elementary schools. They used a Likert-type scale delivered through a social network survey to draw data from 751 teachers and principals representing 49 elementary schools. Analysis of the data indicated a significant positive relationship between trust and dense social configurations. Schools and teams with more one-on-one network relationships that did not involve all members of their school were characterized by lower levels of trust. The study points to the significance of examining and building the social relationships in organizations as a whole. The researchers indicated that educators who were characterized by multiple reciprocal relationships (one-on-one) may fear being openly vulnerable to colleagues and instead rely on those with whom they have had many “long-lasting, safe exchange of knowledge and information” (Moolenaar et al., 2014, p. 9).

The work of Tschannen-Moran and Hoy (2000), Bryk and Schneider (2002), and Louis (2007) further clarify the individual components of the construct trust. Trust is defined as “not a feeling of warmth or affection but the conscious regulation of one’s dependence on another. In situations of interdependence, trust functions as a way of reducing uncertainty” (Tschannen-Moran & Hoy, 2000, p. 549).

Tschannen-Moran and Hoy (2000) undertook a multidisciplinary review of the literature on trust in order to better understand it in organizations including schools. They defined trust as “one party’s willingness to be vulnerable to another party based on the confidence that the latter party is (a) benevolent, (b) reliable, (c) competent, (d) honest, and (e) open” (Tschannen-Moran & Hoy, 2000, p. 556). *Willingness to be vulnerable* (Tschannen-Moran & Hoy, 2000, p. 556) refers to the interdependence between members where in order to achieve the desired ends each member must share the burden of risking harm. *Confidence*, on the other hand, refers to the degree of comfort a person has with being vulnerable. Benevolence is the concern shown for another’s wellbeing, including the assurance that interactions are not for personal gain at the expense of others. *Competence*, as the term suggests, is the ability of the person to do the job expected of him/her. *Honesty* refers to integrity or congruence between what is said and done and the expectation that each person will take responsibility for her/his own behaviour as well as report information to the group in a manner that is accurate rather than “distorted” (Tschannen-Moran & Hoy, 2000, p. 558). Finally, *open* refers to an environment where thoughts, criticisms, and frustrations can be shared without fear of repercussion. Further, in an environment that is open, all relevant information is shared and is one means of displaying vulnerability by both employers and employees.

Tschannen-Moran (2004), speaking of school leaders, adds that:

Trust serves as a lubricant of organizational functioning: without it, schools are likely to experience the overheated friction of conflict as well as a lack of progress toward their admirable goals. With trust, schools are much more likely to benefit from the collaborative and productive efforts of their faculty and staff. (p. 17)

Bryk and Schneider (2002) further clarify trust through their theory of *relational trust*. While there is considerable overlap between the work of Tschannen-Moran and Hoy (2000) and Bryk and Schneider (2002), the latter do add dimension to the former's work through their explanation of trust in terms of role expectations (Bryk & Schneider, 2002) which they define as:

the social exchanges of schooling as organized around a distinct set of role relationships: teachers with students; teachers with other teachers; teachers with parents and their school principal. Each party in a role relationship: teachers with students, teachers with other teachers, relationship maintains an understanding of his or her role obligations and holds some expectations about the role obligations of the other. Maintenance (and growth) of relational trust in any given role set requires synchrony in these mutual expectations and obligations. (p. 20)

Relational trust involves four properties: respect, competence, personal regard for others, and integrity. As with the work of Tschannen-Moran and Hoy (2000), each indicator of trust is marked by a sense of "mutual dependence and personal vulnerabilities" (Bryk and Schneider, 2002, p. 25) and requires public demonstration of the willingness to actively analyze practice in relation to group purposes. Respect is displayed at the individual and professional levels and involves recognizing the importance of the contribution of each person in the overall operation of the organization. A further requirement is that respect be reciprocal. Bryk and Schneider (2002) provide the example of colleagues both listening to each other and incorporating what is said into future action. Competence, personal regard for others, and integrity align with the

components of trust as outlined by Tschannen-Moran and Hoy and explained in the above paragraph.

Research by Louis (2007), who explored how social trust impacts teacher levels of engagement in central office initiated innovations, specifically the relationships between teachers and senior school district administrators, is important to consider as CR4YR involves leadership from both the district and Ministry levels. The three-year qualitative study by Louis involved five senior high schools located in different school districts. The data from her study supported Bryk and Schneider's finding, namely that when high relational trust existed, in this case for senior administration in the school districts, change was implemented more easily. As well, the findings from the study by Louis (2007) identified three conditions that appeared to influence trust: the extent to which participants believe they have a voice in the decision-making process; the extent to which participants perceive their input is considered when administrators make decisions; and the identification of a way of measuring the effect of decisions that is determined and mutually agreeable to all parties. Louis asserted that little research has addressed how to restore relational trust. The restoration of trust may be a critical consideration in a study of CR4YR as relationships between teachers and the Ministry of Education in British Columbia have been strained for some decades (Fleming, 2011). Speaking of district level initiated reform measures, Louis (2007) warned that:

Teachers may comply, but in low trust settings they may not see quality management as an aid to what they normally do in their classrooms as part of their real work. The chronic individualism and isolation of the 'egg carton school' is currently viewed as

an impediment to school reform and improvement ... School leaders need to view trust as the bridge that reform must be carried over. (p. 20)

Network theory is explored in the next section as it allows for further understanding of how “bridges” (Louis, 2007, p. 20) between groups can be established, particularly between groups who do not normally communicate or who communicate ineffectively.

Network Theory

Social network learning theorists refer to the type, range, and content of the professional connections that teachers make as they participate in collaborative activities around reform messages (Coburn & Russell, 2008; Daly & Finnigan, 2009; Moolenaar, 2010, 2012; Penuel et al., 2010). This theory highlights the involvement of both the individual and the ties that link her/him to a collective. As knowledge mobilization is difficult to enact (Levin, 2010) because the most “valuable knowledge is tacit, and actors often have trouble making such knowledge explicit in ways that are useful to others” (Penuel et al., 2010, p. 63) and pre-existing philosophies of what it means to be a literacy teacher often align with the membership in existing formal (Coburn, 2001) and informal networks (Penuel et al., 2010), this theory aims to explain how the *interrelationships* between people contribute to what knowledge is and is not transferred into classroom practice (Daly & Finnigan, 2007; Penuel et al., 2010).

Network theorists describe the connections that exist between individuals as *ties* (Coburn & Russell, 2008; Daly & Finnigan, 2007; Penuel et al., 2010), and it is the ties that explain the patterns that occur in enactments of identities within collaborative situations (Penuel et al., 2010). Theorists classify *ties* as being either strong or weak. The strength of the ties is measured by the frequency of interactions and by the emotional or

social connectedness evident between individuals (Coburn & Russell, 2008; Granovetter, 1973). Strong ties are characterized by shared norms, reciprocity, and identities that are congruent. Building on the work of Reagans and McEvily (2003) Coburn and Russell (2008) describe strong ties as necessary for the exchange of “tacit, sensitive, or complex knowledge” (p. 206). Weak ties, on the other hand, are the mechanisms that allow new knowledge to surface (Coburn & Russell, 2008).

Theoretically, the interactions that occur between the individuals build the capacity of the whole to work towards goals, to problem-solve, and to facilitate each other’s growth. In turn, the identity and strength of the ties between the members of the collective determine what knowledge is transmitted and the speed at which it flows (Adler & Kwon, 2002). However, often networks have ties that work counter to the goals of school jurisdictions resulting in little change in classroom practice. Penuel et al. (2010) maintain that the informal PLNs existent in schools as “advice networks” (p. 63) exhibit strong ties and often do not align with the original intent of the reforms. Unless measures are in place to disrupt existing group and individual identities, often people base PLNs on pre-existing support groups that represent their existing belief systems (Penuel et al, 2010). Wenger (1998) warns in his discussion of communities of practice, which Gee (2007) supports in his work on group learning, that shared identities can both narrow and widen what is explored and communicated.

Network Learning Communities

In the following section I define NLCs, discuss one theory that addresses the organizational structure of NLCs, and provide an overview of the challenges and benefits of NLCs through an examination of research in this area.

Definition. NLCs, for the purposes of my research, are defined as outlined at the Organization for Economic Co-operation and Development (OECD) Lisbon Seminar (2003) entitled Understanding Networks for Innovation in Policy and Practice:

Networked Learning Communities are purposefully led social entities that are characterized by a commitment to quality, rigor and a focus on outcomes. They promote the dissemination of good practice, enhance the professional development of teachers, support capacity building in schools, mediate between centralized and decentralised structures, and assist in the process of re-structuring and re-culturing educational organizational systems. (p. 154)

Jackson and Temperley (2007) further clarify the meaning of NLCs, distinguishing between “networking relationships” and “networked learning” (p. 6), with the latter being the goal of NLCs. Networking relationships are defined as the multitude of ways in which teachers form relationships with other professionals. These types of relationships do offer the opportunity to learn but are unpredictable. Examples of these types of relationships are the casual encounters between teachers at professional development sessions or the chance meeting that occurs during lunch hours or during after school times. Networked learning on the other hand involves groups whose purpose for being together is to learn. Jackson and Temperley (2007) view networked learning as entailing four processes which in part illustrate the OECD definition:

1. “learning from one another” (p.6) by utilizing the group’s “knowledge, experience, expertise, practices, and know-how” (p.6)
2. “learning with one another” through collaboration (p. 6)

3. “learning on behalf of” (p.7) non-network members within home schools, their networks, or the larger system and
4. “meta-learning” (p. 7) or understanding personal learning processes.

Earl and Katz’s (2007) work further develops the construct NLCs as they outline the structure and intent of NLCs. Earl and Katz (Katz et al., 2008) developed, and tested, a theory of NLCs called “theory of action” (Katz et al., 2008, p. 114), a model that was based on a literature study in the area, data drawn from the authors’ qualitative work in the United Kingdom that involved focus groups and interviews in 20 randomly selected schools in the United Kingdom, and then field tested and refined through a large scale survey sample study conducted in the Network of Performance Based Schools in British Columbia (Katz et al., 2008). Their theory provides an organizational model upon which network learning communities can be structured. Key factors that lead to successful NLCs were identified in the theory: clear foci; positive relationships among members; collaborative inquiry; and leadership involvement. A further expectation of NLCs as described in the theory of action is that members within the interschool collaborative will have the capacity to positively influence the practice of non-involved colleagues within their home schools (Earl & Katz, 2007). As CR4YR is in part based on the Network of Performance Based Schools in British Columbia it is important to outline the key features of the theory. Clear foci, collaborative inquiry and leadership are discussed below, while relationship was discussed above in the sections on social capital, relationship, and trust.

Purpose and Focus. One of the theoretical defining characteristics of NLCs is the establishment of a clear purpose that is shared by the group (Hopkins, 2003; Katz & Earl, 2010; Muijs et al., 2010; Stoll, 2004, 2009; Trotman, 2009; West, 2010). The purpose is

representative of the contexts that the members represent (Harris, Chapman, Muijs, Russ, & Stoll, 2006; Katz & Earl, 2010), has the potential to directly affect student growth (Harris et al., 2006; Katz & Earl, 2010; Trotman, 2009), and has a pre-established means of evaluating the effectiveness of the group's work (Harris, et al., 2006; Katz & Earl, 2010). Further it is expected that the focus of the group will be one of challenge that casts all members as learners willing to examine their own beliefs and practices critically (Katz & Earl, 2010; Katz et al., 2008). The importance of purpose and focus to the success of NLCs is considered paramount. Stoll (2009) stressed that for collaboration to be successful all participants must be able to define the group's purpose in terms of their own schools.

Not surprisingly, research on NLCs has revealed that the suitability and clarity of the purpose set for the network emerged as one of the key factors in the success in enacting change not only within the practice of the group members themselves (Katz & Earl, 2010; Katz et al., 2008; Trotman, 2009; West, 2010), but also in the schools with which they were associated (Trotman, 2009; West, 2010). Katz et al. (2008) found purpose and focus correlated significantly with changes in thinking and in practice, and to "attachment to network", the latter result causing them to suggest that "purpose and focus of the network is the glue that merged individual interests into a collective one across the network" (p. 128).

But what constitutes a common purpose and foci and how are each established? Dooner et al. (2008), building on the work of Wieck (1979), warn that while initially network members do come to common understandings of their purpose together, this focus requires a type of conformity that can create tension and therefore needs to be

continually revisited. They explain that while a group may agree on a purpose, the underlying individual purposes can be diverse and not congruent within a group. This view is supported by Chapman and Hadfield (2010) who also caution that the variety of perspectives that teachers bring to a network situations make it difficult to create a group focus. A second component of NLCs, collaborative inquiry, which is defined in the next section, is also an area that can be problematic for participants unfamiliar with learning in a network environment.

Collaborative inquiry. Katz and Earl (2008) define “an inquiry habit of mind” (p. 119) as the “processes of questioning, reflecting, seeking alternatives, and weighing consequences [that] promote the ‘transparency’ of what otherwise might remain unobservable facets of practice – making tacit visible and open to scrutiny (Katz & Earl, 2010, pp. 119-120). This process, according to Katz and Earl, is a critical aspect in the knowledge creation process in NLCs. However it is also a state that is difficult to achieve for as Harris and Muijs (2005) assert “it does assume that teachers automatically possess the will, skill, and ability to work in this way” (p. 2), an assertion that is also supported by Timperley and Earl (2012). Trotman (2009), as well as Dooner et al. (2008), stress that many network members are unprepared to cope with the ways in which groups in networks function.

The work by Dooner et al. (2008) for example illustrated the complexities of establishing a group’s ability to collaborate. Dooner et al.’s research took place over a two year period of time with Middle Years teachers. The researchers were interested in how these teachers established collaborative practices that governed how they engaged in group problem solving, the purpose of which was to translate a theory of imagination and

learning into pedagogical practice. The group met once or twice a month, usually during out of school hours. Data consisted of reflection journals completed by the participants and semi-structured focus group and individual interviews. These data gathering methods resulted in approximately 500 pages of data. The data were analyzed utilizing Weick's (1979) "four stages of collaborative work" (p. 567) to code and organize the findings. While the teachers in this study appeared to experience some changes in their knowledge, they did not realize the ideals of collaborative learning as defined by Katz and Earl (2008) above. There were on-going tensions between group purposes and individual needs, and inexperience with giving and receiving feedback that challenged competence. As one informant in their study said "It's very difficult to get a group to a place where they can be openly critical ... about practice, theory, [and] group dynamics ... Still people's feelings get hurt [and] things become personal" (Dooner et al., 2008, p. 571).

Qualitative research conducted by Hargreaves (2001) also supports the notion that collaborative inquiry is difficult to achieve. To identify the role that teacher emotions play in educational change he interviewed 53 teachers, drawn from 15 schools, in Ontario, Canada. The teachers represented a range of experience levels and orientations to change, and although focused on collaboration at the school level the findings from this study confirmed that the ideals of collaborative inquiry as defined by Katz and Earl (2008) are difficult to achieve. Hargreaves (2001) found that teachers wanted recognition, praise for their accomplishments, and "social acceptance and affiliation" (p. 513) from their colleagues. Additionally, they willingly participated in joint lesson planning, exchanging curricular materials, and the sharing of expertise in formal or informal

professional development sessions but avoided discussions that involved challenging professional practices. The avoidance of situations that might create conflict limited opportunities to grow as educators (Hargreaves, 2001). While conflict is considered to be inevitable and an opportunity to grow professionally in collaborative situations (Wenger, 1998), it was considered to be negative for most of the teachers in this study.

A grounded theory study by Lin et al. (2008) also showed the difficulties in realizing collaborative inquiry. The researchers spent 13 months in the field, sampling 22 online virtual networks, each group containing three to six teacher members. The findings of this study revealed variations in the satisfaction with and the degree to which knowledge flowed within the groups. The researchers noted the effects of unstated hegemonic identity impositions on group dynamics in the networks. Lin et al. (2008) found high anxiety levels and fear of being criticized in some groups. These groups were marked with participants who would edit and re-edit their responses before submitting and by low participation in general. Schwier, Morrison and Daniel (2009) found the same phenomenon in their study of university professors of English involved in a support network. Lin et al. asserted that the shared professional identity kits (Gee, 1989) that were a result of being members of the same professional group with a common focus created hypersensitivity as to how and what members posted.

It appears that for these teachers their ability to share and benefit from knowledge creation opportunities was stunted because they were trying to maintain their image as “certain types of teachers.” When groups experience anxiety or fear in collaborations, such as in the Lin et al. (2008) study, or the participation is carefully scripted to maintain a sort of identity, true learning cannot be achieved. Gee (2004) states that while identities

are socially developed, the “importance of each identity is determined within the contexts that teachers work” (p. 474) and the freedom to “perform an identity” (p. 475) is influenced by the context.

Dooner et al. (2008) stress that more research is needed to examine “the harsher realities of group work” (p. 553). The degree to which leadership personnel in NLCs are cognizant of group dynamics and able to facilitate an atmosphere of collaborative inquiry has been identified as an important component in encouraging this type of professional development.

Leadership. Both formal and informal or distributed leadership are implicated in NLCs. Formal leadership is usually responsible for the overall coordination of the work within the network situations, which may also be aligned with leadership in the schools. Katz and Earl (2010) also note the growing importance of informal leadership. Within these researchers’ work formal leaders are described as people such as principals, head teachers, and district administrators. Informal leaders are defined as those without “formal positions of authority” (Katz & Earl, 2010, p. 32) who contribute a range of supports from leading events to creation of materials.

Formal leadership within the network. Trotman (2009) conducted a longitudinal ethnographic study, the purpose of which was to examine how primary school headteachers organized their interactions within a network learning environment. The study was situated in the United Kingdom and involved two networks. One network consisted of six junior schools, while the second network had 36 schools organized in triads on the basis of national assessment data. The researchers drew their conclusions

through analysis of four types of data: semi-structured interviews, network discussion transcripts, field notes, and participant comments gathered during review meetings in which the researchers discussed their observations with the participants. When analyzing the data the researchers focused on issues to do with leadership, collaboration, and beliefs about professional learning. Trotman found that where those individuals in leadership were aware of the philosophical underpinnings of NLCs, and had the skills necessary to facilitate conversations that were necessarily difficult in nature, the collaborations resulted in significant growth in the member's understanding of new pedagogy. Such groups were characterized by the members' ability to express different perspectives and to be vulnerable by pointing to weaknesses in their practice. These groups also engaged in ongoing evaluation of the success of the group's processes as a whole. Networks that were characterized by authentic problem solving and open examination of practice and belief systems generally had horizontal, distributed leadership (Katz & Earl, 2010; Trotman, 2009).

However, Trotman (2009) expressed concern that groups such as those described above were not the norm in his study. Other groups he observed were focused on short-term goals and engaged in practices that emphasized a knowledge transfer model rather than socially constructed learning reflecting the concerns that groups can become hegemonic in their approach and outcomes. In Trotman's research many of the people who assumed leadership did not understand the processes involved clearly enough, or had other motives that worked at cross-purposes to the establishment of an environment of openness and reflection. It cannot be assumed that people are able to participate in NLCs without an understanding of group processes (Katz & Earl, 2010; Trotman, 2009).

Findings from the study conducted by Lin et al. (2006) also demonstrated the importance of skilled network leadership. These researchers found that the level of diversity in the groups impacted knowledge flow and creation opportunities. However, the findings of this study, as in Trotman's (2009) work described earlier, suggested that the skill of the leader determined how diversity was managed. Those who continuously ensured that the participants clarify what they were saying for the benefit of the entire group were able to create situations where new knowledge could be discussed openly rather than act as barriers to participation. This situation reflects Wenger's (1998) concept of legitimate peripheral participation. The leaders' actions enabled members who were encountering new concepts to be scaffolded. Newcomers were initiated into the conversations, thereby creating conditions that enabled a continuous flow of knowledge. The networks in the study by Lin et al. appeared to flourish when there was leadership that understood how to establish collaborative environments that encouraged deep consideration of concepts, and monitored and established routines around how to handle diversity within groups. What is not clear in Lin et al.'s study are the processes that teachers engaged in as they contextualized themselves to the network environment. Leadership also facilitated the mobilization of knowledge from the district level network situations to the schools as will be discussed in the next section.

Knowledge mobilization. Katz et al. (2008) suggested the importance of school and network based leadership in their pilot research project in the Network of Performance Based Schools in British Columbia, and in their study in the United Kingdom (Katz & Earl, 2010, p. 31). The studies by Katz and Earl (2010) and Katz et al (2008) examined the degree to which each of the key characteristics of NLCs, detailed earlier in this

chapter, influenced the non-network members of schools involved in the initiatives. The researchers distributed a survey to five people (administrators, teachers, teacher assistants) in each participating school. The study participants were identified by the head teachers/principals as being knowledgeable about the ways in which the network activities influenced practice in their schools. By placing the school as the unit of analysis rather than individuals it was possible to ascertain the extent to which network knowledge had been mobilized to the schools and the strength of the key factors (described earlier in this chapter) in this process.

Formal leadership involved in creating conditions favourable to network *and* school collaboration and enquiry was positively correlated with changes in teacher thinking and practice. Katz and Earl (2010) describe these leaders as:

“Boundary spanners” and facilitators of change within the network, both offering a point of upload and download of good ideas and practices between the school and the network and providing the conditions for boundary spanners to emerge from within the school. (p. 48).

Of importance to note is that while most schools in the United Kingdom study reported high formal leadership involvement within their schools, only those with high involvement in both the network and the school correlated with increases in new practice. This finding is important to my study as the teachers were involved in a process of moving knowledge to the school which involves ongoing collaboration with the members of their school-based teams.

Informal leadership. Katz and Earl (2010) reported that in the United Kingdom study informal or distributed leadership existed in 60-85% of the schools, but to a lesser

degree (50%) in the networks of schools. The schools reported informal leaders as having an important influence on the coordination of activities, in spearheading “school action plans” (Katz & Earl, 2010, p. 49) and through the provision of various types of support. Distributed leadership is an area the researchers believe is a “powerful lever for spreading the work of networks, but it requires developing an understanding of how distributed leadership can work within a model of joint work” (Katz & Earl, 2010, p. 49). As stressed by Jackson and Temperley, a symbiotic relationship exists in strong school-based collaborations and NLCs as they are mutually reinforcing.

Effectiveness of NLCs. As written in Chapter One, network learning communities (NLCs) have become widely utilized as a professional learning model in educational circles (Katz & Earl, 2010; Jackson & Temperley, 2007; Stoll, 2009; Trotman, 2009). However, the evidence of their effectiveness is contradictory. Timperley and Earl (2012) assert that the “evidence for the effectiveness of networks ... is equivocal at best” (p. 6). They caution that unless NLCs have members who are willing to critically examine their practice by raising issues that may be contentious little professional learning will occur.

Lieberman and Grolnick (2005) highlight the way identity clashes can undermine the effectiveness of NLCs.

Sometimes the gap between the norms of the network and the professional expectations of the schools can be the source of some tension. Educators accustomed to meetings and staff development activities for which someone else provides the agenda and leads the session, may initially perceive the more open ended style of network gatherings as too loose or unstructured [networks] may be experienced as sharing ignorance. (p. 46)

Lieberman and Grolnick (2005) examined 16 networks formed under the umbrella group National Center for Restructuring Education, Schools and Teaching. One of the questions they asked in their research centered on the tensions that exist in networking learning. How do participants who have professional learning identities that are in conflict with the requirements of a NLC then negotiate these environments? Lieberman and Grolnick (2005) describe the epistemological changes that confront some teachers saying:

Teachers are now finding themselves being asked to bridge two entirely different professional cultures. The culture they entered twenty years ago assumed that as long as they conformed to the curriculum and solved more of their own problems, they would have autonomy within their classroom. They were largely judged on the basis of their self-reliance and accountability was individual. As the culture of teaching changes, teachers are now expected to collaborate and to share responsibility for the work they do together; their work has become visible outside their classroom with a new set of conditions and few, if any, referents or experiences to draw upon. (p. 58)

A learning curve. That collaboration requires a particular identity and skillset is further illustrated through the following studies. At the core of NLCs is the use of data to inform decision-making, a process that in NLCs is mediated through collaborative inquiry. Looking specifically at the data analysis aspect of collaborations such as NLCs, Lasky, Schaffer, and Hopkins' (2009) conducted a longitudinal, mixed-method experimental design study in 32 schools located in four states. The study was focused on the processes involved as professionals learned to utilize data to inform practice in collaborative cross-grade and cross-area environments. The researchers found that despite

having a tool or protocol to structure interactions the conversations remained concerned with procedural elements such as turn taking and focused more on summarizing data and classroom activities than on an analysis of the current pedagogical practices of those involved. Lasky, Schaffer and Hopkins (2009) reported that:

using student data to inform improvement planning at teacher and organizational levels in this way requires highly sophisticated skills and the *dispositions* (italics added) to engage in such activities. It implies expertise in organizing structures and activities, using new tools or materials, and in maintaining normative expectations that support organic, self-generative learning conversations for sustained organizational learning and adaptation. (p. 105)

Dispositions refers to the belief system that professional learning is built on deep analysis of the ways in which pedagogical practices positively or negatively impact student growth. This study confirmed that in order to collaborate around data, and to function in NLCs requires a particular orientation to professional learning. Indeed, the research findings pointed to the need for all members of the education community to develop the professional learning identity and skills needed to engage in conversations that focus on the use of data to grow as professionals, at both the school levels and in cross-site situations.

Earl (2009) similarly reported that understanding the inquiry process is essential to being able to engage in collaborative learning. Earl studied primary teachers engaged in a Ministry of Education supported network in Ontario, Canada. This study was part of a larger initiative that included 13 school districts, the purpose of which was to utilize data to inform practice. While the segment of the study reported in the 2009 article had a very

small sample it is worth noting as the research findings are consistent with those of Lasky, Schaffer and Hopkins' (2009) which were outlined above.

Earl (2009) emphasized that while relationships that are characterized by empathy, encouragement, and advice create a positive working relationship they are akin to what Little (1990) calls "storytelling and scanning for ideas" and serve only to maintain practice rather than question it (p. 50). Despite the facilitators' attempts to introduce prompts to encourage active questioning of practice the teachers did not inquire into the suitability of their own pedagogy and belief systems or that of the other group members when discussing the data. Earl (2009) reported that the conversations were still often "descriptive but not probing, confirmatory but not challenging" (p. 52) which I surmise points in part to teachers' belief systems as impacting the change process.

Similarly, Earl and Timperley (2009), building on the research of Earl and Katz (2006), emphasize that engaging in inquiry is not a familiar way in which teachers learn professionally as it demands "transparency" which is "contrary to traditional norms of privatized practice taking place behind closed doors with professional autonomy being considered a teacher's right" (p. 124).

Personal Learning Networks

Personal learning networks (PLNs) are a type of informal learning engaged in by teachers who are in the pursuit of professional development. A PLN can be defined as "the rich set of connections each of us can make to people in both our online and off line worlds who can help us with our learning pursuits" (Richardson & Mancabelli, 2011, p. 21). While PLNs have always existed, only recently have they been recognized as a vital aspect of professional development (Livingstone, 2007; Luehmann & Tinelli, 2008).

Granting PLNs recognition as important is a paradigm shift in professional development delivery that implies value for “distributed” (Luehmann & Tinelli, 2008), collectively created expertise among practitioners (referred to as bottom-up or grass roots approaches) as opposed to only designated “experts” who coach or lead learning events (referred to as top-down). This reorientation to include grass roots versions of professional development by no means dismisses the importance of traditional forms of formally organized networks as professional development.

Both informal and formal learning are necessary (Pineal et al., 2010). Traditionally they have been bounded by place, and often taken the form of face-to-face interactions. Recently, however, internet-based tools have enabled easy access to networks, and consequently for PLNs, to include the individual teacher in virtual communities of practice (Wenger, 1998). Despite the proliferation of tools that are available for the establishment of virtual communities of practice, and the growing use of them (Kitsantas & Dabbagh, 2011), little is known as to how they are employed by practitioners to further their own professional development (Daniel, Schwier, Richard, & McCalla, 2003; Schwier, Morrison & Daniel, 2009). Similarly, little research has been conducted on off-line PLNs. Below I review the literature that pertains to virtual and to a smaller extent off-line PLNs.

As knowledge sharing and dissemination approaches aimed at creating professional development in differentiated manners, virtual communities have the potential to allow for wider epistemological and pedagogical exploration as membership is determined by focus and is borderless (LaGarde & Whitehead, 2012; Richardson & Mancabelli, 2011). These learning tools offer teachers choice across a wide range of systems that includes

the more familiar and easily used technologies such as e-mail, blogs and video-conferencing. As Richardson and Mancabelli (2011) concisely state in *Personalized Learning Networks Using the Power of Connections to Transform Education*:

Simply put, online learning networks change the game by allowing us, in a sense, to create our own global classrooms and collect teachers and other learners around the topics we want to learn about. They allow us to self-direct our learning in exciting new ways ... This is not the linear, one-size-fits-all, all in one place learning system. In these online spaces, content and knowledge are much more decentralized and distributed, are found in many places instead of one, and are also much more individualized. (p. 22)

How are virtual PLNs used by teachers in the pursuit of ways to meet their differentiated learning needs? School level networks, as is evident in the preceding section, often have cultures that are difficult to change, and therefore do not offer the informal workplace learning needed by teachers in the midst of transformation that Eraut (2000) suggests above is necessary for learning to occur.

Fucoloro (2012) investigated the characteristics of educators who utilized online networks as professional development to enhance their understanding of how to integrate technology into their classrooms. The analysis of 133 survey responses revealed that educators utilized online informal learning opportunities, particularly Twitter, for professional growth as it fulfilled their need for “self-directed and differentiated learning” (Fucoloro, 2012, p. 125). Further, the researcher identified substantial differences in the use of online, informal learning based on assignment, years in education, position, grade level, school and age. While Fucoloro did identify the characteristics of professionals

who utilized online professional development, and some of the motivations that drove their use of online informal learning networks, questions remain unanswered about learning processes involved in this form of professional development and their relationship to formal professional development aimed at implementing reform messages still. This study did reveal that for the teachers in this study the online PLNs were a rich form of learning and one that allowed for differentiated learning needs. The conclusions seemed to suggest that online networks are a form of informal learning that warrant further research as they have the ability to address the concerns of teachers in need of support to further professional learning.

Chapter Summary

In this chapter I have presented a review of the literature as it pertains to NLCs, and to a lesser degree, PLCs. Both NLCs and PLCs are based on two theories of learning: social constructivism (Muijs, West, & Ainscow, 2010) and social capital (Muijs et al., 2010). Therefore I have provided a brief outline of social constructivism in general (Schwandt, 2000; von Glasersfeld, 1989), and added specificity by examining Vygotsky's work on learning as a socio-cultural process (1934/1998), the ZPD (1978), and the role of interpretative psychological tools (Penuel & Wertsch, 1995) in the learning process. In particular Vygotskian scholars Edwards (2005) and Penuel and Wertsch (1995), as well as critical curriculum theorist Au (2012) have provided useful frameworks in which to consider CR4YR as a type of curriculum (Au, 2012), and as such an interpretative psychological tool capable of shaping participants' behaviour.

Social capital (Coleman, 1988), the second theory on which NLCs and PLCs are structured, emphasizes the importance of trust in knowledge creation and mobilization.

The construct trust, examined through the work of Bryk and Schneider (2002), Moolenaar et al. (2014), Tschannen-Moran and Hoy (2000), and Louis (2007), offers a useful means for examining participant behaviour in the initial stages of the CR4YR initiative, a point in time that trust had to be reconstructed with the Ministry of Education. Implied in the creation of trust are issues to do with power and identity. Therefore, I examined power as seen through the work of Foucault (1980, 1982). I also outlined the work of identity theorists Gee (2000) and Clarke (2009), as well as network theory as they, in combination with Foucault's work on power, are useful when seeking to understand how groups reconcile currently held professional identities with those required by reform measures such as CR4YR. While NLCs are utilized widely as a means of providing professional learning, they are not universally effective (Timperley & Earl, 2012). A review of the literature suggests that many teachers, who traditionally work in isolation, are not prepared for the realities of collaborative learning (Dooner et al., 2008). Learning in a public, collaborative, inquiry-based environment may be foreign and require an epistemological reorientation regarding what is and is not professional development. Studies have investigated the organizational structures of NLCs (Earl & Katz, 2006), the role of leadership in the operation of them (Katz & Earl, 2010; Trotman, 2009), and the extent to which knowledge is mobilized from the network to the school levels (Katz & Earl, 2010). However, little research has examined the ways in which teachers interact within these environments, particularly the role that the epistemology of professional learning plays in this process (Lieberman & Grolnick, 2005). Further, the role of PLNs in supporting teachers in the midst of initiatives such as CR4YR is incompletely understood. Therefore my research question and sub-questions addressed

this gap in the literature. To review, my research question follows: what processes are involved as teachers interact with a system-initiated cross-school and cross-district professional learning initiative so as to create and utilize cross-district networks and school based collaborative teams in order to impact primary grade readers?

The research sub-questions were: how are formal and informal learning networks created and utilized to further professional development? And what factors influence the use of these networks as professional development resources?

In Chapter Three I describe the methodology used to investigate the above mentioned question and sub-questions.

Chapter Three

Design and Procedures

In Chapter Three I turn to a consideration of the grounded theory methodology and the methods used in this dissertation research. I recognize that “the research question should dictate the methodological approach that is used to conduct the research” (Corbin & Strauss, 2008, p. 12). Therefore, Chapter Three has three primary purposes: to provide a rationale for utilizing Constructivist Grounded Theory (CGT); to describe both the strengths of CGT and the aspects that have been critiqued; and to provide a detailed account of how I utilized CGT methodology and methods within the research. Following a review of the research questions, I outline in chronological order the three versions of Grounded Theory (GT) methodology and the philosophical basis underlying each. I provide a critique of CGT as a research methodology in a postmodern world, situate myself philosophically within that debate, and describe measures I took to maintain researcher transparency through reflexivity. Finally, the research process employed throughout this study is detailed.

The term methodology is used when referring to CGT as a “way of thinking about and studying social phenomena” (Corbin & Strauss, 2008, p. 1), while method is used when referring to the specific data gathering and analysis techniques and procedures (Corbin & Strauss, 2008, p. 1).

Research Questions

The key purpose of this study was to theorize, rather than describe, the complex processes involved for teachers who were participating in the creation and utilization of

networks to learn professionally. To this end one central question and two sub-questions guided the study. They are as follows:

Central question. What processes are involved as teachers interact with a system-initiated cross-school and cross-district professional learning initiative so as to create and utilize cross-district networks and school-based collaborative teams in order to impact readers in the primary grades? In this study the term create refers to the ways in which the participants access and initiate collaborate relationships with their colleagues. Utilize refers to the ways in which the collaborate relationships are used by the participants.

Sub-questions. How are formal and informal learning networks created and used to further professional development? What factors influence the use of these networks as professional development resources?

Grounded Theory

This section begins with an overview of the history and development of GT, followed by a description of the philosophical underpinnings of CGT. While GT has been used extensively to research practice-based professions such as nursing, it is seldom used to investigate the processes involved as public school educators strive to grow professionally. The methods utilized in CGT, particularly as informed by pragmatism, symbolic interactionism, and constructivism are ideal when studying a networked professional learning model as it is an active process where teachers evolve over time.

History and development of grounded theory. Grounded theory was introduced originally by Glaser and Strauss (1967) as a critique of the “divide between research and theory” (Bryant & Charmaz, 2008). Their ground-breaking text, *The Discovery of Grounded Theory* (Glaser & Strauss, 1967), aimed to provide a methodology for a research process that grounded theory in empirical data (Mills, Bonner, & Francis, 2006) and “provided an alternative to the hypothetico-deductive approach” (Kelle, 2007, p. 192) favoured at the time. In particular, they criticized the grand theories that could not be substantiated with data (Charmaz & Bryant, 2008; Dunne, 2010). Grounded theory methodologists use a combination of distinctive methods that both set the methodology apart from other types of qualitative research and establish it as rigorous (Dunne, 2010). In brief these methods involve the following: simultaneous data collection and analysis; coding in terms of processes and actions rather than topics or themes; constant comparison; theoretical sampling; and theoretical saturation. The systematic application of these research methods culminates in the creation of a substantive theory grounded in the data.

Today, more than five decades after the introduction of GT, three distinct strands of grounded theory method exist. The three versions are best exemplified through the work of Glaser and Strauss (Corbin & Strauss, 1990), Strauss and Corbin (1990, 1994), and Charmaz (2000, 2006, 2008, 2011, 2012). The most pronounced variations between the three strands are the epistemological beliefs about the roles of the researcher and the researched, the ways in which theory is conceptualized, and the relationship between data and reality (Charmaz, 2011).

Glaser and Strauss. Glaser and Strauss (Corbin & Strauss, 1990) posited a system that allowed theory to emerge from data, a sharp departure from the positivistic practices of the day that privileged pre-study establishment of hypotheses, organizing theories, and instrumentation (Charmaz, 2011). Their original work echoed the positivist's epistemological views that reality could be discovered, and that the researcher could, through careful structuring of the research methods ensure that the "truth" was being revealed (Charmaz, 2000, 2006, 2011; Glaser, 2002). However, the work of Glaser and Strauss (Charmaz, 2006) also suggested to the research community that qualitative work could be considered a serious research paradigm by demonstrating: that theory and research could co-exist; that qualitative data could, through rigorous, systematic handling, lead to substantive theories; and that, therefore, qualitative research did not simply have to be relegated to the position of the introductory act for the more "scientific" quantitative research (Charmaz, 2000; Dunne, 2011; Merriam, 2002). After Glaser and Strauss parted ways as methodologists, Glaser continued to espouse a particular epistemological orientation known as Glasarian GT. Glaser remained focused on the methods originally introduced as GT in the work that he did with Strauss.

Strauss and Corbin. Strauss and Corbin (1994) introduced a system of GT based on pragmatism and interactionism. Straussian GT recognizes that researchers cannot separate themselves from the data gathering and analysis processes, and that participants are active in the construction of their realities based on their historical and current contexts (Corbin & Strauss, 1990; Strauss & Corbin, 1994). Corbin and Strauss (1990) asserted that "actors are seen as having, though not always utilizing, the means of controlling their own destinies by their responses to conditions" (p. 5). They further

acknowledged that action is context specific and emphasized that the resulting theory “may give some degree of predictability, but only with regard to specific conditions” (Strauss & Corbin, 1990, p. 5). In these respects, Strauss and Corbin moved toward constructivist views of research, but theorists such as Charmaz (2000) asserted that in other ways they remained objectivists. For example, Strauss and Corbin were criticized by scholars such as Charmaz (2000, 2011) and Kendall (1999) for creating tight structures around the data that violated the original purpose of GT – that of drawing codes, concepts, and theories directly from the data. In this regard, Corbin and Strauss (1990) expanded the Glasarian GT coding system from a two-tier system that included substantive codes (codes drawn from the data rather than constructed a priori) (Kendall, 1999) and theoretical codes (codes that account for most of the variation in the data and will be used to create theory) (Kendall, 1999) to a three-tier system in the Straussian model. The Straussian coding model included: open coding (codes drawn from the data rather than constructed a priori); axial coding (codes and concepts are related to each other); and selective coding (codes that account for most of the variation in the data and will be used to create theory) (Corbin & Strauss, 1990).

The Straussian model of GT also presented an expanded means of determining GT research rigour. Corbin and Strauss (2008) identified 10 criteria for judging the quality of research, eight conditions that “foster the construction of ‘quality research’” (Corbin & Strauss, 2008, p. 302), and 13 criteria for judging the quality of research based on the information provided in reports, articles, or presentations. In contrast, Glaser and Strauss (1967) identified the following four criteria for judging rigour: fit, work, relevance, and modifiability.

Constructivist grounded theory. The third strand, constructivist grounded theory, rejects the rigid, organizational strategies used by Strauss and Corbin and the objectivist positioning of the researcher and researched as described by Glaser and Strauss. By maintaining the original openness to drawing codes, concepts, and theories from the data, while at the same time maintaining that people actively construct understanding, theorists such as Charmaz firmly established this methodology as constructivist. Constructivist grounded theorists believe there are multiple realities, participants need to be studied in their natural contexts, researchers are expected to be part of the context and therefore co-creators of the expressed “reality,” and to understand a phenomenon, data that conform to observed patterns as well as data that does not must be accounted for in theory (Charmaz, 2011). The specifics of CGT are further delineated later in this chapter.

Philosophical Foundations of Grounded Theory Methodology

CGT is based on three philosophical belief systems: pragmatism, symbolic interactionism, and constructivism. These philosophical belief systems are pertinent to a study of how teachers network to learn as the systems allow that learning is a process, one that is influenced by multiple factors within the socio-political environment in which it occurs.

Pragmatism. Pragmatism, which gave rise to symbolic interactionism, presents reality as subjective, value-laden, fluid and dependent on meaningful action (Charon, 1979; Strubing, 2007). Epistemologically and ontologically, meaning arises within, and is demonstrated through, action that is directed towards problem-solving. Meaning, for the individual, is intricately connected with its usefulness (Charon, 1979), and this usefulness

emerges through a process that can be observed in the actions of humans as they problem-solve in particular environments. Pragmatists further believe that humans are respondent to their social, political and historical environments (Denzin, 2010) and therefore meaning is in a constant state of becoming (Charon, 1979; Strubing, 2007).

Pragmatism is well suited to studying professional development. The creation of professional learning networks is a process that is complex and situated in action. It is not an event, but a process where each step informs the next. As pragmatists, GT researchers focus on the research problem rather than structuring their study around pre-existing theories of professional development, data sources or the use of coding topologies to explain the data (Creswell, 2009). Strategies such as theoretical sampling enable concepts that represent the participants' situated realities to be investigated as they arise, in manners appropriate to the need, leading to theories that will be recognizable and useful in the study contexts.

Symbolic interactionism. Symbolic interactionism is concerned with interaction, and the effects that it has on individuals or groups (Charon, 1979) as symbolic interactionists believe that both “stability and change in the individual and society are understood through understanding interaction” (Charon, 1979, p. 31). Participants' actions and interactions are indicative of the meaning an event, or symbol, has for them (Charon, 1979). Within actions and interactions people demonstrate, create and influence meaning-making (Blumer, 1969; Charon, 1979). Blumer (1969) describes symbolic interactionism as based on the following three premises: reality is an interpretation and people act in accordance with these interpretations; social interactions fund versions of reality; and meaning is in a state of flux as it is constantly being augmented, revised or

discarded as a result of interactions. Therefore, to enable researchers to understand the change process, research focuses on the interactions between the participants and the people or objects in their environments as they problematize the enactment of new knowledge (Schwandt, 1994).

As symbolic interactionism assumes that “actions are necessarily embodied” as “when interacting, people enact who they are” (Timmermans & Tavory, 2007, p. 497), I utilized an open-ended interview protocol which allowed the participants to draw upon the experiences they considered relevant and meaningful to them. Further to the use of open-ended questions, I became familiar with the reference materials, such as textbooks, handouts on collaboration, and videos on the CR4YR website that participants reported as utilized in the CR4YR initiative. Additionally, I interviewed both the teacher participants and the administrators and Reading Advocates (RAs) who resourced them to more fully understand the contexts. Finally, at the invitation of one of the school districts involved in the research I attended a Ministry of Education sponsored meeting for the administrators involved in the initiative. Each of these actions allowed me to better understand the participants’ realities as they networked to learn, and how participants were utilizing the networks. For example, reading one of the reference materials helped me understand certain participants’ references to professional development versus professional learning.

Constructivism and CGT. Philosophically, constructivism is closely related to pragmatism and symbolic interactionism. Constructivists posit that people are active in the creation of reality (Hall, Griffiths & McKenna, 2013), and that reality is subjective (Hall et al., 2013), context-specific (Schwandt, 1994) and built through interaction

(Schwandt, 1994). In a research situation constructivists believe knowledge is “transactional and subjectivist; the researcher and the focus of the enquiry are linked” (Hall et al., 2013, p. 18). Therefore, the researcher, adopting a constructivist lens, acknowledges that the researcher and the researched are co-creators of the data and that decisions made during the research process are based on the researcher’s interpretations of the situation. As Charmaz (2006) stresses, “I argue that our purposes, and those of our research participants, shape what we do” (Charmaz, 2011, pp. 291-292). She clarifies this idea by saying:

This point affects which questions we ask, the kind of data we collect, our modes of analysis, and what we take as evidence. Our purposes reflect professional biographies, personal experience, and political proclivities in addition to specific methodological preferences and skills. (Charmaz, 2012, p. 136)

As a constructivist I acknowledge that my prior knowledge and assumptions about the research topic, in this case professional development, impacted my interpretations of the data and my interactions with the participants, making reflexivity an important part of the research process.

Further, as reality is relative in that constructivists view participants as actively seeking to make sense of new situations in terms of their own philosophical orientations, experiential baselines, goals, and contexts, researchers use open-ended data collection strategies that allow the participants to share, and build, their particular realities rather than employ preconceived theoretical frameworks and data coding/analysis methods. Finally, I recognize how the research I conducted is specific to those involved in my study and may not be applicable in other situations (Charmaz, 2006).

Constructivist Grounded Theory in a Postmodern Era

The next sections explain distinguishing features of GT and key criticisms leveled against it as a research methodology. The discussion that follows refers to all forms of GT except where CGT is specified. GT is an inductive methodology that also utilizes deductive and abductive methods. It allows for the creation of substantive, middle-range theories that detail processes specific to a particular area (Milliken, 2010) as “(t)he rigours of the approach force the researcher to look beyond the superficial, to apply every possible interpretation before developing final concepts, and to demonstrate these concepts through explication and data supported evidence” (Goulding, 2004, p. 297). While substantive theory can be defined as “a theoretical interpretation or explanation of a delimited problem in a particular area” (Charmaz, 2006, p. 189), the exact meaning of theory in a postmodern age needs further explanation.

Kearney (2007), in saying, “many of us have struggled with ... what constitutes adequate grounding, and what degree of abstraction is appropriate in a postmodern age” (p. 127), encapsulates the disquiet that exists for researchers in a postmodern age when using methodology that purports to create theory (Charmaz, 2006; Clarke, 2003). Clarke (2003) characterized the postmodern period as emphasizing “localities, partialities, positionality, complications, tenuousness, instabilities, irregularities, contradictions heterogeneities, situatedness, and fragmentation complexities” (p. 554), all of which requires that the concept “theory” be carefully delineated. Consistent criticism has centered on Glasarian GT methodologies, and to some extent the later version developed by Strauss and Corbin (1990), for espousing objectivist (Charmaz, 2006), modernist leanings.

Charmaz, who positions CGT between postpositivism and postmodernism (Charmaz, 2006; Hildenbrand, 2007), sharply disagreed with the objectivist Glasarian views, saying that data are not a “window on reality” (Charmaz, 2000, p. 523) but are at best “reconstructed narratives” (p. 523) that contain both the stories of the interviewers and the interviewees. She, along with other theorists such as Clarke (2003, 2007), advanced GT methodology to a position more closely aligned with postmodernism and constructivist thinking. She stressed that people actively construct understanding that is temporal, subjective and context-specific. The constructivist and symbolic interactionist underpinnings of CGT then caused Charmaz (2006) to adopt theorizing as opposed to what she considers to be objectivist practices of establishing theories. She described that while still focused on the collective rather than the individual, the CG theorists “offer guides to interpretative theoretical practice” rather than providing a “blueprint for theoretical products” (Charmaz, 2006, pp. 128-129). Theorizing, as used by Charmaz, does appear to offer a practical middle ground in the debates around the place of generalizations and by extension, theory, in a postmodern era. A CGT is not meant to be prescriptive, but to raise the data in one particular situation to a conceptual level by noting patterns in the processes employed (Charmaz, 2014). School districts, schools and individual teachers all vary in their histories and identities. They will therefore respond to situations in particular ways that reflect these histories and identities. A CGT does not outline how to design a system, as a model may do, but offers instead principles particular to one situation.

My philosophical orientation aligns with Charmaz’s views of theorizing. My choice of a CGT reflects my belief that an individual’s version of reality is shaped by his/her

historical, cultural, social and political contexts. As such I acknowledge there are multiple versions of “reality” and participants’ engagement in the professional development processes being investigated will reflect their varied contexts. These views suggest I have a largely relativist view of reality, a view that funds my belief that in order to understand a situation wide exposure to those involved is necessary. However, I also believe patterns within these individualized constructions of reality will emerge and suggest commonalities across participants allowing for a substantive theory that mirrors theorizing as used by Charmaz (2006), to be proposed that represents the population from which the data were gathered. As such I recognize CGT offers a method of inquiry that allows for the unique situations of the participants situated in BC school districts to be respected and the patterns in behaviour across participants to be delineated.

Theory-building. Whereas other forms of qualitative research may create thick descriptions of data that allow the reader the opportunity to “enter into and understand the situation” (Patton, 2002, p. 262), all GT researchers conceptualize data by defining the “properties of the category, and its relation to other categories” (Charmaz, 2006, p. 187) so as to form an interpretative theory. As Charmaz (2006) states, “the method favors analysis over description, fresh categories over preconceived ideas and extant theories” (p. 187).

The elevation of descriptive data to a conceptual or theoretical level is one of the major differences between CGT and other forms of qualitative research. As mentioned earlier, the rigor enabled by CGT is derived from the combination of five methods: simultaneous data collection and analysis, coding in terms of action and processes rather than themes, the constant comparison method, theoretical sampling, and theoretical

saturation (Charmaz, 2006; Dunne, 2011; Goulding, 2004). However, the ways in which grounded theorists in general, and CG theorists in particular, create theory from data have come under scrutiny recently (Dey, 2007; Harry, Sturges & Klingner, 2005; Mills et al., 2008). As qualitative researchers are to be “aware in the moment of what is influencing the researcher’s internal and external responses while simultaneously being aware of the researcher’s relationship to the research topic and the participants” (Dowling, 2006, p. 8) the confusion that surrounds reflexivity has been justifiably criticised. Reflexivity is a means of assuring the reader of research credibility. Credibility is of great importance since CG theorists, as social constructivists and symbolic interactionists, consider that research is co-created. The relationship between research as co-created and reflexivity is discussed in the next section.

Co-creation of research data. While CGT researchers both value and accept the relational quality of the researcher-researched relationship, the following comments made by Glaser (2002) raise valid concerns as to the credibility of their research. In a criticism of Charmaz’s belief that data is co-created he admonished:

If the data is garnered through an interview guide that forces and feeds interviewee responses then it is constructed to a degree by interviewer imposed interactive bias.

With the passive non structured interviewing or listening of the GT interview-observation method constructivism is held to a minimum.” (Glaser, 2002, p. 3)

Glaser (2002), although acknowledging that theories are based on perspective, that of the researcher as well as the researched, nevertheless believed that initial interviews were largely based on “passive listening” (Glaser, 2002, p. 1).

Glaser's criticism that research can be researcher-dominated is valid and is mirrored, albeit for different reasons, by Charmaz (2006) and Mruck and Mey (2007) who raise concerns as to the visibility of the research process. Schwandt (1994), referring to what is known of symbolic interactionism, cautions that researchers must explicate the basis for theoretical decision-making. Therefore, for CGT researchers, in order to create an audit trail, reflexivity is an essential part of the research process (Charmaz, 2006; Dey, 2007; Mruck & Mey, 2007; Urquhart, 2007), rather than simply data, as it is for other forms of GT. Memos in CGT allow others to understand how the researcher interpreted data in order to create codes, categories, and concepts.

Reflexivity. Reflexivity can broadly be defined as “critical reflection on ‘self as a researcher’... It is a conscious experiencing of the self as both inquirer and respondent, as teacher and learner, as the one coming to know the self within the processes of research itself” (Lincoln, Lytham, & Guba, 2011, p. 124). It refers to the ways in which researchers have positioned themselves in the research situation (Mruck & Mey, 2007; Neill, 2006; Olesen, 2007). Mruck and Mey (2007) suggest that the exact nature of reflexivity, while often described in studies as a means to “rethink ground or justify their own decisions” (p. 519), is a term that has multiple definitions. However, generally it is practiced in the following three ways: description of how data are gathered and analyzed; description of and analysis of the researchers’ backgrounds and the influence they have on the research; and description and analysis of the ways in which the researchers’ emotions have influenced the research (Olesen, 2007).

The issue of reflexivity has become of particular concern when discussing GT where data are raised to a conceptual level through multiple iterative stages, perhaps making the

analytic rationale less visible to the reader (Charmaz, 2006; Chiovitti & Piran, 2002; Mills et al., 2008; Mruck & Mey, 2007). This point is raised by Cutcliffe (2000) who stresses that an important aspect of GTs claims to rigour rest on

the need for the grounded theory researcher to acknowledge his/her prior knowledge and tacit knowledge, to bring such knowledge into the open, to discuss how it has affected the theory development for ensuring methodological rigor and for improving the quality of the findings. (p. 1479)

One of the various reflectivity strategies used in CGT is memoing. Creating memos, a step that Charmaz (2006) described as the “pivotal intermediate step between data collection and writing drafts of papers” (p. 72), is one method used by all GT researchers, instrumentally at least, as a process that allows for transparency in the theory building process. CGT researchers also use memos as reflexivity tools that allow insight into their roles in the co-creation process (Birks, Chapman & Francis, 2008; Charmaz, 2006; McGhee, Marland & Atkinson, 2007; Mills et al., 2008). Charmaz (2006) emphasizes the need to document theoretical insights and the “extent to which the researcher’s interests, positions, and assumptions” (pp. 188-189) contribute to theory building. The use of memos in this manner shows recognition of the subjective nature of the research process on the part of the researcher (Mills et al., 2006).

Memoing in the context of this study. Memos were completed throughout the research process (Charmaz, 2006); prior to the start of the research process (Chiovitti & Piran, 2003); immediately following each interview (Charmaz, 2006); and during the analyses processes (Charmaz, 2006).

To maintain openness to the data, sensitivity to emerging concepts, and to avoid imprinting preconceptions on the data, I externalized my assumptions relevant to a study of professional development (Birks & Mills, 2011; Charmaz, 2006; Cutcliffe, 2000). Birks and Mills (2011) suggest that the researcher articulate four key assumptions: philosophical orientation and how it relates to the study; both experiential and formally acquired pre-existing knowledge about the topic; expectations as to the results of the study so as to avoid unconsciously influencing the study results; and ways in which the researcher's "strengths and limitations" (p. 20) may influence the research. I recorded these assumptions prior to the start of the study as a memo and referred to them throughout the study to both increase theoretical sensitivity and to act as a check on my decision-making.

Additionally, prior to the start of the study I wrote answers to my research questions as if I was a participant (Mruck & Mey, 2007). I utilized my assumptions about networking as a professional learning tool as a reference point when recording answers. Both the above activities contributed to an awareness of my own implicit and explicit epistemological and pedagogical belief systems pertaining to effective professional learning and allowed me to more easily "bracket" these during the interviewing and analysis stages.

Memoing was also completed as I coded, collapsed codes to categories, and determined both the basic social problem and basic social process (Glaser, 1978). Memoing then provided an audit trail that allowed me to track my thinking about the data as well as the influence I was having on the co-creation process. More specific information about memoing is provided in the sections entitled *The Coding Process*.

Rationale for Constructivist Grounded Theory Method

Below, I outline the two features of CGT that are appropriate to my research purpose: a collective focus; and emergent methodology and exploratory studies.

A collective focus. CGT research is directed towards understanding social processes at the level of the collective rather than the individual (Charmaz, 2012). As opposed to creating detailed descriptions of the individual participants in a study, GT researchers are interested in understanding the patterns that exist across participants (Strauss & Corbin, 1994). Additionally they are interested in understanding process which can be defined as “reciprocal changes in patterns of actions/interactions and in relationship with changes in conditions either internal or external to process itself” (Strauss & Corbin, 1994, p. 278). Understanding the process of change is highly valuable to teachers and administrators seeking information as to how to enable learning in network situations.

Professional development, when viewed through a situational lens, can be considered to be a context-specific, process, and based in social activity. Learning is viewed as lodged within, and dependent on, the multiple contexts that teachers inhabit. Within these contexts educators have particular identities and patterns of interactions that determine what and if new learning occurs (Coburn & Russell, 2008). As a process-based methodology, CGT is ideal for studying professional development. Despite the complexity of raising descriptive data to a conceptual level, this methodology is uniquely appropriate for research that is focused on practice-based professions such as education (Stern, 2007) because “this approach to qualitative data promotes the development of theoretical accounts which conform closely to the situations being observed, so that the

theory is likely to be intelligible to and usable by those in the situations observed” (Bryant, 2002, para. 61).

Emergent methodology and exploratory studies. CGT is suited to exploratory studies. As written in Chapter One, a significant gap in the literature exists around the processes involved as educators create and utilize networks in situations such as the CR4YR initiative. Previous studies have focused on the organizational structures of NLCs rather than the ways in which teachers utilize them to fund their understanding of, and ability to use, networking to learn. The CR4YR structure is also an important consideration in using an emergent methodology. Some of the previous attempts to use NLCs proved to have risk factors that threatened the effectiveness of this model as a way of mobilizing information (Timperley & Earl, 2012). In particular, the ability of leadership to facilitate the process at both the network and school levels is critical, and has, as reported in some studies, proved to be problematic (Trotman, 2009). In addition, researchers have reported that collaborative learning requires learners to critically examine their practice, an area that has proven challenging for many teachers (Earl, 2012). As reported in Chapter One, CR4YR, the British Columbia Ministry of Education version of the NLC model, seemed to have overcome some of the previously mentioned shortcomings making it an ideal site to study networking processes. CGT methodology is emergent and is therefore not dependent on a pre-established theoretical design framework and analysis criteria. Data sources can be identified as important concepts emerge (see Rippon, 2005). The five key CGT methods allow for close scrutiny of the phenomenon, and for the exploration of the new and unpredictable elements that arise from the probing of the multiple data sources. In particular, simultaneous data

collection/analysis and theoretical sampling are useful in identifying sources of relevant information that enable researchers to examine multiple data sources to determine how “networks, situations and relationships” (Charmaz, 2006, p. 130) affect behaviour.

Data Collection

Research timeline. In this section I discuss the research timeline (see Table 1). On November 26, 2013 I received approval from the University of Victoria Human Research Ethics Board to begin gathering data for this study. A modification to my original application for Human Research Ethics Board was granted on February 6, 2014. A full explanation as to why a modification to my ethics approval was sought is described later. Participant recruitment began on November 27, 2013 and continued to May 26, 2014. As I was gathering data teachers initiated strike action that escalated from a partial withdrawal of services on May 21, 2014 to a full withdrawal of services on June 16, 2014. I have included the dates of the job action in the research timeline as this event was part of the research context and affected my efforts to recruit participants in one school district and resulted in one participant in another school district withdrawing from the study.

Table 3-1. Research Timeline

November 26, 2013	November 27, 2013- May 26, 2014	February 6, 2014	February 6, 2014 – June 12, 2014	May 21, 2014	June 16- September 2014 (ongoing)
Approval of Human Research Ethics Board	Participant recruitment	Approval of Human Research Ethics Board for modification	Simultaneous data gathering and analysis	BCTF announce first phase of job action	BC teachers: full withdrawal of services

Sampling. Purposive sampling methods, defined as “nonprobability sampling” (Teddlie & Fu, 2007, p. 80) the purpose of which is to “find instances that are representative or typical of a particular type of case on a dimension of interest” (p. 80), were utilized in the site and informant selection processes. Purposive sampling methodology includes careful consideration of the participants’ familiarity with the phenomenon under study (Morse, 2007), their willingness to participate (Morse, 2007), their abilities to be “reflective” (p. 231) and their abilities to “speak articulately about the experience” (p. 231). Further, Creswell (2014), drawing on the work of Miles and Huberman (1994), states that consideration should be given to the setting or site from which the participants will be drawn and/or where the research will take place. Bearing

the above advice in mind, inclusion criteria were established to guide both the selection of the overall research context and the recruitment of participants.

Site context. In Chapter One I explained the overall CR4YR context. This context was an important site to draw participants from for two reasons. First, as reported above, CR4YR, as a version of a NLC model of professional development, offered the opportunity to study problematic phenomena that have arisen with NLCs as professional learning models. Second, British Columbia is in the process of a major reformation of the education system (British Columbia Ministry of Education, 2014), a change that I believe will require substantial professional development for teachers in the coming years. As the Ministry of Education considers that the CR4YR has been a successful model for professional development (it has now been renewed for a third year) it is possible this model will be used in further professional learning endeavours as BC moves forward with the proposed reforms. As this study has resulted in a substantive theory that delineates the processes involved as BC teachers created and utilized professional learning networks, it may provide insight useful for those participating in and resourcing these professional development initiatives within a British Columbia context.

Additionally, as symbolic interactionism and social constructivism both posit that behaviour is context specific and socially based, a second criterion for selection of participants was that the districts from which they were drawn be a mix of rural and urban school districts. I believed this decision would maximize my exposure to varied conditions. For example, as is described in greater detail below, I accessed districts with different geographical sizes and resource bases. Therefore, the participants were employed in five school districts – two of which could be considered rural, and three

that are urban. These school districts are primarily located in three geographical regions of the province: Vancouver Island; North Okanagan; and Okanagan-Similkameen. The school districts represented different population densities, geographical sizes and resource bases. For example, one of the districts includes seven municipalities, four of which have schools that are a 45 to 65 minute commute to the district's central offices. In contrast two other districts have all schools within a 15 minute commute of the district's central offices. Further differences exist in the number of resource people available to assist teachers access/create, maintain and utilize networks to learn (see Table 2).

Table 3-2. School District Characteristics

Site	Geographical: size of district	District Resource People (able to support at district and school levels)	Urban/Rural
SD 1	149.5 km ²	3	urban
SD 2	8113.3 km ²	1	rural
SD 3	2183.2km ²	2	urban
SD 4	5562.8 km ²	3	urban
SD 5	1734.4 km ²	2	rural

Characteristics of initial informants. To be eligible to take part in the study the informants had to have participated, either as District Office administrators, Reading

Advocates, or teachers, in the CR4YR initiative and be willing volunteers in the research. The initial participants met a further criterion – they had to have participated in the CR4YR initiative during the 2012-2013 school year. Initially, I recruited 2012-2013 participants, as these people had been involved in one entire cycle of the initiative. As I was interested in the processes involved as teachers network to learn, rather than descriptions of the phenomenon, there were two reasons for my initial selection criteria. First, as the seven CR4YR meetings took place over a seven month period of time during the 2012-2013 school year, I reasoned that participants who had completed one full cycle of the initiative would be most able to reflect on and explain the networking processes. Secondly, since my research was conducted in the 2013-2014 school year and I was interested in process, I further expected that having gained some distance from the initiative, participants would be in a position to explain how the CR4YR experience had impacted networking practices following the completion of their involvement in the initiative. The final criterion for inclusion was that the participants had participated in all or all but one of the district CR4YR network sessions. This criterion became a non-issue as regular attendance was a district-level requirement made clear to participants at the onset of the initiative in every research site. As the CR4YR initiative focused on primary level readers, all the teacher/administrator participants worked in some capacity with teaching reading to primary level students, while the School District administrators were responsible for supporting teachers through district level professional development as well as through individual meetings with teachers, through classroom demonstration lessons, and so on. Initially participants were drawn from three school districts – each in

a different region of the province, with two additional districts added at a later date as the participant response to my initial call for informants was low.

Recruitment of informants. In this section I outline the procedures utilized to recruit participants. As GT is an emergent methodology only the initial participants/sources of data were identified prior to the start of the study (Morse, 2007). Further sources of data were recruited as needed to fully develop the emerging theory (Birks & Mills, 2011; Charmaz, 2006; Schreiber, 2001).

Location of research sites and participants. Participant recruitment was a multiple step procedure and varied from district to district. Initially, in November 2013, I approached the British Columbia Ministry of Education Reading Superintendent for recommendations of two suitable sites - one rural district and one urban district. I sought permission from each of the recommended sites to both conduct research in the two school districts and to distribute my materials (see Appendices A, B, C, and D) through their school district mail system. As the response to my invitation to participate was low, in January 2014 I applied for a modification to my original ethics submission (approved on February 6, 2014). The modification expanded the ways in which I recruited participants and allowed me to approach any district in British Columbia for permission to conduct research. In February 2014, I sent recruitment packages to nine additional school districts, four of which approved my request to do research. One reported that it was uninvolved in CR4YR. In two of these districts, once I had received permission from the district superintendents to conduct research, I was instructed to send emails to every district elementary school to first determine if they had been involved in CR4YR, and

second if I could distribute my materials in their schools. In the three remaining districts the School Board offices distributed my materials. I initiated the process with a sixth district, gained permission from the superintendent, contacted the 35 elementary schools in the district to determine which had been involved in CR4YR, but the provincial strike severed my contact with potential participants as I had to depend on school principals to distribute my materials – a form of communication not allowed under the terms of the strike action. Two professors at the University of Victoria also distributed my materials (see Appendix E) to students who met the inclusion criteria (described below) for the study. Data gathering and analysis occurred concurrently with my continued efforts to recruit participants, processes that continued throughout the study.

Recruitment methods. A letter inviting potential informants to participate in the research was distributed to each potential participant through the involved School District Board Offices, or through school based administration, or through two university professors at the institution in which I am studying. The letter outlined my interest in understanding how networks are created, accessed, maintained, and utilized (see Appendices B, C, and D). The letter met the University of Victoria Human Research Ethics Board stipulation that the study be thoroughly described to potential participants. Secondly, as the letter clearly stated that I was interested in the networking processes and defined both informal and formal networking I hoped that I would gain participants who were “experts in the experience or phenomena” (Morse, 2007, p. 231) relevant to my purpose. This method allowed me to recruit participants who were knowledgeable about the networking processes.

To express interest in being a research participant, people contacted me via email. I responded by email and as the context in which interviews occurs can impact the quality of the interview data (Creswell, 2014), I arranged a time and place to meet that was convenient for their schedules. One school district provided me with a teacher-on-call to meet with participants during school hours. The other participants arranged to meet with me either after school finished for the day or in the case of Board Office personnel during the work day as their schedules allowed. We met in either schools or the School Board Offices.

A total of 17 professionals who had been involved in CR4YR responded to my call for participants. One withdrew citing job action as the reason. Six additional participants were gained through snowballing. The recommending informants made the initial contacts with the potential informants; I followed up with an email once I had received confirmation from the potential participants that they were interested in participating.

Theoretical sampling. Theoretical sampling is defined as a process whereby the researcher “seeks people, events, or information to illuminate and define the boundaries and relevance of the categories” (Charmaz, 2006, p. 189). The data accessed may be gained through the recruitment of additional participants, but could also be from methods such as document analysis (Charmaz, 2000; Corbin & Strauss, 1990; Gasson & Waters, 2013). Charmaz (2006) used the following metaphor to describe this process: “Like a camera with many lenses, first you view a broad sweep of the landscape. Subsequently, you change your lens several times to bring scenes closer and closer into view” (p. 14). I utilized theoretical sampling to fill gaps in my understanding of the networking process.

The recruitment of additional participants was, as said above, through snowballing. One participant was gained by asking a participant to pass along my recruitment package to a person who was on her team during the 2012-2013 school year. The participant told me that this person could further illuminate the role school-based teams played in the networking process. Another participant was recruited as a result of asking a participant to share my materials with a specific teacher whom she reported as having had negative experiences with the initiative, an aspect I felt would add to my understanding of the networking process. As all of my informants to that date were positive about their experiences. A third and fourth participant were gained through snowballing as participants informed me that to further understand how to support teacher networking I “needed” to talk to these two individuals. A fifth and sixth participant were accessed again through snowballing as a result of learning they were reluctant participants in the CR4YR initiative. These participants were important as I wondered if people who were reluctant to enter this initiative, given that it had been explained as requiring collaboration, would add to my understanding of the networking process. Further, I hoped that these participants would add to my understanding of how teachers create identities supportive of collaborative learning.

Interview Procedures. I began interviews on February 6, 2014 and completed my final interview on June 12, 2014. Interviews were between 55 and 70 minutes in duration and were audio recorded. As already stated the interviews took place in five school districts situated in three different areas of the province.

Charmaz (2006) describes a GT interview as “intensive, open-ended yet directed, shaped yet emergent, and paced yet unrestricted” (p. 28). The GT interview method then

can be semi-structured, as mine were, in that the researcher begins with an interview protocol that contains open-ended questions that direct informant's attention to the phenomenon at the core of the research process, while also providing space for the informants to respond from their own perspectives (see Appendices G and H). Schreiber (2001) suggests, and Charmaz (2006) agrees, that the prime purpose of the interview is to understand the phenomenon from the perspective of the informants, a process that researcher questions can stunt. The ideal then is to "follow the trail of the interview as the participant tells it" (Schreiber, 2001, p. 67). The informants in this study, in general, gave detailed answers which allowed me insight into their perceptions. Often one researcher-initiated question resulted in answers that included multiple questions from the protocol. I simply stopped at points in the interview, asked permission of the informants to check my notes, and followed-up with questions the participants had not touched upon (Schreiber, 2001, p. 67). In other cases the questions from the protocol were used in sequence to elicit information.

Each interview began with a scripted review of the consent and research process (see Appendix G and H). At the beginning of each interview I described the focus of the interview; confidentiality of information; the freedom to decline to answer questions and/or to add information they felt was relevant; and answered any questions the participants had about the research process. Additionally, I described my own career trajectory and my interest in the networking process. Finally, I emphasized that the study was exploratory in nature, that there were no preconceived correct answers, and that their perspectives were valued.

Charmaz (2006) further stresses that while the interview is meant to be conversational and informal, the researcher is expected to follow the emerging data by “immediately pursuing” unexpected informant perspectives and checking emerging concepts (Charmaz, 2006). Immediately following each interview I listened to the audio in its entirety, and created field notes detailing my general impressions of the interview process itself and of the data. Following this preliminary analysis I began transcribing the audio data, a process that is described below.

Simultaneous data gathering and analysis were practiced with the analysis creating the focus for subsequent interviews. Analysis began immediately after the first interview, allowing me to detect and follow themes in the data by “returning to the field and to gather focused data to answer analytic questions and to fill conceptual gaps” (Charmaz, 2006, p. 29). At this point I began to transcribe the recorded interviews. However, due to the interviews coming very close together, at times I conducted my initial analysis of data using only the audio. I reviewed my question protocols before each subsequent interview, highlighting for myself places where, as a result of the previously collected data, I wanted to ask further questions. Like Charmaz, Schreiber (2001) stresses that emerging concepts can be explored with informants by asking direct questions such as “Others have told me ... (or the literature suggests...). Has that been your experience?” (Schreiber, 2001, pp. 67-68). This process can enable the researchers to test the importance and accuracy of their “hunches” or what they believe are emerging concepts. I began this process in the third interview. I asked these direct questions towards the end of each interview (Schreiber, 2001, p. 67) after I had a sense of the perspectives of the informants. For example, one participant told me the data gathering

process encouraged teachers to reach out to new network partners. I followed this trail in subsequent interviews by asking, “I have been told by some people that the data gathering process affects the networking process. What was your experience?”

At the conclusion of every interview I asked some version of the following two questions: “What do you need from the district or province in order to network to learn?” (Schreiber, 2001) and “Is there anything that I have missed that you consider to be important?” (Schreiber, 2001). I then thanked each informant and turned off the audio recorder. At times this action precipitated further reflections by the informants, causing me to ask permission to turn the recorder back on. In several cases, the informants were interested in my experiences as a doctoral student or wanted to tell or show me other aspects of the work they do in the school system. In these cases I spent time at the end of the interviews engaged in informal discussions, an enjoyable process for me and a way of “giving back” to the informants.

Interview Data Preparation and Management

Participant identification. Each informant was given a participant identifier, and every reference to a person, institution or community that could possibly identify the person was removed from the data transcripts. These identifiers were used to reference the participant in the data transcripts and in instances where direct quotations were used from the data. A master list was kept that cross-referenced the participant identifier with the participant’s name, home school district, and contact information. Each transcript had line numbers to create ease when making reference to the data.

I personally transcribed all interviews except five as these particular informants were all available in the same week. These five interviews were transcribed by a professional

transcriber. The interviews were transcribed verbatim and I checked the typed transcripts multiple times for accuracy. It took approximately one hour to transcribe each 10 minute segment of an audio, with one hour interviews taking about six hours to complete. This process, while lengthy, was an important aspect of the analysis process. Completing the transcriptions allowed me to think deeply about each interview by noting the voice tone, the pauses, and the data itself. Additionally, I remembered the data more easily allowing me to more quickly make connections between the various data sources. The transcripts were returned to the informants for their review. No participants made changes to the transcripts, but one participant added information about the funding for the 2014-2015 CR4YR initiative.

Organization of the data. To stay as close to the data as possible and to alert myself to the processes involved in networking, during the first stage of coding I created a table for each interview. I entered an initial code, using in vivo codes if possible, for each line. Simultaneously I also created a code book that cross-referenced these codes with other interviews.

The Coding Process

Open coding practices. Charmaz (2006) suggests that the initial coding should be as close to the original data as possible. Schreiber (2001) further defines this first level of coding as a process “in which small portions of data are conceptualized, using the participants own words as much as possible” (Schreiber, 2001, p. 69). Therefore, in the initial stages of the analysis process in vivo codes, or codes that are the exact words and phrases used by the participants (Charmaz, 2006; Schreiber, 2001) were used if possible.

This practice “helps to preserve participants’ meanings of their views and actions” (Charmaz, 2006, p. 55), and is one way to avoid forcing the data to fit preconceived categories (Charmaz, 2006; Schreiber, 2001). During this phase of the analysis, when the data seemed to be suggesting a concept I continued to remain as close as possible to the words of the participants while putting the possible concept in brackets beside the code and recording my thoughts in memos.

At this stage of the analysis the data were *fractured* (Glaser & Strauss, 1967) into manageable chunks that allowed for close scrutiny of the participants’ experiences (Charmaz, 2006). The data were initially analyzed line-by-line or sentence-by-sentence (Charmaz, 2006; Schreiber, 2001) and I was quite surprised how information “leapt out at me” that I had misinterpreted during the interview, while I listened to the audio, and/or in my initial notes. For example I had originally thought that a segment of an administrator’s interview was referring to the administrative availability of district level support for teachers. Examining the data line-by-line forced me to see the segment in a different way. The informant actually appeared to be examining her own practice as a facilitator.

During this phase of the research I also took pieces of the data that had been puzzling, significant, or surprising and thought more deeply about them. These thoughts were recorded in memos. For example, returning to the interview mentioned above, I was puzzled by one set of comments I saw in the interview with the district-level administrator and created a memo around my confusion. I include an example of a memo below:

I have been puzzled by the terms “natural fit” (SD1: 32; 35); “natural role” (SD1: 1-30). Initially I understood these to mean that the district had supported the initiative which was a purely descriptive analysis that never seemed to quite fit the tone and obvious excitement that this initiative had for the informant. There was a disconnect between what this participant was expressing affectively and how I was interpreting her words. The organic nature of the references seemed to be indicating something that was more personal – that she was referencing her own goals, philosophies, etc. as she considered how to facilitate CR4YR. Her later references to wanting to create an atmosphere for teachers where they could “weave” (SD 1-1: 766) new learning into the “fabric” (SD 1-1:766) of who they are by choosing a “piece” (SD 1-1:769) of what is offered seems to fit a constructivist epistemological orientation to learning for teachers. This orientation fits the emphasis in this particular network of taking ownership for one’s own learning as a basis for networking. She hoped that every interaction with teachers, as part of their network, could follow this philosophy. Ownership of learning as key to networking is mentioned frequently. (Memo, February 27, 2014)

Memoing allowed me to create a permanent record that could be later compared with existing or incoming data.

Codes, as much as possible, included a gerund or noun that has been used as a verb. The use of gerunds highlighted the processes (Corbin & Strauss, 1990) utilized by informants as they created and utilized networks. For example, during a fourth round of coding *reconciling* was used to code sections of the data that referred to the alignment of epistemological and pedagogical belief systems about professional learning with the

demands of a networked situation. *Reconciling* captured the active struggle to alleviate the tension that existed for some participants between learning in a network situation and their existing belief systems about professional learning. The use of the gerund illustrates that this phase is an important part of the networking process for some informants.

Data gathering and analysis were simultaneous. As noted above, each interview was analysed before the next one began. This approach allowed for the content, direction and scope of the study to be monitored and changed if the data indicated it was necessary (Charmaz, 2006; Chiovitti & Piran, 2003). Thus the research was a process where each stage informed the next. For example, the participants took the research in a direction that I had not anticipated. Originally, due to my experience as a teacher and my understanding of the literature in the field (see Priestley, Miller, Barrett, & Wallace, 2011) I expected that in order to problematize case study school implementation problems the participants would create and utilize networks external to the CR4YR initiative. Further I expected that the networks would, for the most part, be informal rather than formal. These assumptions were not born out in the data. This change in emphasis became clear during the first two interviews. I opened each interview with what I thought would be an open-ended question that would help the interviewees recall their experiences with CR4YR and relax them. It became clear through this question that the district network was the site that was the most meaningful for the participants for creating and utilizing networks. This realization then informed subsequent interviews, allowing me to understand that the participants needed to linger longer in the interviews on the district network experience.

Constant comparison. Constant comparison, a core component of grounded theory methodology, is a complicated, ongoing process that demands that coded data, categories,

and concepts are compared with each other, and with the literature in the field that details like “phenomena” (Merriam, 2002; Parahoo, 2009, p.3). A common way of describing constant comparison is that it involves taking each piece of relevant data collected through interviews, memoing, and field notes and comparing it to discover the ways in which the data is consistent or varied. This practice allowed for the distinctiveness of the codes, categories, and concepts to be refined and for patterns across the data to be noted (Charmaz, 2006; Strauss & Corbin, 1994). Boeije (2002) cautions that it is critical that researchers describe how they actually carry out constant comparison, as it will increase the validity of the study. She recommends including the reason for the comparison, the phase in which it occurred, and the results. As a person new to the process of constant comparison I found Boeije’s five step procedure useful to focus my comparisons. In the next section I describe one way in which constant comparison was utilized to better understand the data in this study.

Focused coding and category creation. By the fifth interview certain patterns emerged, giving me a strong analytical direction. At this stage I began to create focused codes by choosing open codes that appeared to be most significant or frequent and used those to analyze the data more precisely (Charmaz, 2006). The codes were entered into a code book along with an inclusion rule, an example from the data and the data line references that referred to this code. An example of a frequent code was requiring relationship. The strategy constant comparison was utilized to better understand what relationship meant, and how it impacted the networking process. I took all data references to this code, placed them in a separate word document in order to facilitate detection of patterns. I applied Boeije’s (2002) five-step process when using constant comparison to

unravel this data. To ensure consistency within a single data source, the data was compared first within each interview; then between teacher data sources; and finally between teacher and administrator data sources (Boeije, 2002). I further recognized that the relationship with the Ministry, both the nature of it in the early stages of the initiative, and the ways in which it transformed, were important to the networking process. Therefore, I moved all references to relationship and the Ministry of Education to a separate document for closer scrutiny (see Appendix I for an example of the evolution of codes).¹

I also chose codes that appeared to be related and collapsed them to make categories; finally some important codes were raised to the level of concepts (Schreiber, 2001). For example, *requiring relationship* and *establishing relationship* were collapsed to become the concept *grounding through relationship* which later became ***establishing trust*** while *becoming vulnerable*, another frequent code, became a property of grounding through relationship and finally this code became its own sub-process called ***becoming vulnerable***. The properties of the categories were further delineated as this process unfolded. This ongoing process also allowed me to see the areas where I had incomplete data. For example, one code that I had identified, but had insufficient data for, was *networking as a learned strategy*. I pursued further information on this code by reviewing the previously collected raw data and by looking for opportunities to further check this code in future interviews. Eventually, *networking as a learned strategy*, through constant

¹ At this point, at the suggestion of my supervisor, Dr. Begoray, I read and utilized the work of Michael Foucault to inform my analysis of this particular section of the data.

comparison of the data sources and through further interviews, became the sub-process *identifying with collaborative learning*.

Finally, the sub-processes, *establishing trust*, *identifying with collaborative learning*, *becoming vulnerable*, and *mobilizing collaboration to the school*, were integrated to form a theory that explained the interrelationships between them in such a way that it “represented the stories of the people” (Corbin & Strauss, 2008, p. 103). To create a theory I engaged in an iterative process that involved the following acts: comparison of my data analysis with the extant literature in the area; creation of diagrams that conceptualized the relationships between the sub-processes; comparison of conceptualized relationships with the raw data; exploratory memoing; and peer reviews. The resulting theory is depicted in Figure 4-1 and further explained in Chapter Four.

Visual representations. Throughout the study I utilized visual representations such as diagrams to further my understanding of the data. For example, visuals were critical in deciphering the relationships between contextual factors and the networking processes. Early in the research process it became clear that the CR4YR Ministry-created infrastructure played a pivotal part in the teacher participants’ abilities to create and utilize networks. However the dynamics of this process were complex as it involved, politically, personnel from multiple levels of the public school system each of which were situated in numerous interlinking networks which fed into and were in turn fed by each of the other networks. I utilized Clarke’s positional maps to understand the different discourses evident in the data. Clarke, citing the work of Foucault (1973), stated that it is critical that these maps not be used to represent participant positions. Instead their function is simply to allow the researcher to look at the range of positions evident in the

data. I also drew diagrams that expressed the relationships between categories and codes and categories and subcategories.

Theoretical saturation. Theoretical saturation is defined as “the point at which gathering more data about a theoretical category reveals no new properties nor yields any further theoretical insights about the emerging grounded theory” (Charmaz, 2006, p. 189). Stern (2007) states it is not the number of participants that determines when data collection ceases but how adequately the data inform the developing theory. I was satisfied after my 22nd in-depth interview that I had reached saturation. My sample was varied in that it contained people from different sectors of the education community situated in different regions of the province. Additionally I had accessed people who had had a variety of experiences within the initiative. The last interviews did not provide additional insight into my categories, and I had thick data to support theory development. Therefore, at this point I felt confident in ceasing data collection.

Procedures to Establish Quality and Usefulness of the Study

Creswell (2014) suggests that credibility, or validity as it is also referred to in qualitative research, “is based on determining whether the findings are accurate from the standpoint of the researcher, the participant, or the readers of an account” (p. 201). Therefore the strategies used to establish and judge credibility include the reflections of the researcher, the participant and peers who can represent potential readers of the research. He suggests several considerations, taken from his work with Miller (2000), including member checking, prolonged time in the field, rich, thick description, identification of bias, negative case use, and peer debriefing. Additionally Corbin and

Strauss (2008) stress that researchers must be true to the methodologies that they choose. This reminder is of particular importance as GT is based on the combination of the five key methods listed earlier. Finally, I paid attention to suggestions by Chiovitti and Piram's (2003) suggestions as to how to create "auditability" (p.430). The following section outlines the key means of establishing research credibility.

Prolonged engagement in the field (Creswell, 2013, p. 250). Prolonged engagement in the field is defined as including "building trust with the participants, learning the culture, and checking for misinformation that stems from distortions introduced by the researcher or informants" (Creswell, 2013, pp. 250-251). My study took place over a five month period of time, in five school districts in three regions of the province. In addition each interview was in-depth and focused on three different employee groups. The time over which the study took place, the different locales and the ability to cross-check information between the administrator and teacher interviews, and between regions, allowed me to be immersed in the context and therefore better understand the environment in which the participants were learning. Further, as described earlier, I was able to become familiar with the context as there was remarkable consistency from site to site. I also accessed the "tools" such as books or websites that were utilized in the initiative and I attended one Ministry of Education organized meeting for the administrators from each research site.

Peer reviews (Creswell, 2013, p. 251). A peer review is defined as "locating a person (peer debriefer) who reviews and asks questions about the qualitative study so that the account will resonate with people other than the researcher" (Creswell, 2014, p. 202).

I had regular debriefing sessions with my supervisor, committee members, and two knowledgeable fellow graduate students who acted as “peer reviewers” (Creswell, 2014, p. 202) for my developing and developed theory.

Negative case analysis (Creswell, 2013, p. 251). Negative case analysis is described as “defining the working hypothesis as the inquiry advances in light of negative or disconfirming evidence” (Creswell, 2013, p. 251). I revised my analysis based on feedback from my supervisor, committee, peer reviewer, and informant data as well as on the basis of conflicts between the reports of the different employee groups involved in the study.

Pre-existing assumptions. The process through which I delineated my pre-existing assumptions and its importance (Chiovitti & Piran, 2003; Cutcliffe, 2000) were described in detail earlier in this chapter.

Member checks. A member check is defined as “the researcher solicits participants’ views of the credibility of the findings and interpretations” (Creswell, 2013, p. 252). All participants were given the opportunity to critique the developing and completed theory. Only one participant volunteered to meet with me and critique the theory. I met with the volunteer and recorded notes regarding her critique. I then incorporated the feedback into the theory.

Consistent use of the methodology (Corbin & Strauss, 2008). I utilized all aspects of CGT as outlined by Charmaz (2006). I practiced simultaneous data collection and analysis, engaged in theoretical sampling, and recorded my thinking in memos at every

stage of the research. Additionally, as described elsewhere in this chapter, participants “guided the inquiry process” (Chiovitti & Piran, 2003, p.430) causing me to change aspects of my study’s focus.

Key informants. Key informants were recruited by clearly outlining the focus of the study in the invitational letters. Further to the above, specific informants were accessed through theoretical sampling.

The principles of GT. The principles of GT encourage ongoing evaluation of the credibility of the developing theory. The utilization of simultaneous data collection and analysis, constant comparison and theoretical sampling allowed me to constantly check that my interpretations were consistent with the data. Charmaz (2000) considered the above mentioned processes to be the “self-correcting nature of the data collection process” (Charmaz, 2000, p. 522).

Chapter Summary

CGT methodology was utilized at all stages of the research process. To ensure that the participant voices were “heard” and mine “remained secondary” reflexivity was initiated prior to the start of the study and was ongoing throughout the research. The primary data gathering method was open-ended interviews with participants who had involvement with the CR4YR initiative. The participants were drawn from three employee groups: teachers, RAs, and district level administrators. I described how the informants were recruited, the data were collected and analyzed and credibility was established in the chapter. Additionally, the philosophical underpinnings of this approach

to research and the suitability of CGT to a study of how teachers create and utilize networks were outlined.

Chapters Four and Five detail the results of my study. I outline the basic social problem, the basic social process, and the substantive constructivist grounded theory entitled **actualizing collaborative learning**.

Chapter Four

Results

The grounded theory, **actualizing collaborative learning**, describes how primary level teachers contended with the expectations of the Network Learning Community (NLC) initiative Changing Results For Young Readers (CR4YR). The overall purpose of this initiative was to support readers who were in the primary grades through the utilization of networks and collaborative school-based relationships.

The theory gerund *actualizing* was chosen to represent participants' actions within CR4YR to enable networking to be viewed as a process rather than an event. The experiences of all participants are represented in the theory through the utilization of quotations and/or data descriptions. However, I acknowledge how the theory, **actualizing collaborative learning**, is a version of the participants' experiences within CR4YR in that "concepts and theories are *constructed* [italics in original] by researchers out of stories that are constructed by research participants who are trying to explain their experiences and/or lives" (Corbin & Strauss, 2008, p. 10). In order to maintain the integrity of the participants' voices, the quotations, as taken from the interview transcripts, have not been edited for grammatical inconsistencies.

In order to clearly define my findings I have utilized certain font styles to distinguish the different aspects of my theory from one another. The core category, **actualizing collaborative learning**, is bolded while the sub-processes, *establishing trust*, *identifying with collaborative learning*, *becoming vulnerable*, and *mobilizing collaboration to the school*, are bolded and italicized. The properties of each sub-process are *italicized*. The

quotations are referenced with participant identifiers. SD followed by a number indicates an area of the province. Each area is followed by a further number indicating the identity of the participant. Finally, each identifier ends with transcript line references. For example, SD 5-2:34-35 means area 5, participant 2, and transcript lines 34-35.

This chapter begins with an explanation of the basic social problem (BSP) and basic social process (BSPr), followed by a description of the CR4YR initiative as viewed through the experiences of the research participants. I then outline the theory, **actualizing collaborative learning**. The remainder of the chapter consists of an in-depth examination of the four sub-processes that illustrate the BSPr: *establishing trust; identifying with collaborative learning; becoming vulnerable*; and *mobilizing collaboration to the school*.

Basic Social Problem and Basic Social Process

As a CGT researcher I have identified a BSP that is representative of all participants as it allows for the variations in “action/interaction/emotional responses” (Corbin & Strauss, 2008, p. 97) that occurred as participants interacted in a collaborative inquiry-based environment. The BSP for participants was: how can teachers create and utilize network connections in CR4YR, a network that emphasizes deprivatization of practice, learning for and with cross-school colleagues, and data-based planning for primary grade readers?

The BSP emerged as the problem faced by the participants as they interacted with the other professionals who were involved in the CR4YR initiative for two reasons. First, networking, as defined within the CR4YR initiative, was not an established part of the

professional learning practices of the research participants. The second reason the BSP emerged as a problem was that this initiative had potential for wide power differentials within the CR4YR membership, complicating the creation of trust in the initial stages of the initiative. Each of these issues is discussed in the following section.

In order to participate in CR4YR potential participants had to agree to work within a collaborative inquiry model of professional learning at both the network and school levels. As participation in CR4YR was voluntary, the participants could be considered to have indicated interest in this type of learning. Although they expressed interest in collaborative inquiry learning, the model, as defined by CR4YR, was largely unfamiliar to my research participants. As one administrator said, and others echoed, this professional learning model emphasized “declaring a need as opposed to getting a strategy ... and being a part of the solution” (SD 5-8:310-311). Declaring a need refers to *deprivatizing practice* with the intent to critique and revise epistemological and pedagogical beliefs about teaching reading, an act that required viewing vulnerability as a learning tool. Participant 5-8, like others, stressed that the professional model utilized in CR4YR was an uncommon way for many teachers to learn, both at the district level and the school level. Another teacher, disappointed with her experience during the first year of the initiative explained that:

When we set up these teams in schools someone has to have a conversation with them so that they understand that it is a team. It is supporting one another. It is discussions. It is looking at what is happening; analyzing it; and moving forward within our school. It is not just two individual teachers doing their reading things in their rooms. (SD 5-7:79-83)

Therefore, while the CR4YR participants that I interviewed made a commitment to learn in a collaborative inquiry based model of professional learning they, for the most part, were unprepared for the extent to which they were expected to examine their own practice in a public venue.

Trust, as is described in a subsequent section of this chapter, is an essential part of the networking process. The perception of a hierarchical power structure in CR4YR affected the networking process for the participants in this study and is the second reason why the BSP emerged for the participants.

CR4YR in each district involved interactions between professionals from four different levels of the education system: the Ministry of Education facilitators; school district administrators; Reading Advocates (RAs); and teachers. All teacher participants spoke of the need to assess the extent to which they could establish trust with the educators who represented each of these levels, with the Ministry of Education representatives generating the most concern with respect to trustworthiness. References such as “another government initiative” (SD 2-1:94) were common reasons for the demonstrated initial reluctance to engage in the network and seemed to signal a deeper problem. For example, one participant expressed feeling “disrespected and dishonoured” as a reading teacher due to the way the initiative was originally introduced by the Ministry, while another participant explained that there was:

a mood in the room our very first session ... because it [CR4YR] was coming from the Ministry, and there was data being collected, and all those sorts of things. Things that you had ... to agree to do to be part of this. Like put out an expression of interest

to all the schools but we only selected four. So all of those things coming together ... this is after job action, the Ministry is coming in, what are they up to. (SD 5-8:45-50)

To function in CR4YR the participants needed to recognize vulnerability as a learning tool within this context, hone their skillsets so as “to learn how to take advantage” (SD 2-6:102-103) of the human resources in the network, and determine how to create trust with four different levels of the school system.

Participants responded to the BSP by initiating a BSPr that I refer to as **actualizing collaborative learning** (see Figure 4.1.). The BSPr involved four interdependent sub-processes: *establishing trust*; *identifying with collaborative learning*; *becoming vulnerable*; and *mobilizing collaboration to the school*. At all times the networking process was grounded in and responsive to the strength of the relationships within the network. In particular trust, a property of the construct relationship, was crucial to the ability of teachers to form networks.

Changing Results for Young Readers

In this section I give a brief description of the CR4YR initiative so as to facilitate readers’ understanding of the data. Participants reported that CR4YR utilized a collaborative inquiry method of learning that was based on the book *Spirals of Inquiry* (Halbert & Kaser, 2012). Collaboration in CR4YR, according to the research participants, involved three behaviours: deprivatizing practice; learning with and for cross-school and school-based team colleagues; and active questioning of practice – one’s own and that of others. As one of the goals of the CR4YR initiative was to encourage push-in programs for primary level children rather than pull-out programs, each school represented in the

initiative sent teams of two to four teachers. Each team was composed of classroom teachers and one non-enrolling teacher (position in the school not prescribed). Each teacher chose a case study child who was a primary grade reader whom “they’re really wondering about that they feel they just haven’t quite unlocked something for them yet” (SD 1-1:66-67). These children were not students who had been given particular designations. The non-enrolling teacher acted as a support teacher who together with the classroom teachers created inquiry questions that directed their work with the students, their interactions with reading instruction materials presented in the CR4YR sessions, and their creation of networks. The foregoing description was the *inquiry-based* aspect of the collaborative inquiry-based learning model utilized in CR4YR.

The participants met as a district network seven times during the 2012-2013 school year. Many sessions were co-facilitated by a Ministry-appointed person who was not affiliated with the particular district. In addition each district had at least one, and most often two or more, RAs who co-facilitated the meetings and could provide support for the teachers at the school level as they implemented new practices into their daily practice. These people were district-based professionals whose job it was to support the learning needs of teachers through services such as the provision of professional development, demonstration lessons in classrooms, and individual meetings to discuss curricular issues.

The Ministry of Education personnel suggested meeting protocols, which were said to be voluntary; however, the participants specifically mentioned how the facilitators strictly adhered to these suggestions from the Ministry. For example, every meeting began with a private reflection that allowed the participants to review their progress towards meeting the needs of their case study students. The initial private reflection was

followed by activities such as think-pair-share that emphasized cross-school discussions or a group sharing activity called “What’s on your mind?” “What’s on your mind?” gave each person two uninterrupted minutes to speak about her/his case study. Further activities and break times allowed for participants to informally network with the other members. Participants spoke of using these times as opportunities to follow up on comments made during the “What’s on your mind?” activity and as a means of establishing and maintaining networks.

Finally, in most cases, each meeting had a further professional development aspect which was organized differently from district to district. For example, in some districts participants engaged in book studies using the book *Catching Readers Before They Fall* (Johnson & Keier (2010). During each meeting about 45 to 60 minutes was scheduled for school teams to meet to assess and plan the next steps for their case study students. While planning, facilitators and the RAs were available for assistance, as well as the collective group. All planning was completed during the meetings to facilitate immediate implementation of the plans in the classrooms. During the planning portion of the meeting teams also completed and submitted to the Ministry of Education data on the progress of their case study students.

Data analysis revealed that collaborative inquiry, as represented in CR4YR, was unfamiliar for the participants in this study and induced a state of disequilibrium. They responded by initiating the BSPr **actualizing collaborative learning**. The next section presents an overview of the BSPr.

Theory Overview

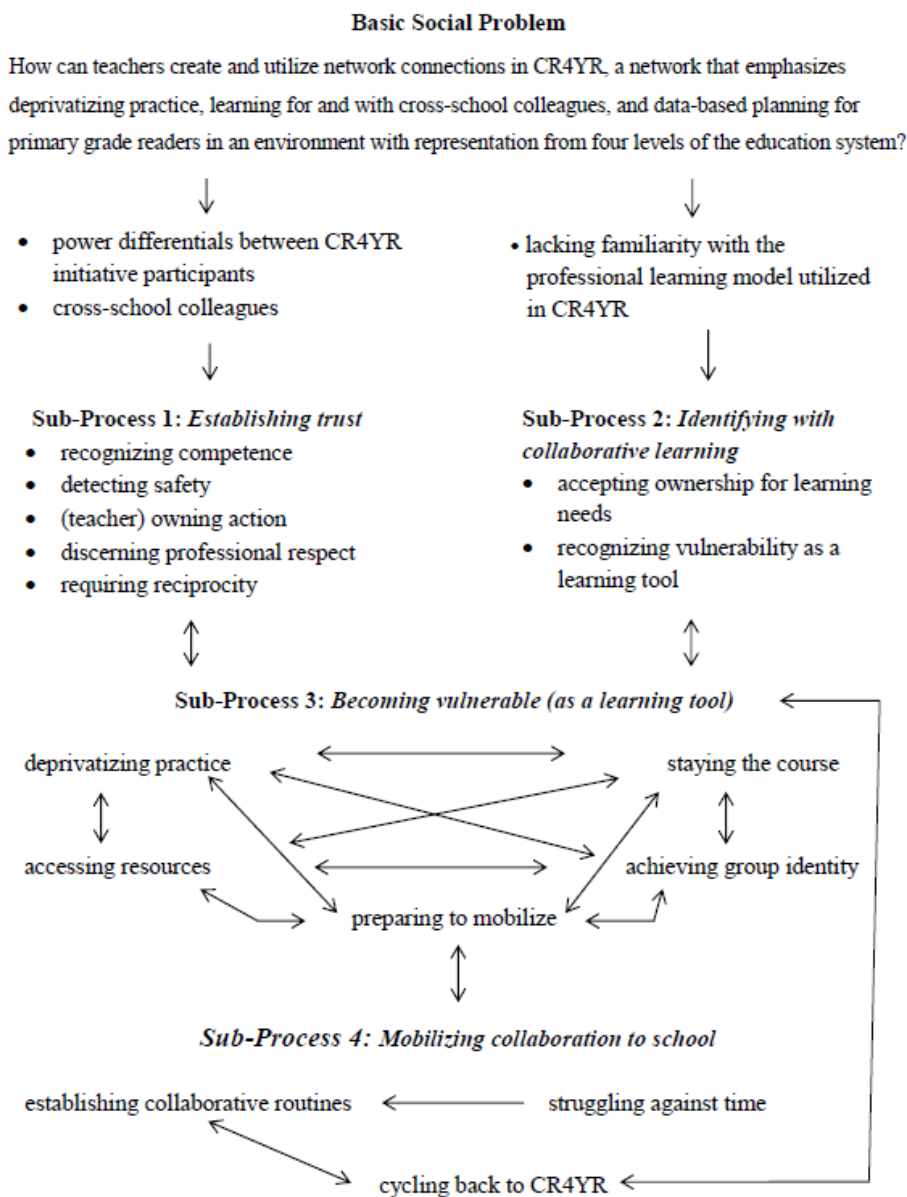
The BSPr, **actualizing collaborative learning**, began with primary level teachers committing to increase their capacity to meet the needs of primary grade readers in CR4YR, an collaborative inquiry-based model of professional learning.

Making a commitment to CR4YR motivated participants to engage in the sub-process of *establishing trust*. Becoming vulnerable, by externalizing and critiquing practice for the purpose of growing professionally, was a primary learning tool in CR4YR. As detailed earlier in this chapter, to become vulnerable necessitated assessing and creating trust with the professionals who represented the four levels of the school education system, and with the model of learning as presented in the initiative CR4YR.

The analysis of the data suggested that initially participants were concerned about participating in a project that was initiated by the Ministry of Education, and co-facilitated by both Ministry-appointed and school district personnel. The participants assessed the trustworthiness of the Ministry facilitators and school district personnel on the basis of the following four criteria: *recognizing competence*, *detecting safety*, *owning action*, and *discerning professional respect*. A further group with which teachers needed to assess and create trust with were their cross-school colleagues. These individuals were assessed on the basis of two criteria: *requiring reciprocity*; and *discerning professional respect*. As collaborative inquiry was not a familiar way to learn, participants also assessed the trustworthiness of the CR4YR initiative as a viable way to learn. Finally, at the school levels trust was assessed on the degree to which team members were *liked*, and how the participants understood their team members' *weaknesses and strength*.

The second sub-process, *identifying with collaborative learning*, was initiated by the participants in order to activate or create identities as learners that enabled them to learn in the model of professional development utilized in the initiative CR4YR. As stated above, this type of professional development model was not familiar to the participants. This sub-process involved creating identities as professional learners in which vulnerability, as evidenced through the participants' willingness to engage in *deprivatizing practice*, was viewed as a learning tool.

Figure 4-1. Basic Social Process: Actualizing Collaborative Learning



The third sub-process, *becoming vulnerable*, was dependent on the degree to which trust had been established. Once participants entered this stage in the BSPr, further assessment of trust occurred as *becoming vulnerable* initiated the potential to both strengthen and disrupt calculations of trust. *Becoming vulnerable* included five properties: *deprivatizing practice*; *achieving group identity*; *staying the course*;

accessing resources; and *preparing to mobilize*. *Deprivatizing practice* refers to the public declaration of strengths and needs, both of which require acts of vulnerability. *Achieving a group identity* occurred on two different levels. First, groups established a collective identity within their individual CR4YR cohorts. These identities were based on participants' willingness to share their vulnerabilities, on recognition of their commonalities, and on demonstrated support and care for one another. The second way in which participants created a group identity was by forming attachments to the larger province-wide initiative CR4YR.

Staying the course was achieved through the following three acts: remembering purpose; focusing through inquiry questions; and grounding through check-ins at the beginning of each network session. These acts served to keep participants true to their case students' needs when discussing and searching for resource people. *Accessing resources* had two dimensions: accessing human resources within the CR4YR meetings; and accessing professional development provided at or external to the meetings. Accessing human resources within the CR4YR meetings occurred as participants tapped into the available expertise in this group. During this aspect of the BSPr participants noted who in their cohorts had knowledge that would be useful as they strove to create learning plans for their case study students. Once the participants had identified resources that could be of assistance to them they performed acts called going deeper which involved initiating more in-depth conversations with identified resources. In addition to the human resources available at the CR4YR meetings, the participants also noted the importance of professional development opportunities such as book studies which were available at the network meetings. The participants further spoke of the benefits of the

presentations, external to the CR4YR sessions, that they were funded to attend. This aspect of the BSPr was called accessing professional development provided at or external to the meetings. *Preparing to mobilize* involved the creation of a plan for the case study child that was mobilized to the school level.

The fourth sub-process, ***mobilizing collaboration to the school***, refers to the mobilization of collaboration to the school level and it had the following three properties: *establishing collaborative routines*; *struggling against time*; and *cycling back to CR4YR*. *Establishing collaborative routines* refers to the ways in which the participants utilized collaboration at the school levels. *Struggling against time* describes the impact of lack of time at the school levels on collaborative behaviour. Finally, *cycling back* refers to the central role of the resources available through the CR4YR initiative in the participants' learning.

Actualizing collaborative learning is an upwardly spiraling process in that participants repeatedly returned to the district level network to debrief school experiences, which in turn positively impacted levels of trust and group identities, the ease with which they engaged in *becoming vulnerable*, and how school level collaborations were navigated.

In the remainder of this chapter I describe the findings of this study in detail. The sub-processes in the BSPr **actualizing collaborative learning** are discussed in the following order: *establishing trust*; *identifying with collaborative learning*; *becoming vulnerable*; and *mobilizing collaboration to the school*.

Actualizing Collaborative Learning

Establishing trust. Virtually every participant reported some variation on “It is usually your third meeting where you see the trust and relationships really solidifying; where people are very comfortable in talking about their practice and what’s happening in their classroom” (SD 1-1:251-255). Participants explicitly or implicitly suggested that one of the keys to creating and utilizing networks to learn professionally was the strength of the relationships (Coburn & Russell, 2008; Granovetter, 1973), in particular trust, established within the groups. Trust, put in more practical terms, referred to assessing how closely the program work conditions aligned with the participants’ opinions about what they considered to be supportive. The data analysis indicated that for the participants, an important aspect of the three month initial period of time, referred to above was assessing the degree to which there was trust in the CR4YR groupings. Therefore, in order for the participants to actualize collaborative learning they initiated a sub-process I have called establishing trust. As detailed earlier in this chapter I identified five properties of this sub-process: recognizing competence; detecting safety; owning action; discerning professional respect; and requiring reciprocity. At the school levels teachers utilized two additional criteria to assess the extent of colleagues’ trustworthiness: the degree to which team members were liked; and how well their weaknesses and strengths were understood.

Recognizing competence. Competence was established, in part, through participants’ prior experience with the Superintendent of Reading and/or the other appointed Ministry of Education facilitators. Teachers commented on the person who had been chosen as

Superintendent of Reading as one reason for their confidence in CR4YR as an initiative. For example, one teacher who had been initially angry about the initiative stated, “When I realized who was chosen to do the job I thought, ‘Oh, maybe there is more to this’” (SD 5-7: 218). Another stated that given the reputation of the Superintendent of Reading the initiative would be “absolute gold” (SD 5-1: 174-175). Others who may not have known the Superintendent connected instead with the Ministry-appointed facilitators. A participant echoed the opinion of others when she described why teachers were able to connect positively with the Ministry-appointed facilitators. She explained, “I think they [Ministry-appointed facilitators] have credible expertise. They have reputations that are solid. When they make suggestions, people listen. They have credible backgrounds” (SD 4-4:49-50). By credible backgrounds the participants were referring to having personally experienced and successfully utilized the work of the facilitators as through attending their workshops, reading their books, and/or having worked with them. Finally, once CR4YR was underway the participants based their assessments of competence in part on the facilitators’ demonstrated knowledge levels and abilities to impart their expertise both skillfully and respectfully. Common ways of referring to the Ministry-appointed facilitators follow: the facilitators have a “wealth of knowledge” (SD 5-6:223); are “wonderful leader[s]. Very enriching at the Ministry level and very passionate” (SD 1-3: 753-754); “[Ministry-appointed facilitator] is very approachable, personable. That piece has been really important” (SD 4-1: 558-562); and the facilitators have the ability to present “tough information” (SD 5-6:224) that is controversial in “honest” (SD 5-6:228) ways that show that they can “frame messages

that some people do not want to hear in a way that they will be receptive to” (SD 5-6:229-230).

Participants further assessed competence of the facilitators on the basis of their discourse around children and teaching at the primary level. Teachers appeared to assess whether facilitators understood the realities of classrooms and children in primary grades. Participants expressed assurance that the Ministry-appointed facilitators understood their situations rather than being administrators who “had never been in a classroom and [had] no clue what [they were] talking about” (SD 5-8:132-148). In particular, the Superintendent of Reading’s comprehension of children and of classroom teaching were frequently mentioned. For example:

[The Superintendent of Reading is] ... so sure of “Here’s what works for children”.

And it’s that ... the reason we are here, doing what we do, no matter what it is we do - it’s for those children. That’s the heart of everything she does and I just have so much respect for that. (SD 5:1:178-182)

Recognizing competence was centered on the reputations of the Ministry facilitators’ and to a lesser degree the RAs as professional development providers, their understanding of primary level teaching, and their ability to impart knowledge respectfully. A further criterion that was utilized to establish trust with the Ministry and RAs is represented in the property *detecting safety*.

Detecting safety. Safety was a concern spoken of frequently by the teacher participants; and was a criterion for determining depth of trust for the facilitators and the process in general. This property included understanding the origin of CR4YR, who was involved in the initiative at government and British Columbia Teachers’ Federation

(BCTF) levels, and both the purpose and consequences to the participants of the student data that were submitted to the Ministry.

Many participants expressed being initially concerned about the requirement that teachers collect and submit data to the Ministry. Intertwined with this concern was the stipulation that the case study child was a student who “they’re really wondering about that they feel they just haven’t quite unlocked something for them yet” (SD 1-1: 66-67). The seriousness of the concerns for safety was illustrated through the following quotation:

I think too, the fact that we can keep our student anonymous. I asked more of a challenging question than I probably would have asked if we had the pressure of having to show that your student went up in these many levels. What if I asked a question, I tried something, a strategy and it didn’t work at all? Well, I probably wouldn’t ask that question. (SD 4-2:330-335)

Comments such as “[The Superintendent of Reading] is really good at making everyone feel comfortable. And this [work within CR4YR] is not an evaluation by any means which is really important. Absolutely” (SD 1-2:351-353) indicated that the participants were initially concerned that their professionalism was being scrutinized.

A further way in which some participants indicated that surveillance of teacher professional competence was a concern centered on the dialogic format of the CR4YR meetings. For example one participant, obviously assured that professional scrutiny was not the intent of the initiative, said:

The facilitators were really good. Just nonthreatening and saying right off the bat ... that there were lots of ways [to be a reading teacher] and no one was going to go

there and say “Well why do this. Well that’s the wrong way to do that!” They took that off the table right away. That was comfort for everybody. (SD 5-3:222-225)

The initial anxiety that was sparked by the requirement for data was dispelled as participants reported that it became simply part of their routines within CR4YR. Similarly, their fears about being evaluated during the dialogic aspects of the program were assuaged. They suggested that taking these issues “off the table right away” was due in large part to the ongoing use of the spiral of inquiry. Participants explained that the inquiry method relieved anxiety because “you don’t feel pressured that whatever you try has to work. Because you are just wondering! What will happen? Rather than, “I’m going to do this and my kids will do X, Y and Z because of it” (SD 1-2:533-535). In fact, when I summarized portions of the data for the participants if I referred to aspects of their plans that had “worked well,” they would laugh and add “or not worked”.

Closely related to the utilization of the inquiry question was the practice of emphasizing that the focus was on what was working with the child, not on teacher deficits. Participants frequently emphasized that the focus in discussions was, “Here’s my experience with my student. That’s what it is – my experience” (SD 5-1: 375-376). Another said, “The focus is not on the teacher – on our teaching ability, but what can we do to help those kids learn. It is definitely on the kids’ achievements and the kids’ abilities, and the kids’ success” (SD 4-3:164-166).

The data indicated the student assessments became a tool the teachers utilized to understand their case study children and their experiences in the classroom. Participants noted they developed confidence in the safety of use of this tool because the facilitators created a network environment that was perceived as both welcoming and safe. One

participant described the nature of this environment saying, “just the atmosphere and the attitude that we are here to learn and we are here to learn together. Just like our classrooms. We are here to learn” (SD 5-1: 366-376).

Analysis of the data suggested the participants also utilized information as to the origins of CR4YR and the education sectors involved in the planning and implementation of the initiative in their assessment of trust for CR4YR. In particular, the RAs suggested the participants demonstrated interest in how the BCTF was involved as well as how the district level personnel would be utilized in the running of the network meetings. One administrator explained the ways in which the Ministry of Education personnel handled the anxiety that existed around the origins of the initiative:

[The Ministry-appointed facilitator] started off right away with explaining how this initiative came to be; how the Primary Teachers’ Association was involved; how the BCTF was sitting in at the provincial table. How [another RA] and I would be included, you know with the provincial network. (SD 5-8:85-88)

It was not clear why this information was required by participants. References were made by the teachers, albeit references lacking in detail, as to the role the BCTF played in the encouragement or discouragement of learning in district or Ministry-directed initiatives. Some participants spoke positively of the funding provided in locals to support cross-school visits to enhance connections made at the CR4YR meetings. Another participant disclosed that teachers felt encouraged to innovate when employed in districts where the BCTF locals were characterized as “moderate” rather than “extreme.” The participant did not explain what characterized a union as moderate or as extreme.

Detecting safety through assessing and creating trust was focused on the participants' understanding the purpose of the data collection and determining if they could express vulnerabilities in the dialogic portions of the program. The use of the spiral of inquiry, with its emphasis on speculation rather than certainty, and a demonstrated philosophy by the facilitators that learning was focused on what was working for the child not on teacher deficits, relaxed anxiety as to the function and purposes of data collection. Teachers also assessed the extent to which they had autonomy in CR4YR, which is the next property of trust discussed.

Owning action. The third way in which participants assessed the facilitators focused on the degree to which teachers had autonomy as to what was studied and the actions undertaken around plans for the case study student. One participant stated that:

(The Superintendent of Reading) definitely talked about bringing the resource people into the classroom. But it didn't come across as "You shall do it this way." (SD 5-4:174-176). I don't think that any of the facilitators positioned themselves as experts. They positioned themselves as facilitators. They really ran the meetings and ran the group and asked the questions. My experience wasn't that they answered them. (SD 5-4:189-191)

Another participant also spoke of granting teachers autonomy over their own learning as a reason for the development of trust in the initiative. Her comments were directed specifically at the school district personnel, although her original statements about lack of trust referenced the Ministry. In her opinion, the reason the initially negative relationship with the CR4YR initiative changed was that "the district provided release time for us to

discuss professional development in what interested us” (SD 2-1:141-144). She further emphasized how:

They [the facilitators] really listened to feedback after every session. It had not gone particularly well – the one group [session]. And I know that they really sat down and analyzed what made that happen. How can we make sure they [the teachers] are feeling like this is for them? (SD 2-1:154-161)

Yet despite the assertion by teachers of wanting autonomy over their own learning and its implementation in the classroom, actually accepting ownership as represented in CR4YR was difficult for the participants. Initially they also needed to develop trust for the CR4YR process, a portion of which was sparked by the role change as to who was responsible for identifying learning needs. This aspect of the BSPr is detailed in the section that outlines the sub-process *identifying with collaborative learning*.

Having autonomy as to the topics and/or content being discussed and the outcomes of exposure to CR4YR were important to the participants in this study and contributed to their trust for the facilitators. The final criterion utilized to assess facilitators was *discerning professional respect*.

Discerning professional respect. Discerning professional respect referred to giving importance to the role played by professionals in the education of children, and the recognition of their existing skill levels. One participant described what it means to be respected as the following:

I remember her saying things like, “You know your kids. You know where they are at.” She [Ministry-appointed facilitator] just made you feel confident in your

teaching abilities. So I would go in the classroom the next day and feel like

“Okay, here we go!” (SD 5-2:103-106)

Participants also talked about the ways in which the facilitators recognized their existing skill levels, encouraging them to have confidence in themselves and nudging them to ask more challenging inquiry questions. A participant, for example, described a conversation with a RA who was encouraging her to recognize her existing skill sets:

RA: “Well you know that!

Participant: Do I?

RA: Yes, you teach emergent readers in the summer.

She continued by explaining, “So it was growing based on my experience and other people having watched me and knowing that maybe I do [have competencies]” (SD 4-2:596-599). *Discerning professional respect* involved recognition by the Ministry-appointed and district-level facilitators of the participants competence.

Requiring reciprocity. A further aspect of the networking process involved creating trust with the cross-school participants, as well as the colleagues on the school-based teams. In this respect, one criterion for trust that figured in all the interviews was requiring reciprocity. Participants were adamant they would not network with people who did not display vulnerability. The participant’s comments below serve to summarize what most stressed:

some teachers ... are very willing to give you advice, but are not necessarily going to ask you for advice in return. I’m okay with that sometimes because I’m getting what I need out of it. ... I may get something from them once, but it might not be a person that I would go back to. (SD 4-2:272-281)

Another teacher described reciprocity as follows, “Everyone should be equal in that they’re willing to share successes and struggles. ... Absolutely, it’s empowering knowing that you are on the right track! You are with everyone else” (SD 1-2:379-382).

Requiring reciprocity had two dimensions. First, as seen in the above quotations, participants expected their cross-district colleagues to display the same kind of vulnerability as themselves. Participants wanted validation that difficulties were not being evaluated negatively, and this validation needed to be experienced as a willingness by all parties to express vulnerability so “you are not the only one that had a bad day” (SD 4-3:181-189). Secondly, reciprocity for these participants involved collaborating in an environment that allowed them to express their strengths as well as their weaknesses. It was interesting to note how the participants were almost embarrassed to outline areas of teaching in which they had strengths. One teacher disclosed that she felt uncomfortable sharing her strengths as an educator as she was unsure of the theoretical knowledge of those present and of how receptive they were to opinions different than their own:

A barrier personally for me to go out there at the board office level and ... I just don’t do that because I, again I don’t know where people are coming from. I don’t know how open they are to hearing things. I don’t know if they hear it if they will even understand what it is, you know. (SD 5-4: 376-380)

A further criterion of trust participants utilized to assess the trustworthiness of their cross-school and team colleagues was *discerning professional respect*. The terms of this criterion were similar to those used to define *discerning professional respect* as detailed above. When considering trust for facilitators and cross-school colleagues this criterion was based on demonstrated professional respect of all people regardless of position or

experience level. However, the teachers provided examples to illustrate this criterion of trust specific to either the facilitators or their colleagues. Therefore, to highlight this specificity this finding has been referred to twice in this chapter.

Discerning professional respect. Closely related to requiring reciprocity was the criterion discerning professional respect. Again, participants were definite they would not network in situations where they perceived their contributions to the network discussions were not valued by others. This issue revolved around the differing experience level of the participants present and respect for alternative viewpoints. For example, one participant illustrated the respect she expected as a teacher in the earlier stages of her career in a network with seasoned teachers. She cautioned that to engage with people she needed to sense they had “respect for people at different points in their career. As a newer teacher I sometimes find that people say, ‘Oh I’ve been teaching for 30 years and blah, blah, blah.’ That doesn’t help I find” (SD 1-2: 645-648). She spoke of past situations where, although subtle, she had perceived her ideas had been devalued and considered to be of lesser consequence because of her experience level. She explained, “I wouldn’t feel comfortable talking if someone thought my ideas were less valued than theirs. But I don’t feel that by any means. [I am a newer teacher] Fair enough. But it doesn’t mean you don’t know anything” (SD 1-2: 655-659).

Trust laid the foundation for all other sub-processes involved in the BSPr. When sufficient trust was established, participants initiated the sub-process ***becoming vulnerable*** which is outlined in a further section. The next section details the sub-category ***identifying with collaborative learning***.

Identifying with collaborative learning. The CR4YR facilitators encouraged participants to take ownership, publicly, for their learning needs as opposed to utilizing transmission models of learning which deliver content that has been determined external to the learners. Accepting ownership for their learning was an aspect of CR4YR that was, initially, a common problem for the participants as it required vulnerability. According to the participants, part of the three to four month time period where there was reluctance to participate in deprivatizing practice was in part due to developing familiarity with, and trust for, a new approach to learning. One participant described the behaviour of the group in the following manner:

At one point I remember (the Literacy Coordinator) and I after about three sessions we were a little bit frustrated and I know that ERAs (Early Reading Advocates) across (the region) were also. So other people had expressed, “What do you think is going on?” because it seemed like it wasn’t going anywhere fast enough. There wasn’t any meat to it. There was lots of talking going on but where was the action.

That is how we were reflecting. (SD 5-8:212-218)

The confusion as to how to learn in this environment prompted participants to initiate the sub-process *identifying with collaborative learning*. The analysis of the data suggested that in order to orient to this model of learning, the participants either activated or built constructs that recognized vulnerability, as displayed through deprivatizing practice, as a learning tool. One participant described the shift in thinking required for the teachers involved in the CR4YR initiative as:

It is a mindset if you come into something saying, ‘Tell me what to do and it is going to fix it.’ Or coming in and saying, ‘I’m going to look at my own practice and try to

change something. To learn something and change something.’ It has to be the mindset that I’m going to look at my practice and be critical of my practice. (SD 2-6: 102-111)

Identification of one’s own learning needs was a role shift for the teacher participants. Previously determining the content of professional learning initiatives and delivering it had been the responsibility of the district level people; it had suddenly shifted to teachers. Again, publicly taking ownership for their knowledge gaps was an unfamiliar experience. One participant’s explanation of the role change echoes participant SD 2-6 who was quoted above:

I think when I first went [to CR4YR] I was expecting it to be a workshop ... that is what I was expecting. Not my expectation, but my idea of this inquiry really had to change because I was expecting to go, sit down and listen to someone talk, do something and then leave. I had to wrap my brain around it a little differently. I definitely had to change my ... not expectations but my parameters around it I think. (SD 5-2:77-85)

According to one participant this shift in role definition was eventually accepted by teachers because “[the facilitator] allowed the group ... time ... to struggle with taking ownership [for their learning needs through deprivatizing practice]” (SD 5-8:210-212). The shift in how the participants came to view professional learning in the CR4YR initiative was explained by one participant in the following way:

I feel that at the beginning of our group everyone wanted to phrase their inquiry question just perfectly and that I think raised the anxiety a little bit. Then throughout they realized that they could adapt and change it. So I think that is something too –

that to grow professionally you do not have to do it exactly right the first time. In this sort of networking professionalism is your willingness to expose your vulnerabilities to your peers and then to grow with your peers or alongside or with or from them. (SD 5-6: 368-375).

The participants noted that adopting the model of learning utilized in CR4YR was an adjustment that, for them, occurred over time.

Becoming vulnerable. Assessing and creating trust with the Ministry, the school district administrators, the RAs, and the cross-school colleagues allowed participants to enter an aspect of the process called becoming vulnerable. Engaging in the sub-process becoming vulnerable enabled the teachers to utilize CR4YR to learn from the group as a whole and to create connections privately with individual members of the network. Vulnerability, in varying amounts, occurred throughout the entire process but this particular sub-process seemed to be marked by more assurance that deprivatizing practice could be a learning tool as opposed to being merely threatening. Becoming vulnerable involved the properties of deprivatizing practice; achieving group identity; staying the course; accessing resources; and preparing to mobilize.

Deprivatizing practice. All participants spoke of the initial nervousness around deprivatization of practice. For example, one participant said “when we started there was a lot of apprehension about speaking up in the group. Definitely there were not teachers saying, ‘I’m struggling with this and I need support with how to move forward’” (SD 2-5:160-163). Once a level of trust had been established, the participants’ behaviour underwent noticeable changes, changes almost all participants described in paradoxical

terms. On the one hand they spoke of a sudden tipping point characterized by a number of participants demonstrating deprivatization of practice. For example, one participant described how:

It just all of a sudden started to happen where ... questions were just much more deep. And putting it out there, but it took some time for them to feel safe about doing it [sharing vulnerabilities] and then people started risking. (SD 5-8:255-262)

Utilizing the phrase “all of sudden” to describe the initiation of deeper conversation was a common way of describing this phase of the BSPr. On the other hand participants also described the change in behaviour as having occurred over time as they came to know one another and determined that being vulnerable was safe and a risk worth taking. One teacher stated:

It certainly was a process. I think that it was just through the process of talking and sharing that we got to the point where we felt very comfortable with each other. I think that it was quite awkward at first. And then it wasn't and I think that is because people were willing to admit that things were not perfect in their classrooms. Those made us all feel very close. (SD 2-3:47-51).

During the interviews one could almost hear the breath intake as participants described taking the step to becoming vulnerable. When asked to clarify her information further, SD 2-3, the participant quoted above, succinctly stated that teachers may not have perfect conditions in their classes but they “do not like to talk about it” (SD 2-3:53).

It appeared that, while there was a point in the BSPr at which many members felt comfortable *deprivatizing practice*, this sub-process may have involved a slow trickle of vulnerabilities first displayed by people who felt very comfortable in these types of

environments. For example a participant described an early meeting that involved sharing. She said “of course there are some people who are very shy to share but once, like anything, once you have heard a few different people share a vulnerability you are more willing” (SD 5-6:218-220). Additionally, the facilitators were modelling deprivatization through their own disclosures. Teachers often spoke of models in the group who inspired them to both see the benefits of *deprivatizing practice* and emboldened them to reorient their own beliefs by considering vulnerability a learning tool as opposed to a threat. One teacher spoke for others when she recounted a moment within CR4YR when her definition of vulnerability changed. She explained how:

Somebody would give us a little snippet and then it is okay for you to say. Like it just kind of snowballs when someone shows – somebody exposes themselves a little. Then you realize that, “Oh well nothing happened to them. In fact that was really good because she just got ten great ideas.” (SD 2-1: 143-148)

Becoming vulnerable allowed participants to “feel very close” (SD 2-3:51), which in turn created a new phase in the BSPPr called *achieving group identity*.

Achieving group identity. Achieving group identity had two dimensions. The first dimension, called identifying with cross-school colleagues, concerned the group identity formed between the members in each CR4YR cohort. The second dimension, called identifying with cross-district colleagues, concerned the identity developed between the individual members at each research site and the larger provincial CR4YR initiative.

Identifying with cross-school colleagues. Participants indicated how their network cohort achieved a sense of cohesiveness. The acts of becoming vulnerable to each other,

through the stories told of successes and of difficulties encountered while implementing the case study plans, resulted in the participants identifying with one another. This group identity was characterized by a sense of having commonalities as well as demonstrated acceptance of one another. One participant described the group cohesiveness that occurred in her cohort as:

We were in a community of people just like us. People who were struggling with their students; struggling with the workload; and struggling with the expectations. So hearing the stories from the other teachers made me feel – well I felt much supported by the group. (SD 2-3:42-45)

Another participant further clarified how the display of vulnerability contributed to the creation of a group identity:

I think that it was confirming too for people to realize that when you hear that that person has the same struggle as you and that person. Or they are trying something, and they are trying something. I think that it makes everyone feel a little bit more connected and then it is easier to network when you feel that you are not alone. (SD 5-3: 375-379)

Caring about each other's case study students and the experiences of their colleagues as they put their plans into action in classrooms was evident in the data. Teachers spoke of taking responsibility to "always ask [name of CR4YR member] when she comes in 'How's it going? What's happening with your student? How's it going in the classroom?' We want to know" (SD 5-2:432-433). SD 5-2 explained how experiences such as the one in her quotation happened "over and over again" at the meetings. Participants spoke of

coming to know each other's case study students, even recounting stories during the interviews of the progress made by their colleagues' children.

Interdependence was shown in other ways as well. The participants described how CR4YR members would forward books, which related to their case study students, to them through the inter-school mail or connect participants with non-CR4YR members who could augment their learning further.

The final way in which identity was implicated in the BSPr is explained in the next section, and details how CR4YR members created an attachment to the larger provincial CR4YR initiative.

Identifying with cross-district colleagues. The sense that participants were part of a larger initiative that involved 600 teachers created another layer to the participants' identities as CR4YR members. The participants spoke of creating a connection with CR4YR colleagues province-wide, and with the Ministry, through the facilitators' regular Ministry updates. The participants reported this routine augmented their understanding of how the CR4YR fit within changes to the education system that were in progress or proposed by the Ministry. For example one participant echoed others' opinions when she said, "I mean I really appreciated learning what was going on at the Ministry level" (SD 1-3:534-535). Participants expressed feeling like they had their "finger on the pulse ... of what is going on in the Ministry as far as reading goes (SD 1-3:445). They also expressed surprise and a feeling of connection when facilitators regularly reported the ways in which other CR4YR sites were operating. For example:

It is exciting to see that it [CR4YR] is growing. We have pockets all over the province. (SD 4-2: 318-320). I think it created this sense that if there are people in

all the districts that are part of it you knew that it was the start of something. You felt, “Okay, it is happening all over.” I don’t know how to word it, but excitement I guess. (SD 4-2:666-669)

Other participants spoke of the Ministry updates as whetting their appetites for more connection with their provincial counterparts. Teachers wanted the specifics of how, for example, teachers in other parts of the province were utilizing CR4YR. One participant illustrated the degree to which she, and some others, would like to solidify their identities with BC teachers province-wide saying she would benefit from knowing “if other people in the province are doing the same things [or] something different that I can learn from ... the same idea of the collaboration within that one room at our district expanding to the whole province” (SD 5-2:290-293). A few individuals speculated about the possibilities for collaboration through technology. One suggestion was a Ministry-created secure, CR4YR-only website with a webinar and discussion board that allowed for teachers to continue their conversations province-wide.

Participants formed identities with their CR4YR cohorts that were characterized by recognition of their similarities, by a feeling they would be supported when vulnerable, and by acts of caring for each other’s case study students. The short, regular updates by the Ministry personnel at CR4YR meetings appeared to ignite a feeling of identity with the larger provincial initiative.

Staying the course. Becoming vulnerable enabled the participants to utilize their district network contacts to learn. However, the participants expressed concern, based on previous experiences with collaborative learning, that networks can be:

unproductive and veer towards negativity, political agendas, and things like that.

There is a tendency for things, if they are not organized and thoroughly planned to veer off course and start being a big ‘complain fest’ about climate, budgets, job action, government and stuff like that. (SD 4-3:712-713)

For the participants in this study, the CR4YR infrastructure, developed by the British Columbia Ministry of Education, was an important tool utilized by teachers to create networks to learn professionally in ways that allowed for productivity and focus. This property of *staying the course* had three dimensions: remembering purpose, focusing through inquiry questions; and grounding through check-ins.

Remembering purpose.

When I think of the group and the people that stuck with it, I think there was a common interest in learning and doing the best for children. That really came through. The common interest, it was for the kids. People were there to learn for the kids. (SD 4-3:157-160)

Participants spoke of the importance of having a clear focus which created purpose for the group and a sense of identity. Doing the best for children through participation in on-going professional learning was cited, in some form or another, by the participants as the purpose that prevented them from “veering off course.” The participants spoke of how:

When you are in the classroom you are constantly – with Grade 1s specifically – you are constantly thinking about it [how to teach reading]. Just to make sure you are

doing what works and if there is a child who can't read is there something you can do. (SD 5-3:32-37)

Many participants echoed the sentiment in the following quotation in identifying one of the greatest benefits of the initiative as the exchange of ideas as to how to reach primary grade readers who were of concern to teachers:

So we would share that and then people would have different strategies on how to teach reading. And how to help reach those low kids; those kids that are struggling.

So I think that just the sharing part was the most beneficial for me. (SD 2-2:219-221)

Participants also spoke of using their inquiry questions and the check-in activity as tools that helped them focus their work within CR4YR.

Focusing through inquiry questions. Participants noted how posing inquiry questions provided focus when examining their own practice, when discussing reading pedagogy in general, and when meeting as a network and team at the district and school levels. Initially, many participants explained that they had been skeptical that focusing on one child rather than a subject area would further their professional learning about reading development in general. Some feared that at best their learning would be shallow and lack applicability to other students, and at worst their focus on one child would limit their ability to meet the needs of the other children in their classes. However most participants stated that focusing on one child actually allowed them to “really dive deeper” (SD 4-3:573-575). One participant described studying one child closely as prompting her to explore issues such as self-regulation, areas different than what she had previously focused on. Further to allowing for deep examination of one child the participants noted how posing one question allowed them to focus discussions both

within their teams and the larger group. For example, one participant said the inquiry question:

gave us [team and network colleagues] direction. Because otherwise you are running off madly in all directions. If everybody is sitting down and “I want to talk about this.” “I want to talk about this.” Nothing ever comes to conclusion and you never feel like you have actually gained any significant knowledge in one area. (SD 2-1: 167-172)

Similarly, another participant shared, “And sometimes we get kind of off on a tangent. ‘Oh no, no, we’re working on just right books. Let’s just work on that right no’” (SD 1-2:318-319). Focussing on one child and a specific inquiry question provided direction during the team and large group discussions for networking, an important aspect of the process.

Grounding through check-ins. Participants began each network session with a “check-in,” a two to five minute private reflection consisting of filling out a four question quadrant. While the questions did change from session to session, basically the teachers were asked to think about their inquiry questions, detail work completed with the case study students since the previous meeting, assess the consequences of the completed work, and on the basis of these assessments, propose a further plan. Participants reported that the opportunity to privately reflect served three purposes in the networking process. First, it provided a bridge from the school environment to CR4YR and their one case study child through a process of “letting go of the day ... those school things that are on your mind even though you have left the classroom” (SD 5-7: 98-100).

Secondly, participants spoke of needing the opportunity to reflect on the child:

You get busy teaching and, “Oh our session is tomorrow. I know I have to write down my case study, but I don’t feel that I have done enough.” But then you would get there and sit down and do your reflection, your two minute write. You realize that I actually know what the next step is once you have had a chance to reflect on what you have done. (SD 4-2:308-213)

As detailed later in this chapter, teachers struggled to find time to collaborate and reflect on the case study students at the school level. Participants emphasized throughout the interviews how the CR4YR routines, such as the check- ins, were valued as reflection tools.

Thirdly, the private reflection allowed some participants to organize their contributions for the share-out activities that followed the check-ins. They used the reflections to determine questions about their case study students they could bring forward to the group, the next aspect of the BSPr.

Accessing resources. The participants in this study noted two types of professional learning resources they utilized as learning tools. The first tool, human resources within the CR4YR meetings, was related to the ways in which they located and connected with the CR4YR members who could help them grow professionally. The second resource they used as a tool when structuring their work within the CR4YR initiative was the professional development provided at or external to the meetings.

Accessing human resources within the CR4YR meetings. Participants spoke of how the group activities enabled them to make meaningful connections with CR4YR members

that benefited them professionally. These group activities are explained in the sections tapping in and going deeper.

Tapping in. Tapping in refers to ways in which the participants utilized the CR4YR routines to expose themselves to different skillsets and perspectives and to locate network partners. Diversity, within the district networks and school based teams, existed to a greater or lesser degree in every district providing a range of perspectives and sources of expertise. CR4YR in all areas sampled in this research had representation at every meeting from multiple levels and areas of the education system. As stated earlier, each district had a Ministry-appointed co-facilitator who while a member of the BC education community, did not work within the district to which they were assigned. Additionally each district had at least one RA or district level administrator and most often two or three who were present at each meeting. The representation from the teaching sector included people who worked in a wide range of capacities. The diversity within the group created what participants described as a rich learning environment that allowed them to “tap into” (SD 5-2: 189) skill sets present in the room and to experience a variety of perspectives and philosophical viewpoints. Analysis of the data indicated the hierarchical power structures did not seem to be an issue during the share-outs as people spoke of, “Being able to learn from the experienced teachers; and they could learn from us which is a little different, but also learning across ... from teachers, administrators and the Superintendent of Reading who is so high up” (SD 5-2:189-192). Others talked of administrators whose “admin hats came off and their teacher hats went on” (SD 3-1: 178-179) and noted how “role distinctions were non-existent” (SD 3-1:218).

Much of the exposure to different skill sets and perspectives occurred in an activity called “What’s on your mind?” which operated under strictly adhered to protocols. For example, participants could not be interrupted, questioned, or given advice when speaking. The role of the network members was to listen respectfully, with the caveat they could follow-up at a later time by speaking to the individuals involved.

Participants considered this activity powerful. They explained:

I think that is really valuable too because it helps you solidify “Hmm, do I agree with that? Maybe I do; maybe I don’t; maybe I don’t know at this point”. But to get that wider band of awareness – experience from decades of experience to new people.
(SD 5-1: 100-105)

The tapping in also allowed participants to realize possible networking partners as is described by the following teacher:

It was awesome because someone could say “Hey, hey, hey, I know all about this” because there were experts – at a whole bunch of different levels. So that really helps so I know a particular person is really great at you know early phonetics teaching or something like that. I could tap into them um as a resource. (SD 1-2:204-209)

Participants spoke of increased understanding as to how to learn from and utilize itinerant people through the comments made during the share-outs. One participant explained how “most of us were from schools but two teachers were (speciality teachers). So it was really interesting being able to collaborate with them as well and see how we could utilize people like them as well (SD 5-2:163-168).

In turn, one of the aforementioned speciality teachers reported how the discussions that took place in the network concerning students who were on her caseload allowed her

to understand that she needed to more actively explain her job so others understood she could be a resource. She stated:

So it just informed . . . me that I need to do a better job of informing the teachers of what we can do and then it also informed those teachers what is happening in different schools so that they can expect more or ask for more. (SD 5-6: 284-286)

Finally, for many participants, the activity “What’s on Your Mind?” enabled them to engage with the group without fear of being challenged or contradicted. One participant explained this aspect of the networking process as:

When it was your turn to speak, because you knew no one was going to comment, there was almost comfortability about it. I can just speak. There was a safety in it. You knew that they were just thinking. There was no pressure to have a response and me have to explain myself more. It was more me having a free flow of thought. (SD 4-2:87-92)

As is described in the following section, participants utilized the small group activities and the break times to further explore ideas presented in the “What’s On Your Mind?” activity.

Going deeper. The second and third aspects of the CR4YR structure utilized by the participants were the think-pair-shares, in particular the activities where participants were instructed to share with people from other schools, and the break times. The participants described how the small group activities “very, very definitely take you from your little core, comforting, this is who you eat lunch with every day to talking to someone from a school I might not know” (SD 5-1: 122-123). These activities were described as further opportunities to connect with people who had diverse perspectives and teaching

situations. Participants emphasized how these brief talks often led to feeling, “I can shoot her an email and she knows me. I have this connection with someone” (SD 5-1: 153-154).

Participants also described how the catered meals provided opportunities for highly interactive times when they followed up on comments made during the “What’s On Your Mind?” activity. An RA described one such interaction in the following way:

A teacher was really curious about well what did that [peer feedback] look like; how did you set that up? You know, obviously a lot of work was done with students prior to having the whole class engage in peer feedback. So they have a chance to talk and find out what that really looked like in your classroom in case they wanted to take it back and try it for themselves. (SD 1-1: 130-136)

Another teacher spoke of approaching a colleague who had shared a concern during the group sharing session to offer help:

And with the ... teacher that was wondering about this boy that just wasn’t taking on his alphabet. I went up to her privately and said “I had a student like that” and ... I said “[mentor] teacher came out and watched him and we talked about it.” And “here are some things that worked for him.” (SD 5-4:383-387)

The participants spoke of the CR4YR infrastructure as providing the basis for establishing alliances, some of which became contacts beyond the district meetings. Many participants stated that having face-to-face contact was critical and preceded contacting network members, beyond the confines of the district meetings, through technology or in person. Comments such as the one below reflect how people used the infrastructure to initiate relationships that led to future connections, an important part of

the networking process. One participant emphasized how the face-to-face interactions that CR4YR afforded her with the district administrators allowed her to be comfortable contacting them by email. She explained that:

Sometimes there can be a bit of a disconnect between School Board District Staff and those that teach. Face-to-face interactions allowed for a different relationship to foster between people. So even having that interaction with [them] personally then it makes it more welcoming to send [them] an email. You just don't have any concerns about asking them a question. (SD 5-6:332-344)

Professional development provided at or external to the meetings. The participants reported that the CR4YR meetings had professional development components in addition to the group sharing activities. The participants emphasized how the professional development components were essential aspects to the work they were doing within CR4YR, as described below.

The mode used to deliver the professional development varied from district to district but in general it involved supplying resources such as *Catching Readers Before They Fall* (Johnson & Keier, 2010) and/or providing funding for RAs to meet with teachers to facilitate continued professional growth at the school levels. RAs in some districts also talked about providing funding to send their participants to hear speakers who in their opinion confirmed and enlarged teachers' understanding of the reading process. Two of these speakers were Richard Allington and Pat Johnson, and the teacher participants mentioned their presentations as meaningful within the context of CR4YR. The professional development, according to network participants, provided the knowledge they needed to create plans for the case study children. Additionally they

reported how the professional development components enabled increased understanding of the results of their case study student plans, and facilitated conversation.

As one participant asserted:

Because purely the Changing Results, while interesting, the professional development part of it just gave that extra support to everyone. Like you really felt like not only were you inquiring about a student but here's some tools to help you along the way. You got the pro-d piece that just really gave the support you needed to follow through with what you were doing. (SD 2-1:38-47)

The above participant, among others, stated that the professional development provided structure to their discussions because it provided people with a common theoretical understanding of how children learn to read which allowed for deeper discussion around their case study students.

The final property in the sub-process *becoming vulnerable* is *preparing to mobilize*, a step in the BSPr that provided a bridge between the network and schools.

Preparing to mobilize. Participants described their behaviour during the case study planning sessions as some version of “then you filter it down; filter it down” meaning that as they progressed from the whole group activities to the small cross-school activities to their team discussion and planning times, they were engaged in determining how to take new or renewed knowledge and contextualize it to schools and their particular case study children. The three dimensions to preparing to mobilize as a property are requiring release time, creating the plan, and recognizing team competencies.

According to the participants the release time provided during every network session to meet as a team to plan for the case study children at their schools was a critical bridge

between CR4YR and the schools. Comments about time pressures were duplicated in almost every interview. Participants spoke of “even within a building ... people are so pressured for time ... there is just no time ... I think that time makes it difficult for people to connect within their buildings” (SD 5-6:199-202) . Another participant echoed many other participants when she said, “I could go over my agenda with you for the week and not know when could I have got together with these people. So I think that time is against us” (SD 1-3:554-556). Other teachers indicated that without release time collaboration would not happen. The release time allowed for participants to all have a common time to plan in an environment free of other concerns.

The creation of a case study student plan during this phase of the BSPr involved whole school-based team brainstorming to contextualize new or renewed knowledge to the specific needs of case study children. All participants emphasized that at this point in the BSPr and the school implementation phases it was “nice to be able to share ideas with somebody else [team members] who knows the school, knows what we are experiencing, who knows what day to day is like here” (SD 4-3:194-199). These sessions were described as being structured around “these wonderings about ‘Oh what if I did this? I could do that. Would this have an impact on this child?’” (SD 1-3:127-129) and were based on data gathered since the previous meeting. This aspect of the BSPr sparked questions that initiated searches within the group and elsewhere for knowledge needed to create their case study plan. Teams reported utilizing the expertise on the team, as well as the Ministry-appointed and district level facilitators to fill gaps in their knowledge. The Ministry-appointed facilitators apparently “offered an extra expert in the room who could then ... go around and circulate and support. Provide ideas and suggestions” (SD 3-1:241-

243). The RAs repeatedly spoke of watching for participants' specific learning needs that they then could assist with by lending teachers a particular book, by visiting classes to do demonstration lessons or to co-teach lessons, and by arranging for introductions or class visits with teachers in the district who were engaged in similar projects.

A further benefit to this dedicated time to plan as school-based teams involved participants coming to know their team members professionally. For example, participants remarked that as a result of co-planning they had a better understanding of the specifics of the speciality teachers' work with their students in schools, and of how they could utilize the fact that "both of us have different strategies on how to approach that child and their family to support them" (SD 2-2:208-209) in problem-solving situations. Others noted that prior to CR4YR they had assumed they needed to access expertise external to their schools when they experienced difficulties. One participant said, "What was neat about the project was that we have specialties with the colleagues that are right around us. It was neat to see that you could go next door and maybe find an answer" (SD 4-2:16-18).

Preparing to mobilize created a link between the work in which the participants were engaged at the network level and at the school sites. The planning time at the network meetings enabled the participants to create learning plans for their case study students. Additionally, participants reported gaining insight into how they could augment their work with students by tapping into each other's skill sets. The next section details the sub-process *mobilizing collaboration to the school*.

Mobilizing collaboration to the school. Ideally, according to the RAs, the school-based team provided continued support for CR4YR members attempting to implement new practices into the classroom settings. One RA said:

The team approach is the thing that has really kept it going. That the teachers have somebody either in the classroom beside them or in the classroom down the hall that they can talk to about what they are doing and what they are trying. And I think that is why it is sustainable. (SD 3-1b: 7-10)

Another RA confirmed that a purpose of organizing CR4YR participation around school-based teams was to provide support to teachers at the school level, and stated it was an expectation that the team members work together. RAs spoke of teams providing for the continuation of “rich conversation” (SD 2-5: 212) and for the establishment of push-in programs that saw teachers co-teaching, a move that would ideally allow them to impact the case study child, the class as a whole, and their own understanding of literacy acquisition. One RA stressed that, once the case study student plan was created, the demands on the teachers at the school level should not be onerous as:

They’ve created it [case study student plan] so hopefully it is very manageable and something that they feel that they can actually do. So there shouldn’t be really a need for them to feel they need a whole afternoon together or have something between those times. (SD 1-1: 516-525)

As noted earlier in this chapter all the teachers emphasized how having release time to plan for their case study child was critical, and described how this time allowed them to mobilize their inquiry projects to the school levels. The next sections detail how collaboration was utilized at the school levels.

Establishing collaborative routines. Teachers left the district network meetings with a plan for their case study students and with school-based teams who understood that collaboration was an expectation. However, the data analysis revealed that teams were accorded autonomy as to how they mobilized their plans and how much they collaborated at the schools level. For example, one RA said that while utilizing push-in collaborative models was a focus of discussion during the 2012-2013 initiative “school teams had the ability to ... interpret it how they saw fit” (SD 3-1: 319). Therefore, as most RAs and teachers said the “collaboration piece” (SD 3-1: 301) varied according to how schools were structured, which included the availability of time, and the comfort levels of the teachers involved. The data gathered from the research participants indicated that collaboration at the school levels was either “on the fly” or utilized a push-in approach. Further, during the 2012-2013 year most teams who were able to realize push-in collaborations had previously established routines around this practice. Each of the approaches to collaboration at the school levels is discussed in the following section.

On the fly. Time was a barrier for all these teachers that overwhelmed their ability at times to meet. As one participant explained:

The three of us don't always have a lot of time in school to all meet so I relish the time that the Ministry gives us because that has us all specifically sit down for hours where we can actually meet. (SD 1-3: 235-238)

Another participant said, “If we commuted to these sessions we would often talk about them [case study students] and whatnot but outside of those settings I don't remember sitting down and working as a team” (SD 2-4: 100-103). Therefore, most of the participants who were interviewed reported collaboration at the school level being

performed “on the fly.” In fact, “on the fly” was a frequent way of referring to how teams connected at the schools. These initial contacts involved “touching base” if team members met in the hallways or staff rooms and focused on validation of implementation results, quick problem solving adjustments to the original plan, material exchanges, and encouragement. At other times the participants utilized email to discuss and tweak plans for their students. One participant echoed many others in the study by saying that for her, team collaboration “was very informal. You just know that when you run into that person ... that naturally that conversation is going to happen” (SD 4-2:558-562).

In-class collaborations. In class collaboration, through push-in programs, was practiced by some of the teams involved in this study. This level of collaboration put greater demands on the collaborative practices of the participants as it required team members to establish organizational routines and trust each other. Participants who had committed to in-class collaboration at the school level emphasized the need to be organized to make in-class collaboration work as it “takes some forethought. You have got to have someone who is willing to plan with you and look at your timetable with you because it isn’t something that you can just walk into” (SD 3-1: 349-351). Some teams described scenarios such as:

We would make a point of sitting down, maybe once every two weeks. We would say “Where are we going? What are we going to do with this?” Sometimes it would be in-class support, sometimes it would be a shared lesson that we would teach together. (SD 1-2: 96-99)

Collaboration that involved in-class support depended on having a non-enrolling teacher who had flexibility in her/his schedule to enable this type of support. Some participants

noted their disappointment that they were unable to utilize a push-in program because they either did not have a non-enrolling teacher able to do in-class work or the teachers on teams were not comfortable with the concept of push-in programs.

While organization was clearly important if collaboration was to be utilized at the school level another aspect to this level of collaboration was trust. Participants were very specific when describing the importance of and the criteria for assessing the level to which the Ministry, the district personnel, and the cross-school representatives could be trusted. At the school level trust emerged again as a concern for teams utilizing or considering using push-in programs. The criteria utilized to establish trust with cross-school colleagues were implicated at the school levels also.

Participants involved in co-teaching situations emphasized that teaching was “somewhat of an intimate process” (SD 1-2: 101) and therefore it was necessary to know each other “really well.” Although there were a variety of suggestions as to what “really well” might mean, the participants did talk about having time to know a person well enough to like them, a quality that did not surface as a requirement at the cross-school network. Additionally they spoke of knowing the person’s style, strengths, and weaknesses, which refer to competence, so they could “fit in” by first approaching the person through their strengths and/or in a style familiar to them. Finally, they emphasized that in order to co-teach, the person had to know these styles well enough to “tag team”, which may mean that they had an identity that allowed for greater ease in communicating and acting in accordance with each other. However, the participants did not explain how trust was assessed at the school level beyond what is specified above, perhaps because they were speaking of colleagues.

Cycling back to the network. Cycling back refers to the cyclical nature of CR4YR. The network was utilized by the teachers as the central means by which they supported their case study students through the acquisition of new knowledge and problematizing the contextualization of it in school settings. As discussed earlier in this chapter, CR4YR provided the environment in which participants perceived they had the time, space, and breadth of expertise needed to reflect on their students, as well as access to a community with whom they had a shared “journey.” Throughout the data there were numerous examples of participants making references to being able to “bring it [the results of experimentation with new practices] back to” (SD 4-3:190) CR4YR. The following section details why cycling back was a necessary aspect of the BSPr and provides examples of how it worked as part of the BSPr. As would be expected the examples detail many different aspects of working within a collaborative inquiry model of learning. What is constant is that the CR4YR became a site to which the learners could return to further their own learning and that of others. Additionally it is important to note that cycling back did not appear to begin until a sufficient level of trust had been acquired and the sub-process becoming vulnerable was initiated.

In general participants had difficulty mobilizing their CR4YR work to non-CR4YR members within their schools, people who may have provided a source of support for the teachers as they implemented new practices in collaborative manners. Teachers spoke of feelings of isolation as individuals in schools, as well as in their teams. The schools in which these participants worked often were reported as having organizational structures that did not support knowledge sharing that was gained external to the sites. Teachers spoke of overloaded staff meetings and staff members who simply would not be

interested in the work that they were involved with at CR4YR. Further, as detailed earlier in this chapter, teachers were chronically struggling against time pressures at school sites which limited their opportunities to meet even with their team members.

Additionally, some teachers experienced challenges with respect to understanding how to make collaboration work at the school level, an area that was not clear to CR4YR RAs and teachers until the second year of the initiative. Finally, the participants reported how the strong identities they had formed as members of CR4YR created barriers at the school level. For example one participant stated, “I think that in a way it is hard to draw others in on the staff because those of us who went have all these shared conversations” (SD 2-1: 211-213). Another said, “So it is hard to share exactly how exciting it [CR4YR] was and to bring it back here. Sometimes it is a little bit difficult to convey to others ... because you need to see it yourself” (SD 2-2: 198-201). Each of the above described conditions created a reliance on ongoing support from the CR4YR network within the BSpR.

The data were replete with examples of participants cycling their experiences at the school level back to the CR4YR networks, some of which have been detailed previously in this chapter in the section on the sub-process *becoming vulnerable*. Two further examples are provided in this section. The most common type of cycling back reported by the participants was taking specific implementation successes or problems to the network. For example, one participant described the following implementation problem that they debriefed with the members of the CR4YR network:

Our school team was stuck. Of course the one student who wasn't getting it [our case study student plan] was the student we hoped would hear it all. So we were really

struggling and one [cross-school CR4YR] teacher said, “I have a little chart that I put in the book bags of kids who are working on just right books. I modified what she’d given me so it evolved to fit the needs of the student I was working with. (SD 1-2: 581-591)

Another teacher explained how her team’s experiences in the CR4YR network motivated them to change the way in which they approached collaboration at the school level. Initially, the team worked to implement the case study child plan, but in isolation of one another with no meetings to critique the plan. They made a decision to adapt their approach to collaboration as a result of push-in models that were shared by schools at the network meeting. The participant reported that:

As we sort of developed in the program we realized from hearing other schools talking about what they had done. And really the things they do for the case study child they do for everybody. And we were thinking, “yeah we really like that.” In this year’s case study I don’t pull any of the children out. (SD 1-3: 509-515)

A second organizational adaptation utilized by this team involved in-class support teacher assistance but not all team members were included in planning or critiquing the lessons. The final stage in this team’s changing manner of collaboration, which was being planned at the time of the interview, was to move to a model where all members of the team were involved in the planning, implementing, and critiquing of the plan. Each adaptive stage was the result of cyclical exposure to the experiences of the cross-school members. RAs also spoke of similar situations. One shared how:

Hearing and learning from the experiences of others have certainly opened doors ... that would have been previously closed. Those teachers who might not have been

comfortable having a co-teaching Learning Assistant Teacher push-in versus a pull-out might be more willing to try something like that now whereas in the past it was something they may not have considered. (SD 3-1: 370-376)

Thus, the experiences of the participants at the school level cycled back to the network and then back to the school level.

Chapter Summary

Actualizing collaborative learning was the BSPr employed by primary level teachers to create and utilize network connections in CR4YR, a network that emphasizes deprivatization of practice, learning for and with cross-school colleagues, and data-based planning for primary level readers. As described in this chapter, **actualizing collaborative learning** was a cyclical process that involved four inter-related sub-processes. The first sub-process, *establishing trust*, provided the foundation upon which all other sub-processes were built. *Establishing* trust was essential as the CR4YR initiative had representation from four different levels of the school system in the year following job action that spanned seven months. Participants utilized the following five criteria to assess the trustworthiness of the facilitators, their cross-school colleagues, and their school-based team members: *recognizing competence, detecting safety, owning action, discerning professional respect, and requiring reciprocity*. In addition, those teachers who were involved in push-in programs at the school level added the following three additional criteria: the degree to which team members were *liked* and how well their *weaknesses and strengths* were understood.

Initially, CR4YR created disequilibrium for the participants as they were unfamiliar with professional learning models that utilized *deprivatizing practice* in a public venue. This disequilibrium caused the participants to initiate *identifying with collaborative learning*, a sub-process that involved the creation of a professional learning identity that enabled the participants to take ownership for their own learning needs and to view vulnerability as a learning tool.

Creating trust allowed for the third critical sub-process, *becoming vulnerable*, to be activated and utilized to “tap into” the human learning resources available in the network. Trust and vulnerability were reciprocal as trust allowed participants to become vulnerable and acts of vulnerability increased trust. For example, participants expected all networking parties to be willing to display vulnerability.

Becoming vulnerable had the following five properties: *deprivatizing practice*; *achieving group identity*; *staying the course*; *accessing resources*; and *preparing to mobilize*. *Deprivatizing practice* involved public externalization and examination of practice, which in this study led to the creation of group identities and allowed the participants access to the human capital contained in the network. The participants emphasized the importance of having knowledge creation resources. This aspect of the BSPr was called *accessing resources*. In this study the participants noted three resources that enabled them to grow professionally and as a result to more effectively collaborate with their fellow network members: the expertise of the network membership, the CR4YR professional development activities such as book studies; and the professional development opportunities external to the CR4YR meetings that they were funded to attend. *Staying the course* referred to the use of purpose, inquiry questions, and

reflection to create foci in the participants' work within the network. Finally, *preparing to mobilize* referred to the ways in which teams utilized collaboration to create plans for their case study students. This aspect of CR4YR had the following three dimensions: requiring release time; creating the plan; and recognizing team competencies. Teachers emphasized how the release time provided to plan for the case study students was essential and one reason why they were able to carry their inquiry projects forward to classrooms. Additionally, teachers reported increased awareness of the roles of the speciality teachers in the education of their students. They reported seeking ways to merge their different skillsets so as to impact their case study students when planning collaboratively.

Analysis of data revealed that the final sub-process in the BSPr, *mobilizing collaboration to school*, had three properties: establishing collaborative routines; struggling against time; and cycling back to CR4YR. Teachers mobilized collaboration to the school level in two ways, both of which tended to mirror existing routines within their work sites. They either collaborated *on the fly* or they utilized push-in programs. All teachers noted how time was a constant concern that diminished their abilities to collaborate at the school level. Finally, *cycling back to CR4YR* identifies the district level network as the central support system for these participants. Teachers used the network as a means of furthering their own learning and that of others. Knowledge flowed from the school to the network and then back to the schools, but rarely from CR4YR members to non-CR4YR members within schools.

In Chapter Five I situate the results of my study in the existing literature in the field of professional development. In particular I review the literature that deals with identity,

trust, power, and network learning communities. My intention is to describe how my research both supports and extends what is known of learning in NLCs. I also describe the contextual factors that impacted participants' abilities to network in the CR4YR initiative. Finally, I make recommendations for implementation of this theory, suggest further avenues of research that would augment and extend my work, and detail the limitations of my research.

Chapter Five

Discussion, Implications and Conclusions

I begin this chapter by outlining my CGT, **actualizing collaborative learning**. Following this section I present my interpretation of the data in which the theory is grounded and situate each sub-process, as outlined in Chapter Four, in the relevant literature. Finally, I outline the contextual factors that impacted the ways in which the participants interacted with CR4YR, offer implications for practice and suggestions for further research, answer my central research question and two sub-questions, and detail the limitations of the study.

Actualizing collaborative learning is a theoretical conceptualization of how BC teachers interacted during CR4YR, a collaborative model of professional learning. This theory is grounded in semi-structured interview data collected from 22 educators located in five school districts in BC. Analysis of the data suggested that collaborative learning as utilized during the educators' participation in CR4YR was an unfamiliar way for participants to learn, as was working within NLCs that had representation from four different levels of the school system. Therefore, in order to enact collaborative learning in this environment the participants employed the following four sub-processes: *establishing trust, identifying with collaborative learning, becoming vulnerable,* and *mobilizing collaboration to the school*. The ways in which the sub-processes were utilized by the participants and the interrelationships between them are outlined below.

A review of the current literature, as presented in Chapter Two, revealed that despite the proliferation of collaborative professional learning models questions remained as to

how teachers developed the capacity to deprivatize practice for the purpose of critically examining the efficacy of their current belief systems and pedagogical practices (Dooner, Mandzuk & Clifton, 2008; Hargreaves, 2001; Lieberman and & Grolnick, 2005). As written in Chapter Four, *deprivatizing practice* required that educators publicly display aspects of their teaching practice, both their gaps in knowledge and their strengths, with the intent to critique and revise, if needed, epistemological and pedagogical beliefs about teaching reading. *Deprivatizing practice* were acts that required viewing vulnerability as a learning tool.

In order to investigate how teachers develop the above mentioned capacity I utilized, as said above, CGT methodology to answer the broad research question: what processes are involved as teachers interact with a system-initiated cross-school and cross-district professional learning initiative to create and utilize cross-district networks and school based collaborative teams in order to impact primary grade readers? The following two supporting sub-questions were also explored during the study: how are formal and informal learning networks created and utilized to further professional development; and what factors influence the use of these networks as professional development resources?

The next section features an analysis of the sub-process *establishing trust*. This sub-process emerged in the data as the critical initiating point in the BSPr **actualizing collaborative learning**.

Establishing Trust. Willingness to become vulnerable was an essential sub-process in the BSPr. However, vulnerability in an initiative where there was a perceived power hierarchy as well as unfamiliar cross-school teacher representatives initially created barriers to engagement during the CR4YR network sessions. Additionally, this form of

learning was unfamiliar to the participants and challenged their identities as professional learners. These situations resulted in participants initiating the sub-process establishing trust. Within the BSPr, actualizing collaborative learning, establishing trust created the conditions necessary for all other aspects of the process to be activated. Additionally, establishing trust was a sub-process that was ongoing throughout the entire BSPr.

As outlined in Chapter Four, *establishing trust* had four properties which formed the framework within which the participants judged the trustworthiness of the Ministry facilitators and district level personnel: *recognizing competence*; *detecting safety*; *owning action*; and *discerning professional respect*.

The first property, *recognizing competence*, aligns with what Tschannen-Moran and Hoy (2000) and Bryk and Schneider (2002) referred to as having adequate skill levels to fulfill a particular role. The teachers in this study stated that they entered into CR4YR for the express purpose of increasing their capacity to meet the needs of primary grade readers. To ensure the realization of this goal in a collaborative inquiry professional learning endeavour such as CR4YR required they depend on the competence of the network facilitators. In this regard the teachers scrutinized their facilitators, evaluating their reputations, demonstrated familiarity with teaching, and ability as leaders. Recognizing competence may have been particularly important as the teachers were unfamiliar with this style of professional development (Louis, 2007) and were not convinced at the onset of CR4YR's efficacy as a viable way to build knowledge.

Detecting safety as a property of trust reflects Tschannen-Moran and Hoy's (2000) property of trust benevolence. Benevolence refers to the assurance that when teachers

become vulnerable, such as submitting data on their case study children or when expressing questions during the share-outs, their “well-being, or something one cares about, will be protected and not harmed by the trusted party” (Tschannen-Moran & Hoy, 2000, p. 557). Bryk and Schneider (2002) state that as individuals work together “they are constantly discerning the intentions embedded in the actions of others” (p. 2). In this study detecting safety was a large concern and was related to fears of surveillance.

The property *owning action* was concerned with the degree to which teachers believed they had professional autonomy. Tschannen-Moran and Hoy (2000), Tschannen-Moran (2001), and Priestley and Sime (2005) reported that teacher autonomy was an important basis of trust between teachers and administrators. The criterion, referred to as “authentic empowerment” (2000, p. 572) by Tschannen-Moran and Hoy and “professional trust” (2005, p. 24) by Priestley and Sime, allows teachers a voice in professional learning subject matter, and discretion as to what aspects of their learning are implemented in classrooms. Lieberman and Grolnick (2005), researchers who have completed extensive research on NLCs, maintained that teachers build commitment for networks proportionate to their assessments of how influential their “voice” (p. 45) is within the group, an assertion confirmed by Louis (2007) in her work with collaborate learning at the school levels.

CR4YR facilitators encouraged teachers to accept ownership for determining and publicly expressing their professional learning needs. However, publicly taking ownership for their learning was an aspect of the program that teachers found difficult to embrace as it required vulnerability on their part. This aspect is discussed in greater detail below in the section entitled *identifying with collaborative learning*.

Discerning professional respect refers to interdependence. A key component of trust is having a sense of interdependence or the belief that all parties are implicated in decision-making and the resulting consequences. Participants who believed they had been accorded respect during their interactions with the Ministry facilitators, school district administrators, RAs, and their cross-school colleagues noted how their existing skill levels were recognized and were considered important by these members of their CR4YR cohorts. This particular property of trust aligns with what Bryk and Schneider (2002) refer to as respect.

Establishing trust also required participants to assess and create trust with the teacher cross-school representatives. In this regard they structured their responses around two properties of trust: *requiring reciprocity* and *discerning professional respect*. As *discerning professional respect* has already been described in the above section only *requiring reciprocity* is detailed below.

Requiring reciprocity is aligned with what Tschannen-Moran and Hoy (2000) call openness. To them, openness refers to “reciprocal trust” (Tschannen-Moran & Hoy, 2000, p. 558), a state that is characterized by all people being willing to make themselves “vulnerable to others by sharing personal information” (p. 558). Personal information in this case refers to exposing both professional strengths and weaknesses. The participants communicated unwillingness to network with colleagues who did not fulfill this criterion.

While the properties of trust discussed above are important and, as indicated earlier in this section, reflect the work of Tschannen-Moran and Hoy (2000) and Bryk and Schneider (2002), what is more critical to note is how establishing trust created the bridge that allowed all other sub-processes in the BSPr to be initiated and utilized by participants

to learn professionally in a network situation. Trust is acknowledged as a critical determining factor in the creation of positive network learning environments in the literature on NLCs (Katz et al., 2008), however the properties and dimensions of this construct are not developed specific to these situations. In this study, trust emerged as a time-sensitive, critical sub-process of BSPr that proved to be essential, as indicated in the research on NLCs (Katz et al., 2008), and the basis of all other sub-processes utilized by the participants as they engaged in **actualizing collaborative learning**. Further, the properties of trust utilized to assess and create trust with the network membership were specialized to the different segments of the education community represented at the network. The above mentioned findings support and extend the work of Tschannen-Moran (2001) whose research with school-based teachers and administrators had similar results (see Chapter Two). The findings of my study have not however been explicated in the literature on NLCs that I have reviewed. To fully understand the ways in which trust is implicated in the theory, **actualizing collaborative learning**, it is important to examine the sub-process *establishing trust* in greater detail.

The active involvement in the network of the Ministry-appointed facilitators and district level administrators was of particular concern for the participants in this study. The trust that existed initially between the Ministry of Education and the teachers participating in CR4YR was, as described earlier in this chapter, strained. This uneasy relationship reflected the political turmoil that epitomized the relationship between the BCTF and the Ministry of Education. Foucault (1980) stresses that people do not interact passively with information. Instead information is vetted through personal and group versions of reality. Aspects of CR4YR such as screening participants through an

application process, having protocols that emphasized public externalization of practice, and collecting data that was to be reported to the Ministry appeared to fan fears of surveillance and fed initial guardedness among the participants. These fears were reflected in the criteria utilized by the participants to assess the degree of trustworthiness of the Ministry-appointed facilitators, and by extension the district personnel.

Katz et al. (2008) and Tschannen-Moran (2001) assert that learning in collaborative environments is risky and requires that a level of trust between members be present. As Tschannen-Moran (2001) states:

Collaboration and trust are reciprocal processes; they depend upon and foster one another. Collaboration takes place between autonomous partners who choose whether or not to participate, therefore it is unlikely that collaboration will develop without at least a measure of trust. (p. 315)

As stated in Chapter Four, a three to four month period of time passed before teachers participated in collaborative learning at the level of intimacy suggested by Tschannen-Moran (2001). From a Foucauldian perspective the period of time during which the expectations of the organizers were unrealized demonstrated resistance on the part of the teacher participants as they evaluated the ways in which power was being exercised by the Ministry, the district level personnel, and their cross-district colleagues. Foucault (1982) viewed this resistance as “acting on the actions of others” (p. 792) for he maintained that:

In effect, what defines a relationship of power is that it is a mode of action which does not act directly and immediately on others. Instead, it acts upon their actions:

an action upon an action, on existing actions or on those which may arise in the present or in the future. (p. 220)

The teachers utilized their power to participate in a manner with which they were comfortable. They conducted an assessment of the degree to which they could trust the professionals involved and initiated the next sub-process only when they considered there to be an adequate level of trust (Tschannen-Moran, 2001, p. 315) to move forward in the initiative.

Three aspects of the evaluation process are noteworthy. First, the teachers, as described by one administrator, needed to understand the origins of CR4YR. In particular, an administrator reported that they wanted information as to how the BCTF was involved. As reported in Chapter Four the participants did not reveal why they wanted the above described information. These teacher participants had two I-identities (Gee, 2000) – one as employees of the Ministry of Education, and one as BCTF members at a time immediately following job action that lasted seven months. It is possible that needing this information is reflective of what Tschannen-Moran and Hoy (2000) describe as calculative trust (p. 561) or the ability of participants to extend a low level of trust to a body because there are consequences, such as the intervention of the union, if trust is broken.

The second important aspect to the establishment of trust between the CR4YR participants and the Ministry was that this relationship was co-constructed, with the Ministry, as reported by the CR4YR participants, playing an active and highly transparent role. Contrary to many types of professional development initiatives where the sessions begin at the point of knowledge creation (Timperley, 2011), the Ministry provided time

during the beginning sessions for participants to understand the origins of CR4YR, the people and organizations involved, and how the initiative fit into the broader infrastructure changes at the Ministry. Additionally, participants expressed appreciation for knowing “who” the Ministry representatives were as educators.

The third way in which the participants’ initial distrust of the Ministry was alleviated involved considering the Ministry facilitators as avatars of government’s intent. The teachers held the Ministry facilitators in high regard because they were high-profile people who had established reputations as quality BC educators and were able to demonstrate that they understood teaching. Consequently, the participants were willing to participate in a Ministry-initiated endeavour.

The above section provides insight as to the relational factors that either encourage or impede initiatives that involve multiple levels of the school system. The state of the relationship at the beginning of the CR4YR program impeded the collaborative nature of the initiative and emphasized the importance of recognizing and addressing the social and political aspects of working together in collaborative environments. *Establishing trust* allowed individuals to create the conditions necessary to initiate the sub-process, *becoming vulnerable*, which is described below in the section following an explanation of the sub-process *identifying with collaborative learning*.

At the point at which participants commenced becoming vulnerable through deprivatization of practice, the sub-process *establishing trust* became interdependent with all other aspects of the BSPr creating a situation where acts of vulnerability served to strengthen trust and trust strengthened the participants’ ability to be vulnerable.

Another sub-process, which emerged from my analysis of the data and that I have called *identifying with collaborative learning*, also operated during the initial three to four month time period of the CR4YR initiative. This sub-process enabled the participants to activate or begin to build constructs that led them to understand how to learn in collaborative environments such as CR4YR.

Identifying with Collaborative Learning. As described earlier, analysis of the data suggested that constructing or activating identities as learners that were compatible with collaborative learning was essential in the BSPr actualizing collaborative learning. As learning in NLC environments such as CR4YR was unfamiliar for participants, a further sub-process initiated by them was identifying with collaborative learning. Identities, as indicated in Chapter Two, are ideological representations that define “how to be” (Gee, 2000), and in this study the identities define “how to be” professional learners. According to Clarke (2009) and Gee (2000, 2004) identities are forged, maintained, and disrupted through social interaction.

A number of scholars contend that collaborative learning requires an identity as a learner that prepares teachers to critically examine their own teaching practice and that of colleagues (Dooner, et al., 2008; Hargreaves, 2001; Lin et al., 2008; Lasky et al., 2009; Lieberman & Grolnick, 2005). Further, Ainscow, Muijs, and West (2006) maintain collaborative learning requires, in part, that teachers be willing to utilize diversity as a learning tool, an assertion that is examined later in further detail.

Dooner et al. (2008) reported, as outlined in Chapter Two, that the Middle Years teachers in their study experienced ongoing difficulties with creating and maintaining group focus and with giving and receiving feedback that challenged teaching practice.

Hargreaves (2001) similarly found that while teachers were willing to engage in collaborative unit planning, the sharing of materials and other types of information exchanges, they experienced difficulty when required to engage in critical examination of their teaching practice. Timperley (2011) also stated that the reality of collaborative learning can be unsettling for some participants as the premise upon which it is built can “touch raw nerves ... [and] impinge on teachers’ sense of professional identity and competence” (p. 16).

In contrast, most participants in this study viewed collaborative learning as a positive way in which to learn. The participants who reported being comfortable with learning during the CR4YR initiative had similar self-declared identities as professional learners. Perhaps the most central area of commonality in these identities was the role played by vulnerability in learning. These participants viewed vulnerability as a tool that stimulated growth. One participant described the identity of a person not attuned to collaborative learning in the following manner:

One of my teaching partners last year, who is also on this team, she would get really nervous about showing vulnerability in the group. Like saying something didn’t work or that she is really frustrated with something. She would have trouble with that because she thought that it reflected badly on her. ... I would often remind her that “Hey, listen to everyone else. Everyone is having really similar challenges. That it’s ok.” (SD 1-2: 338-345)

Another participant, also personally supportive of collaborative learning, offered the opinion that, “There are some teachers that aren’t ready to say they are struggling with something, they are not very open to the conversation” (SD 4-2: 267-268).

Constructivist epistemologies of learning (Von Glasersfeld, 1989) indicate that learners, in order to understand situations and respond to them, develop constructs, based on their philosophies, goals, and experiences that define reality. The participants in this study who were comfortable with collaborative learning activated or were in the process of developing criteria that allowed them to classify certain behaviours as appropriate in a networking situation and others as not.

There were research participants, albeit few, who did not experience CR4YR as a positive learning environment and their experiences were similar to the findings of Dooner et al. (2008) and Hargreaves (2001) who described teachers who struggled in collaborative environments. Additionally, the RAs, and teacher participants such as SD 1-2 and 4-2 who were quoted above, described other teachers in CR4YR who were not able to align their identities as professional learners with the expectations of collaborative learning. Becoming vulnerable appeared to be a contentious issue for these participants, a situation which aligned with the research of Dooner et al. (2008), Hargreaves (2001), Lin et al. (2008), Lasky et al. (2009), and Lieberman and Grolnick (2005).

Participants who were supportive of collaborative learning described a number of reasons for their attitudes towards this form of professional development. For example, they described past experiences in which they had been involved in collaborative learning situations and explained how vulnerability shown by their fellow CR4YR members during the “What’s on Your Mind?” activity within CR4YR encouraged them to refine their attitudes towards vulnerability. The facilitators’ foci on the spiral of inquiry and on the child’s needs as opposed to teacher deficits also encouraged participants to view professional learning as a process that involved vulnerability. Each of the above

situations reflects the writing of Clarke (2009) and Gee (2000, 2004) who proposed that identities are forged, maintained, and disrupted through social interaction. Findings from the data analysis suggested that constructing or activating identities as learners that were compatible with collaborative learning was essential to **actualizing collaborative learning**. The sub-process *identifying with collaborative learning* was active for the participants throughout the CR4YR initiative. The participants' experiences within the sub-process *becoming vulnerable* which is discussed below, reinforced their abilities to identify with collaborative learning within the CR4YR initiative.

Becoming vulnerable. As individuals came to trust that the requirements of CR4YR held no inherent potential for harm, the participants initiated the sub-process becoming vulnerable as evidenced by their willingness to undertake deprivatizing practice. Deprivatizing practice was described as acts of vulnerability in which teachers engaged in “really sharing what is going on in our classrooms. Good and bad” (SD 5-5: 82-83). These acts of vulnerability provided models for those less sure of the initiative, confirmed and strengthened trust, and created a sense of cohesiveness in the group that I have called group identity. As indicated above the sub-process establishing trust continued to be active throughout the remainder of the 2012-2013 school year and into the 2013-2014 year.

While *deprivatizing practice* enabled participants to begin to externalize their practice in such a way that they could access the human capital within the group as well as contribute to it, three additional properties of *becoming vulnerable* contributed to the conditions necessary to learn while participating in the CR4YR initiative. These properties were *achieving group identity*, *staying the course*, and *accessing resources*.

Achieving group identity. Achieving group identity assured participants that they had an environment in which they could “access other people’s human capital” (Hargreaves & Fullan, 2012, p. 90). Having the ability to access the human capital within the CR4YR cohorts was dependent on the creation of social capital (Coleman, 1988), which was intertwined with the sub-process establishing trust. Social capital is created through the establishment of group identities marked by common communication systems, group norms, and values (Hargreaves & Fullan, 2012; McClenaghan, 2000). The common communication system the CR4YR participants expected of one another was characterized by a willingness to be vulnerable. Tschannen-Moran (2001), building on the work of Wrightsman (1974), asserted that groups with high trust are more willing to “disclose more accurate, relevant, and complete data about problems, as well as their thoughts, feelings or ideas” (p. 313). This level of vulnerability occurred in the interactions of the CR4YR participants and was a condition for participants becoming “really close” (SD 5-5: 80) as a group.

As a key aspect of collaboration between the CR4YR members involved vulnerability, the identities formed within the CR4YR cohorts were also marked by norms of mutual caring and non-judgemental acceptance of each other’s struggles and successes. This finding is reflected in the work of Tschannen-Moran and Hoy (2000) who noted that one of the most fundamental facets of trust that people require in order to form working groups is benevolence. Benevolence refers to confidence that one’s vulnerabilities will be respected and not exploited. Tschannen-Moran (2001) further reports that when high trust exists in organizations another dimension of benevolence that occurs is the willingness to “go beyond the minimum requirements” (p. 584). In CR4YR

such benevolence occurred as teachers reached out to supply materials for each other or to introduce network colleagues to non-CR4YR members who could assist with inquiry questions.

Staying the course. As described previously, staying the course referred to the particular ways in which participants maintained focus during CR4YR sessions. In this regard the participants noted that having a common purpose, a relevant inquiry question, and the ability to reflect on their case study student at the beginning of each CR4YR session supported their efforts to learn in this environment.

Remembering purpose. Katz et al. (2008), as do Jackson and Temperley (2007), describe how having a shared purpose that is ideological in nature is a critical component of NLCs. Jackson and Temperley (2007) write of this purpose as having “moral” value such as a “commitment to success for all children” (p. 5). The CR4YR participants’ purpose for involvement in the initiative also appeared to be ideological in nature. The expressed purpose of the CR4YR initiative, and of the participants, was “to see if we [CR4YR participants] can see improved results [for our students by]... working as a team ... where we all came together for that one child and for that one question – that inquiry” (SD 5-2:33-35). Therefore, ideologically, professional learning was viewed within CR4YR as child-centered, collaborative, and inquiry-based. The participants in this study were singularly focused on meeting the needs of primary grade readers and were direct in saying that if the network failed to meet this purpose they would cease involvement. Participation in CR4YR was always weighed against the potential academic losses for students that resulted from teachers being absent from their school sites.

Further, the learning activities utilized within the CR4YR initiative focused on what was or was not working for the child rather than on teacher deficits. This epistemic focus was one expressed reason why CR4YR participants were able to engage in the initiative. Concentrating on the child's needs appeared to create a way for the participants to engage with problematic situations in a depersonalized manner. The conversation could focus on exploration of the pupil's development rather than the teacher's deficits.

Focusing through inquiry questions. While remembering purpose enabled participants to detail the overall reason for involvement in the initiative, the establishment of an inquiry question created a specific focus for learning. During the CR4YR initiative the inquiry question allowed for learning to become "concrete and useful" (Katz et al., 2008, p. 117) and directed the ways in which participants engaged in the networking process. Lieberman (2000) asserted that while professionals are attracted to networks that are guided by moral purposes, such as student-centered learning, these types of purposes are not enough to sustain professionals' interest in collaborative learning. Instead she says that "sustaining educators' commitment and interest hinges on keeping the work focused on practice" (Lieberman, 2000, p. 223). She further states that "networks that last, that hold their members, and continue to attract new teachers understand that they must account for the daily pressures of teaching" (Lieberman, 2000, p. 223). The study participants noted that creating practical inquiry questions around their case study students who despite their previous efforts were not making reading progress provided the stimulus to engage in the utilization of the larger CR4YR network, kept their interactions focused, and directed their decisions of whom they connect with for more in-depth discussions.

Grounding through check-ins. Check-ins were utilized as reflection tools that augmented the participants' ability to connect with the work being undertaken in the network. As was described in Chapter Four, the participants reported that the check-ins at the network functioned as a tool that served the following three purposes: it provided an opportunity to psychologically transition from school to the network; it functioned as a time in which participants could reflect on the case study student, something they found scant opportunity to do in the schools; and it enabled them to organize their contributions to the group activities. This aspect of the BSPr was guided by reflection questions provided to the participants by the CR4YR facilitators.

Accessing Resources

Accessing human resources. Accessing human resources had two dimensions: tapping in and going deeper. These dimensions of the property accessing human resources involved the use of the varied skill sets that existed in the CR4YR membership. The ability to benefit from the varied skill sets and belief systems, referred to as diversity in this section, was considered important by the participants as it allowed them to fill their knowledge gaps.

Tapping in and going deeper. Tapping in and going deeper, both in vivo codes, refer to the ways in which participants located and utilized human resources, and therefore were key to the BSPr actualizing collaborative learning. An integral part of this aspect of the BSPr was the availability of diversity within the network. The review of the literature concerned with NLCs indicated that without diversity, which refers to the inclusion of people within the networks who have varied experiences, expertise,

philosophical orientations, and abilities to connect multiple networks, collaborative inquiry cannot operate (Muijs et al., 2010). CR4YR participants expressed that diversity, such as described above, was one aspect of the network they utilized to create alliances that allowed them to grow as professionals.

However, the literature on collaborative learning revealed that utilizing diversity to learn is difficult and often not realized. For example, Coburn (2001) (see also Ainscow, Muijs, & West, 2010) found that when the “worldviews and practices” (p. 163) of the participants were too divergent groups had difficulty bridging the communication gap. In the case of Coburn’s study, the diversity led to unproductive conflict and/or avoidance of conversation. Achinstein (1998) states that teachers require support or structures that help them “engage in conversation across diversity, to help make diverse settings opportunities to learn from one another and push thinking rather than places to disengage and avoid conflict (in Coburn, 2001, p. 164).

As described above, diversity existed within the CR4YR cohorts, and in some cases there was wide diversity, as professionals were present who represented many different sectors of the education community (see Chapter Four for a complete description). Yet the participants, in most cases, indicated they benefited from and used this diversity within their cohorts to create alliances that led to learning. Two important findings emerged from the data analysis that provided insight into how the CR4YR participants were receptive to diverse sources of knowledge, an important aspect of collaborative learning in NLCs and of my theory. Having laid the groundwork for learning in collaborative environments through the sub-processes *establishing trust* and *identifying with collaborative learning*, as well as through *achieving group identity* and

deprivatizing practice, the participants were positively disposed towards viewing diversity as potential sources of knowledge. Furthermore, the structure of the protocols supported the sub-processes and properties as noted above. Both of these findings are discussed below and as they are intertwined it is not possible to separate them.

Participants reported using the CR4YR network meeting protocols to *achieve group identity*, as well as acclimatize to, reflect on, internalize, and then directly connect with the different views represented in their cohorts. In this regard, the following three particular protocols emerged as important to the participants: “What’s on Your Mind?,” the follow-up discussions, and the informal aspects of the meetings when members had opportunities to connect one-on-one with network members.

Utilizing diversity. As detailed in Chapter Four, data analysis revealed that the activity, “What’s on Your Mind?” was utilized by the participants as a forum in which they deprivatized their practice and reflected on the practices of others. The participants emphasized that the ‘rule’ that prohibited interruptions during this activity accorded respect to individual voices, including their own, as it prevented certain people from dominating the conversations. Lieberman and Grolnick (2005) state that commitment to networks is built through all members believing that they have a “voice in creating and sustaining a group in which their professional identity and interests are valued” (p. 45). This aspect of the BSPr was discussed in the section on achieving group identity, but the participants’ ability to benefit from the diversity in the cohorts also reflected the sub-process establishing trust and participants’ willingness to become vulnerable through deprivatization of practice. The acts of vulnerability required to participate in the activity and the verification that the individual voices present would be respected further built

trust, enhanced people's willingness to engage in deprivatizing of practice, and for those unsure of how to be a learner in these situations, provided models that enabled them to observe vulnerability and its consequences. The above mentioned properties of becoming vulnerable and the sub-process establishing trust built capacity to be influenced by and influence others through the sharing of their differences.

The structure of the protocols. Participants also reported that the exercise, "What's on Your Mind?" allowed them to understand who, within their cohorts, were valuable resources who they could tap into as they moved forward with their inquiry questions. Participants expressed that a further benefit of the "no interruptions" rule was that it prevented certain people from determining the direction of the sharing which allowed them the space to tap into the different perspectives and skill sets available in the network. During this activity participants reported noting with whom they wanted to go deeper.

Similarly, the CR4YR meetings had agenda segments that required small and large group, cross-school discussions that focused on research articles and/or the issues that emerged during the "What's on Your Mind?" activity. These activities, according to the participants, again provided opportunities for exposure to different viewpoints and skill sets that led to *going deeper* in follow-up discussions during the break times and in some cases communication between sessions.

Viewing the above mentioned experiences with the protocols through an identity theory lens suggests that the activities provided the disruption needed to enable teachers to begin to privately explore alternative perspectives, as well as expand the range of people with whom they interacted professionally (Gee, 2000). The fact that teachers were

not required to form consensus or to integrate specific elements into their practice created a situation where it was unnecessary to resolve differing viewpoints. Instead, participants had the opportunity to simply consider and possibly internalize other viewpoints. Alternatively, the literature suggests that situations such as this one lead to disregard of alternative viewpoints and therefore do not function as a way in which to interrogate practice (Earl, 2009).

The literature on collaborative learning environments stresses that dissonance or “moderate conflict is essential for the development of high joint benefit, and the desire to avoid conflict can undermine this outcome” (Katz et al., 2008, p. 119). It was clear in *achieving group identity* how the participants were committed to supporting their fellow CR4YR members. However, the group identity did not constrain participants from critical examination of their own pedagogy and that of others. The data indicated that each of the above mentioned activities was used by the participants to examine their practice. Instances such as the following were reported frequently by the participants indicating that it was common place to view their pedagogy through different lenses:

Some people share, or disclose very personal things. I remember last year, one person telling us that she wasn't a reader. It was quite shocking. She didn't read novels. So it made us all expand our understanding as to what we were defining as reading here. Suddenly we had to think, “Well you are a reader. You are reading this book, the newspaper; you read all kinds of stuff”. (SD 4-1: 577-584)

Another participant shared that she had found CR4YR beneficial because:

I learned ... that 80% of the children will learn to read in spite of us. Doesn't matter what program we use; what methods we use. It's the 20% that don't learn to read

that we need to be concentrating on. That was an epiphany for me. I've prided myself on my reading program. And I also had not worried too much about the kids that didn't get it because I assumed that somebody else was going to pick up those kids. (SD 2-3: 26-35)

Participants shared other similar types of "ah ha" (SD 4-1: 584) moments indicating that diversity initiated reconsideration of beliefs and practices.

As indicated earlier in this section utilizing diversity to learn can be difficult (Coburn (2001; Muijs, West, & Ainscow, 2010), yet it is a foundational aspect of learning in collaborative situations (Katz et al., 2008) as it allows the use of different viewpoints to critique practice. As noted above, data analysis revealed how the participants used the protocols implemented during the CR4YR initiative to acclimatize themselves to and benefit from diversity. However, *establishing trust* and *identifying with collaborative learning*, as well as the properties *achieving group identity* and *deprivatizing practice* emerged in the data as ways in which the participants were supported to be open to the diversity of ideas of cohort members. An important aspect of my theory is recognizing the ways in which the sub-processes and their properties are intertwined with and contribute to how the protocols are utilized by the participants. This linkage accounts for one variation in the data as the people who were not able to utilize the above mentioned protocols as positive learning tools had not established one or more of the sub-processes or properties.

One additional protocol, *preparing to mobilize*, was used by the participants to structure their learning.

Preparing to mobilize. Preparing to mobilize is the point in the BSPr when teams work collectively to analyze the progress made by case study students and then, on the basis of these reflections, plan for further action. This aspect in the BSPr was interactive, retrospective, and prospective (future-oriented) in that the participants focused on completed actions for the purpose of planning for the future. The participants described this aspect of the BSPr as data-based problem-solving that involved reflection, speculation, and active searches for knowledge. Preparing to mobilize appeared to be, in part, reflective in nature and align with the work of Dewey (1933). Dewey (1933), considered the founder of “reflective thinking” (Van Woerkom, 2004, p. 179), emphasized action is not enough to produce learning. Instead learning occurs when action that is considered “an experiment with the world, to find out what it is like” (Van Woerkom, 2004, p. 179) is followed by reflective thought that is “active, persistent, and [a] careful consideration of any belief or supposed form of knowledge in the light of grounds that support it” (Dewey, 1933, p. 4). For Dewey (1933) reflection was practical, encouraged questioning “the grounds of one’s beliefs” (p. 9), and was directed towards solving practical problems, a type of reflection evident in this aspect of the BSPr.

A further finding of this study was the parallels between the *preparing to mobilize* in the BSPr and the dimensions tapping in and going deeper. Some participants inferred that previous to their involvement in CR4YR, they had relatively weak ties (Coburn & Russell, 2008) with the speciality teachers in their schools. Working with them during the *preparing to mobilize* aspect of the BSPr allowed teachers to tap in to the skill levels of their school team members, initiating a consideration of how their individual skill sets might complement each other as they worked together for the students. The latter action

aligns with going deeper. Network theorists such as Penuel et al. (2010) and Coburn (2001) warn, as outlined in Chapter Two, that new practices are difficult to mobilize to classrooms because teachers often have pre-existing formal and informal networks within schools that may not support change. *Preparing to mobilize* seemed to offer teachers the opportunity to form alliances that may have been new and aligned with the knowledge that was being mobilized to schools. While most collaborations at the school level were informally organized, according to the participants, in that they consisted of brief interactions in the staff room or if the team members happened to meet as they moved through their days, the data analysis indicated that team members were visible to one another and considered each other a support.

Preparing to mobilize allowed the participants the time to create plans that would carry their work forward to the school level. Additionally, it appeared that working intimately, in the manner as described above, with the participants' school-based team members allowed for some of them to create the grounds for collaboration at the school levels. The review of the literature, as reported in Chapter Two, indicated that in order to create new networks at the school levels disruption must be introduced (Penuel et al., 2010). In some research (Coburn & Russell, 2008) these disruptions are reported as the introduction of professionals such as on-site literacy coaches. For the CR4YR participants, the disruption appeared to be providing the participants with the time necessary, in an environment where the task was relevant to their work (i.e. creating a plan for a student with whom they all worked), that created the basis for the formation of new alliances. This study finding is important because, as written above, creating new networks at the school levels is difficult. Although the teachers struggled at the school

levels to “carve out time” (SD 1-3: 635) to meet formally, as indicated above, data analysis indicated that they considered their team members their “people” (SD 2-1: 201), that is professionals who were available to provide support when implementing plans in classrooms. While the provision of time in this manner is a significant cost item, it does seem that this element may have created the conditions for collaboration between some of the participants at the school levels. The next section discusses the ways in which collaboration at the school levels unfolded.

Mobilizing Collaboration to the School. Jackson and Temperley (2007) argue that learning environments are not Network Learning Communities (NLCs) or Personal Learning Communities (PLCs), but instead stress that there is a symbiotic relationship between strong school-based collaborations and NLCs as they are mutually reinforcing. It appeared that the intent in organizing participation in CR4YR around school-based teams was to facilitate this symbiotic relationship. RAs hypothesized that the school-based team members would provide ongoing support for each other at the school sites as they implemented the case study plans into classrooms. However, Jackson and Temperley (2007), like Warren Little (2005), state that little is known about how NLCs and PLCs evolve to the state where they can be mutually reinforcing. The results of this study reflect the lack of clarity around how to create strong connections between the network and school levels. Further, the research findings revealed dissonance between the expressed potential benefit of teams at the school levels and the realities that ensued.

Most participants reported that the school based teams were beneficial and as described above, the data analysis showed how team members were regarded as sources of support which may have been absent prior to CR4YR. Therefore, there was

collaboration, albeit of varying intensity levels. Participants reported that two approaches to collaboration were implemented: on the fly and push-in programs, with on the fly being the most usual response at the school levels (see Chapter Four for a full description of how participants mobilized collaboration to the school levels). However, in general, participants had difficulty mobilizing their CR4YR work to non-CR4YR members within their schools, struggled to meet with team members because of prohibitive school schedules, and tended to depend on the CR4YR network to debrief and revise plans. Trust issues also surfaced as factors affecting the degree to which collaboration occurred at the schools and this aspect of the BSPr is included in the section that details implications for further research.

Cycling back was the most consistent means by which participants invoked help from collaborative relationships that could help them to solve implementation questions that arose around their case study inquiry questions. This property refers to the tendency for the participants to cycle experiences at the school level back into the sub-process ***becoming vulnerable***. In particular, the dimensions *checking in*, *preparing to mobilize*, *tapping in*, and *going deeper* enabled participants to problematize their experiences and create new plans. Further, they reported that *cycling back* was utilized only when they had already established trust.

The degree to which the participants depended on the CR4YR network reflects the strength of the trusting group identities that had formed for the participants as well as their ability to identify with learning in collaborative environments. Additionally, the property *cycling back* indicated that participants were able to find the resources in the CR4YR environment they required for their continued growth as reading teachers,

something perhaps not as readily available in their school-based teams. Three contextual factors contributed to the ability of the participants to utilize CR4YR as a valuable learning resource and each is discussed in the following section.

Contextual Factors

Corbin and Strauss (2008) advise that:

Context doesn't determine experience or set the course for action, but it does identify a set of conditions in which problems and/or situations arise and to which persons respond through some form of action/interaction and emotion (process), and in doing so it brings about consequences that in turn might go back to impact upon conditions. (p. 88)

This section details the contextual factors that supported the CR4YR teacher membership directly or indirectly as they engaged in collaborative learning: leadership, interlinking points of contact, and extended time period.

Leadership. Collaborative learning situations such as CR4YR depend on the ability of the participants to utilize both vulnerability and diversity as learning tools. Ainscow, Muijs, and West (2010) and Coburn (2002) have written about the importance of leadership in creating structures that promote the abilities of participants to learn from diversity. One contextual factor that may have created conditions favourable to the utilization of diversity and of vulnerability as learning tools is the leadership involved in CR4YR. The literature on NLCs, as outlined in Chapter Two, documents the importance of skilled leadership to the success of NLCs as knowledge creation initiatives. Trotman (2009) and Katz and Earl (2010) stressed that leadership must understand how to

facilitate learning situations that emphasize knowledge construction rather than transmission. Similarly Lin et al. (2008) noted that leadership's ability to facilitate collaboration in groups with diverse beliefs and skill sets is critical to the creation of knowledge flow in a network. Finally, Achinstein (2002), Lin et al. and Coburn (2001) all emphasized that it is imperative for leaders be able to create organizational learning environments that normalize critical examination of practice. As Coburn (2001) states, leaders must be able to "provide processes that allow teachers to talk about, explore, work with, and mediate their differing worldviews and practices" (p. 166). In this section I detail the contextual factors that supported CR4YR district level RAs, and as a result the teacher participants.

Each district had a Ministry facilitator assigned to co-facilitate the monthly meetings and to offer support to the advocates and the teachers. The RAs spoke of the Ministry facilitators as augmenting their understanding of and ability to guide collaborative inquiry groups. One RA reflected the opinions of others in CR4YR when she said:

(The Ministry facilitator) has expertise in inquiry that I didn't have and she has worked with groups like this before. She was very 'trust the process' kind of, and that was helpful for me. I was trying to micro-manage probably. Let it flow, let it happen. And of course it did. (SD 4-1: 555-557)

The participants made reference to the leadership skills of the RAs and the Ministry facilitators, albeit through the use of descriptors such as *wonderful* or *masterfully led us through CR4YR* rather than delineating the particular components of these skill levels or how they contributed to **actualizing collaborative learning**. While the participants in CR4YR had varying degrees of awareness of the extent to which the RAs were supported

in this regard and the ways this support cycled back into the meetings at the district levels leadership was an important aspect of the initiative. The RAs reported that the Ministry support enabled them to learn how to facilitate CR4YR network meetings. A further contextual factor that influenced the ways in which the participants could engage with CR4YR was what I call *interlinking points of support*. CR4YR, as described earlier, encouraged participants to be actively involved in both the identification of individual learning needs and the search for ways in which to fill these knowledge gaps. Personalizing learning in this way required there be diverse sources of knowledge which included both that which could be found internally within the network and that which was accessed externally. In the following section I describe how this need for knowledge was accommodated in CR4YR.

Interlinking Points of Support. One key resource that must be available for professional growth to be realized through networks is expertise (Coburn & Russell, 2008). In this study expertise was a resource that determined the extent to which groups could realize their learning needs. In the CR4YR model of professional learning multiple points of contact allowed for continual refreshment of existing knowledge that was directly related to the provincial initiative. Often these points of contact were what are referred to as weak ties (Coburn & Russell, 2008) in that they provided expertise that may not have been readily available in the participants' regular networks (Coburn & Russell, 2008). The study participants, as stated above, needed these weak ties to provide the information that they required to meet their learning purpose. The following examples illustrate the breadth of the interlinking connections and the ways in which they supported teacher networking.

One RA, speaking about the availability of resources within the CR4YR infrastructure, said:

And one of things that I think that was really neat for our group is that the district – when I sort of saw the questions that were coming up from that first year group I contacted (name of Superintendent of Reading) who contacted (names of two authorities in this area). (SD 3-1: 533-536)

As described previously, the Superintendent of Reading is the Ministry of Education's lead person for the CR4YR initiative. Yet for the Reading Advocates, she was as close as a phone call away and she was responsive to the needs of the RAs by mobilizing other parts of the Ministry of Education network. When speaking of the Ministry-appointed facilitators, the content in the quotation that opened this section was echoed by other participants.

The Reading Advocates were also supported by the Ministry of Education through professional development provided twice a year in Vancouver. All the Reading Advocates described this level of support as critical to their ability to support the teachers in their districts – to become part of their networks, both at the district and school levels. The Reading Advocates were able to interact with other advocates, receive professional development that allowed for a consistent view of best practice in reading development throughout the province, and utilize the materials provided in their own districts. Additionally, as already noted earlier in this chapter, each district had a Ministry-appointed facilitator assigned to co-facilitate the monthly meetings, and to offer support to the RAs and the teachers. As all but two districts in BC were involved in the initiative, CR4YR was also an agenda item on the multiple regional meetings attended by the RAs.

The participants referred frequently to the knowledge that the RAs and the Ministry-appointed facilitators shared at the meetings. The participants also described how the professional learning opportunities available within the CR4YR meetings such as book studies or shared article discussions provided essential support as they worked with their case study inquiry questions. These sources of information created a common knowledge base that impacted their abilities to communicate with one another. They stated that the professional development gave structure to their discussions because they had a similar theoretical base knowledge about how children become readers which allowed for deeper discussion around their case study students. This contextual factor accounted for a variation in the data as participants who believed that the professional learning opportunities, as described above, were not available or did not meet their particular needs as learners expressed dissatisfaction with CR4YR as a learning environment.

The final contextual factor, time, was a condition mentioned in every interview. Time influenced both the creation of trust and the participants' abilities to attend CR4YR.

Extended Time Period. Time, a crucial and fundamental contextual factor, was necessary in order for participants to trust the CR4YR membership and to allow them to become vulnerable. Social capital theorist Coleman (1988) specifies that trust is developed through sustained interaction between group members. The extended period of dedicated time allocated for the CR4YR initiative was one contextual factor that afforded participants the opportunity to develop trusting relationships. The participants in two districts received release time to meet once a month for seven months of the school year; in three districts for 14 months. The participant's comments below reflected the

experiences of almost all other interviewees. She spoke of her group being virtual strangers to one another initially due to the large geographical distance of her district. She said

at the beginning maybe people did not know each other nearly as well but we did form a close group bond. I felt that whole group; not just our team from our school. And then it did sort of turn into “Ok, I did this and it didn’t go exactly as I had planned. Something went wrong and what do you guys think? What could I have done next time?” (SD 2-2: 68-73)

Those districts which invited the 2012-2013 cohorts to return during the 2013-2014 year found that the relationships developed during the initial year created situations where teachers were much more willing and able to interact with their own practice and with others in critically analytic ways. As one RA observed:

In the group that is continuing into their second year I have found that they have been really open to – putting things out there. Just saying like ... through their inquiry last year they have really made a shift in something in their practice. So I see them as feeling very safe and really, really risking. “I’ve done this for years and I’m not going to do it that way anymore. It’s not working for this child” or whatever it might be! (SD 1-1: 475-481)

The development of trust was dependent on having an extended period of time in which to meet. Another related aspect of time reported by the participants was the allocation of release time. Having release time to attend the CR4YR meetings and to complete an implementable plan for the case study students was important to gain commitment to this project. Most participants noted that without release time they would not participate in an

initiative such as CR4YR. They stated they would not be able to create the case study student plan citing issues to do with lack of time during the regular school day due to the range of subject areas they needed to prepare for, their responsibilities to meet with parents, the administrative work they needed to complete such as record keeping, their committee or extra-curricular commitments that were also part of their school days, and the inability to work as a team due to scheduling conflicts. Finally, a number of the participants cited family issues and fatigue as mitigating factors in their after school hours making it difficult to attend late afternoon and evening meetings.

Three contextual factors appeared to influence the participants' engagement with the initiative CR4YR. First, it appeared that the initiative had leadership who understood how to facilitate collaborative inquiry-based initiatives. The RAs, who were initially unfamiliar with facilitating these types of professional learning endeavours, were mentored in this regard by the Ministry-appointed facilitators. Second, the CR4YR infrastructure had multiple interlinking points of support through which the RAs and the teachers could access knowledge. Third, participants reported how participating in CR4YR over an extended time period enabled them to develop trusting relationships which in turn increased their abilities to collaborate. Additionally, the participants stressed that the provision of release time to attend the CR4YR meetings and to create learning plans for their case study students was a critical determining factor in both their willingness and ability to take part in the initiative CR4YR.

Implications for Practice and Research

Implications for Practice. The following section details five implications for practice that are based on the analysis of the data gathered for this study. The implications involve the establishment of trust and the necessity of providing adequate time for initiatives such as CR4YR. Additionally, the following implications emphasize the importance of diversity in collaborative models of learning.

Establishing institutionalized trust. Participants in CR4YR expressed how they were initially distrustful of an initiative that was Ministry inspired and facilitated. Louis (2007) reports that little research exists that details how trust is restored in situations in which distrust is institutionalized. She further notes how distrust is difficult to counteract when in the midst of a reform, which CR4YR was in part. The findings from this study indicate that distrust can be reversed to the point where participants can move forward productively in an initiative, and that it can be done in the midst of a reform. The transformation of the relationship between the Ministry and the teachers involved in this study has important implications for practice. Two aspects of this issue are instructive and may account for the way in which the relationship between the Ministry and the teachers changed.

Inherent distrust for the Ministry and a Ministry-initiated professional learning endeavour was ameliorated by capitalizing on existing relationships. Personal credibility of the facilitators was ultimately more important to the teachers than employer-employee relationships as the reason for establishing trust. As reported above the participants made decisions as to the trustworthiness of a Ministry-initiated professional learning endeavour

on the basis of the reputations of the people involved. When this type of information was not known they based trust on how well the facilitators understood children in the primary grades and the challenges facing teachers in their classrooms.

Teachers need a mechanism to safely and honestly communicate their concerns about an initiative in which they are expected to become vulnerable, and facilitators must provide the time necessary to address them. The Ministry facilitators in this study, rather than starting at the point of knowledge creation, began by framing CR4YR in terms of the larger provincial context, as well as addressing the teachers' fears around issues such as data collection. Approaching the introduction of CR4YR in this manner was one component important in the establishment of trust.

Extended financial investments facilitate the development of trust. Data analysis suggested that extensive financial investments are required to establish networks as functioning professional learning tools. This financial investment will allow for the provision of sufficient time to create trust through the sub-process establishing trust.

Time delay. The data analysis further indicated that in initiatives such as CR4YR, where extensive time is required to establish trust, there may be a time period in which there is no apparent benefit for the expenditure of money return on the investment in professional development, a concern of RAs during this time period in the first year of the initiative. However, to utilize vulnerability as a learning tool, an essential way in which people learn in situations that depend upon deprivatization of practice, participants require sufficient time to establish trust.

Time facilitates collaboration with team members. Data analysis suggested that collaboration at the school levels is positively impacted when time is provided at the NLC sessions for the individual teams of teachers to reflect on and create a plan for their case study students. The time allocated for team-based planning enabled the teachers to understand how they could utilize their collective skill sets for the benefit of students and formed the basis for collaboration at the school levels.

Diversity. Collaborative professional learning models predicated on the critical examination of practice benefit from the diversity of belief systems and skill sets when professionals who have different roles in the school system are included in cohorts. Therefore, NLCs organizers should consider adopting models of learning that include representation from multiple levels and areas of the education system in order to provide the human capital necessary to motivate new thinking. The CR4YR participants utilized the diverse expertise and knowledge of members to stimulate new approaches to teaching and to meet their varied learning needs. For example, the teachers appreciated learning the principles of Reading Recovery through the Reading Recovery teachers at the meetings. Finally, they touted the benefits of viewing reading through a social-emotional lens as provided by the Ministry-appointed facilitators.

Implications for Research. This study raised five questions which I address in this section as suggestions for further research. The research findings point to the importance of understanding the following areas when considering NLCs: the nature of the collaborations mobilized to the school levels; the types of protocols that enable participants to productively use diversity to learn; the development of teachers' identities

as collaborative professional learners; the need for further knowledge as to how trust develops between teachers; the nature of effective NLC leadership; and the mobilization of knowledge to non-CR4YR members. Each of these research implications is detailed below.

The nature of collaboration at the school levels. Further research that focuses on the ways in which the teachers conduct themselves during the on the fly collaborations is important. A question that emerged from the data analysis was whether the teachers needed collaboration time beyond the informal meetings mentioned above. As a long-time teacher I know that if colleagues share common epistemologies and a set of similar skills, and have a plan they are working from, the informal meetings would be sufficient to tweak plans or problem-solve. This type of information would support decision-making around the inclusion of work time in NLCs, which as noted above is a cost item.

Diversity. The data collected in this study indicated that the activities utilized in CR4YR, when supported by the sub-processes and properties mentioned above, may be viable ways of introducing moderate conflict (Katz et al., 2008). As stated above, theorists contend that conflict is essential in situations where teachers are expected to challenge their existing belief systems (Hargreaves, 2001; Katz et al., 2008; Wenger, 1998). However, further research is needed to determine how the willingness and/or ability to utilize participants' diverse beliefs systems and skill sets available in NLCs develops, as well as the effects of activities, such as "What's on Your Mind?" which have strict rules around interruptions, impact participants' abilities in this regard.

Trust at the school levels. The findings of this study indicated how trust between teachers at the school levels is implicated in the extent to which they collaborate. In particular research is required to examine both the nature and the role of recognizing competence in the decisions that teachers make around initiating and maintaining collaboration at the school levels.

Professional learning identities. Research is needed to understand the dynamics of identity formation as professional learners within collaborative initiatives such as CR4YR. It appears the participants in this study who experienced CR4YR positively developed identities that supported vulnerability as a learning tool. Additionally, activating or developing such an identity was part of the BSPr. This finding suggests the following two questions: Can identities as collaborative learners be developed as part of the BSPr through exposure to initiatives such as CR4YR? Is collaborative learning as a professional learning model inappropriate for some teachers?

Leadership. Research focused on the ways in which the CR4YR RAs were supported as facilitators by the Ministry, the effects this support had on their abilities to facilitate meetings, and how this support impacted the teachers' abilities to engage in collaborative learning would contribute to what is known about effective leadership in NLCs. The ability of leadership to facilitate NLCs has been identified as an area of concern in the literature (see Chapter Two).

Mobilizing knowledge to the school levels. Research is needed to further understand how CR4YR members can effectively mobilize their NLC knowledge to non-CR4YR

members. Participants noted the problematic nature of mobilizing knowledge to non-CR4YR members.

Central Question and Sub-Questions

In Chapter One I asked the central question: What processes are involved as teachers interact with a system-initiated cross-school and cross-district professional learning initiative to create and utilize cross-district networks and school based collaborative teams in order to impact primary grade readers? Two supporting sub-questions were also asked: How are formal and informal learning networks created and utilized to further professional development?; and What factors influence the use of these networks as professional development resources?

In answer to the research question and sub-questions I have developed a substantive CGT that is contextualized to, and grounded in, data gathered from BC educators involved in CR4YR. In Chapter Four the basic social problem for these participants was identified as *how can teachers create and utilize network connections in CR4YR, a network that emphasizes deprivatization of practice, learning for and with cross-school colleagues, and data-based planning for primary grade readers?* **Actualizing collaborative learning**, the participants' response to the BSP, details the processes involved as teachers interacted within a system-initiated cross-school and cross-district professional learning initiative. This basic social process was also outlined in Chapter Four, and then explicated in Chapter Five.

Becoming a collaborative learner in CR4YR, for most participants, was a complex undertaking that involved the following four inter-related sub-processes: *establishing*

trust, identifying with collaborative learning, becoming vulnerable, and mobilizing collaboration to the school. Through their interactions with these four sub-processes most participants were able to **actualize collaborative learning** during their involvement in CR4YR as they established conditions conducive to becoming vulnerable, the primary learning tool utilized to establish and learn in this network.

All network alliances undertaken were formal in that they were created and utilized within an employer-initiated framework. No informal networks, which are characterized as participant organized, facilitated, and maintained (Penuel et al., 2010), were initiated to fulfill the purposes that directed action within CR4YR. Finally, the ways in which the participants engaged during the CR4YR initiative were impacted by three key contextual factors. These contextual factors, as explained above, focused on the political situation in which BC teachers were situated during their involvement in CR4YR; the support available for CR4YR leadership; the resources generated through the interlinking points of support for knowledge creation and renewal; and the extended time period over which the participants were involved with the CR4YR initiative.

While the use of constructivist grounded theory was effective in determining a BSPr as viewed through the perspectives of the participants in this study, several limitations to the study are outlined in the next section.

Limitations of the Study

As a CGT researcher I recognize that the results of this study represent my interpretation of the data provided by participant volunteers. While the contextual factors evident at the district level network meetings were remarkably consistent from district to

district, as were the support systems in place for the RAs, the resulting grounded theory reflects the experiences of only this one group of participants in these five districts situated in a particular time period in the educational history of this province.

Further to the above, as a constructivist I believe that others with different orientations than me (Charmaz, 2006; Corbin & Strauss, 2008) and/or more experience as researchers may have interpreted the data differently. I am a new researcher, and despite my best efforts to follow the grounded theory methodology protocols, I may have made mistakes.

Additionally, the participants in this study were all volunteers who may not represent the average population of educators in networked professional learning endeavours. Data analysis suggests that the participants in this study may not have been a representative sub-set of BC teachers. School districts utilized Ministry-produced criteria for recruiting teacher participants for the CR4YR initiative. These criteria clearly stated that teachers involved in CR4YR would be required to work in cross-school networks and school-based collaborates. Teachers could opt in or out of this form of learning on the basis of these criteria. Therefore, the recruitment process utilized to gain participants in CR4YR may have attracted a certain type of professional learner to the initiative and discouraged the participation of others.

Further, although I sent letters of invitation to all potential participants in the five districts in which I conducted my research, I was able to attract only a small number of those teachers. Interviews are time consuming and therefore may be possible for only some professionals. I also articulated in my invitational letters that I was interested in how teachers form and utilize networks which may have encouraged some while

discouraging others from participating. Additionally, I did not have access to participants who were located in school districts in the more remote parts of BC.

Conclusion

Actualizing collaborative learning is a CGT that details the processes involved as teachers who were immersed in the collaborative learning endeavour CR4YR strove to learn professionally. In particular, the theory, as illustrated in the BSPr model, emphasizes the importance of recognizing trust as a time-sensitive, fundamental requirement of professionals who are expected to deprivatize practice, and thus become vulnerable, in initiatives such as NLCs. A further finding is that institutionalized distrust that exists between employers and employees can be alleviated, to the point that initiatives such as CR4YR can be productive, through attentiveness to issues to do with trust. Additionally, this theory conceptualizes the importance of activating or constructing professional learning identities in which vulnerability is viewed as a learning tool, the requirement for diversity of belief systems and skill sets in initiatives where professionals are expected to critically examine their practice, and the recognition that behaviours in collaborative situations are predicated on the interaction of the sub-processes (as outlined in this chapter) rather than on individual protocols. Finally, collaborative learning models that emphasize critical examination of practice and personalized learning goals as defined by the inquiry questions established by the participants required that knowledge creation and renewal resources be available, both those internal and external to the network.

In conclusion, **actualizing collaborative learning** extends current conceptualizations of how teachers actualize professional learning in collaborative

situations such as NLCs. A review of the literature suggested that there was incomplete understanding of the processes involved as to how teachers engage in collaborative learning situations. By conceptualizing the ways in which the four sub-processes and contextual factors supported teachers as they acclimatized to and used the CR4YR collaborative learning situations to learn, this theory addresses a significant gap in the literature.

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Appendix

**Appendix A: Permission to Undertake Research: School District
Superintendents**

Attention: Superintendent of School District

Dear

My name is Robin Wilmot. I am a PhD candidate in the Department of Education at the University of Victoria. Currently I am undertaking research for my dissertation, a requirement for my degree. I am interested in conducting research in your school district. I am interested in studying how teachers who have recently participated in the British Columbia provincial professional development initiative *Changing Results for Young Readers* (CR4YRs) move knowledge from the district level to the classroom. In particular I am interested in the types of networks that teacher create or access to continue their learning as they strive to implement new practice in the classroom.

I would like to invite the teachers who participated in CR4YR during the 2012-2013 school year to participate in this research. Additionally I would like to interview the administrators/coordinators and/or the coaches/literacy lead teachers responsible for resourcing these teachers as they implement change in their schools and classrooms. Both the teachers involved in CR4YR and the professionals who resource these teachers can provide insight as to how teachers utilize both formal and informal networks when implementing new practices in schools.

Network initiatives such as CR4YR offer the environment necessary for first steps in learning. However, to implement new practices in classrooms often teachers require further professional development. Teachers utilize a variety of networks from creating face-to-face or online discussion groups to undertaking graduate work at universities to conferencing with coaches or literacy lead teachers to meet their further learning needs. Some of these are formally organized by employers/universities and others are teacher initiated and maintained. I am interested in both formal and informal learning networks and the ways in which teachers create, access, maintain and benefit from them when implementing new practice.

Data will be gathered largely through interviews. I am hoping to have one to three individual interviews with each participant. Interviews will be in a public venue – either at the University of Victoria or the participant’s workplace. Each interview will be between forty-five and sixty minutes in duration. The interviews will be audio recorded, then transcribed. Additional data that may be gathered is listed at the bottom of this page.

Participation in this study is entirely voluntary; participants may discontinue their involvement at any time with no repercussions. Participants can withdraw by telling me in person, by e-mail or by telephone. A document will be forwarded to them to sign that includes the date of withdrawal and specifies what is to be done with previously collected data. If they decide to withdraw from the study the option will be available to have previously collected data destroyed or used in the study. Each interview will begin with a reminder that participants have the right to withdraw from the study at any time. They will have the opportunity to view/change the information provided by them when the transcription of the interview is shared with them. At all times the identity of the participants will be protected. Pseudonyms will be used on the audio tapes, on the transcriptions, and in all uses made of the data. The audio and transcribed data will be saved on a USB stick and stored in a locked filing cabinet. Additionally the data will be stored on a password protected computer in the home of the researcher. The only other people who will have access to this data will be my PhD committee.

This research will result in a substantive theory that describes how CR4YR teachers meet their learning needs when implementing new knowledge in the classroom. This theory will indicate the role that both formal and informal professional development has on teacher learning. The theory will be shared with others for educational purposes only and with the participants themselves. The educational purposes for sharing the theory are as follows: 1. completion of a PhD dissertation that will be published to UVICSPACE, an internet site; 2. presentation at scholarly meetings/conferences; 3. professional development sessions for members of the educational community; 4. articles or book chapters; 5. dissertation executive summary will be distributed to members of the school community. The data may be reanalyzed for the purpose of refining the theory or to add to the work of others up to and including the year 2018. Data will be destroyed in December 2018. Audio files will be erased, e-files deleted, and hard copies of data shredded.

The Human Research Ethics Board at the University of Victoria has approved this research (Protocol Number 13-401), a copy of which will be made available to you. For further information you may contact me at: rwilmot@uvic.ca; 778-676-0244 (my phone); or my faculty advisor, Dr. Begoray, at dbegoray@uvic.ca; or you may contact the

Human Research Ethics Office, University of Victoria, at (250)472-4545 or at ethics@uvic.ca.

Data Sources will be:

- Individual interviews
- Resources supplied to teachers such as research articles or textbooks as part of participation in CR4YR
- resources used either during CR4YR sessions and/or currently to help teachers implement and/or track action at the school levels
- copy of contributions to online network professional group

If so desired I will be happy to provide you with an executive summary of the research.

Appendix B: Letter of Permission Teachers

Let's talk ...

About CR4YR, change and you!

Researcher: Robin Wilmot

**Bio: University of Victoria PhD candidate and
long-time British Columbia Educator!**

The Research

- **Participant's role: share your experiences as a member of the CR4YR initiative in a supportive 1 to 1, confidential 45-60 minute interview designed to provide space for reflection!**
- **When: a time that is convenient for you between February 1 and June 15, 2014.**

Thank you!

I look forward to hearing from you soon!

About CR4YR, change and you!

Dear 2012-2013 *Changing Results for Young Readers' Member*:

My name is Robin Wilmot. I am a PhD candidate in the Department of Education at the University of Victoria. Currently I am undertaking research for my dissertation, a requirement for my degree. I am interested in studying how teachers who have recently participated in the British Columbia provincial professional development initiative *Changing Results for Young Readers* (CR4YRs) move knowledge from the district level to the classroom. In particular I am interested in the types of networks that teachers create or access to continue their learning as they strive to implement new practice in the classroom.

Why You Are Invited to Participate in this Research

I am inviting you to participate in my research because you were a 2012-2013 CR4YR member and can provide insight as to how teachers utilize both formal and informal networks when implementing new practices in schools.

Importance of this Research

Network initiatives such as CR4YR offer the environment necessary for first steps in learning. However, to implement new practices in classrooms often teachers require further professional development. Teachers utilize a variety of networks from creating face-to-face or online discussion groups to undertaking graduate work at universities to conferencing with coaches or literacy lead teachers to meet their further learning needs. Some of these are formally organized by employers/universities and others are teacher initiated and maintained. I am interested in both formal and informal learning networks and the ways in which teachers create, access, maintain and benefit from them when implementing new practice.

Participant's Role

Data will be gathered largely through interviews. I would like to have one to three individual interviews with each participant. Interviews will be in a public venue – in the participant's workplace. Each interview will be about sixty minutes in duration. The interviews will be audio recorded, then transcribed.

Additional data sources that may be collected are:

- Planning logs
- Resources supplied to teachers such as research articles or textbooks as part of participation in CR4YR
- resources used either during CR4YR sessions and/or currently to help teachers implement and/or track action at the school levels

Voluntary Participation and Ongoing Consent

Participation in this study is entirely voluntary; you may discontinue your involvement at any time with no repercussions. Participants can withdraw by telling me in person, by e-mail or by telephone. A document will be forwarded to sign that includes the date of withdrawal and specifies what is to be done with previously collected data. If you decide to withdraw from the study you will have the option of having your previously collected data destroyed or used in the study. The interview will begin with a reminder that participants have the right to withdraw from the study at any time. You will have the opportunity to view/change the information you provide when the transcript of the interview is shared with you.

Confidentiality and Disposal of Data

At all times the identity of the participants will be protected. Pseudonyms will be used on the audio tapes, on the transcripts and in all uses made of the data. The audio and transcribed data will be saved on a USB stick and stored in a locked filing cabinet in the home of the researcher. Additionally the data will be stored on a password protected computer in the home of the researcher. The only other people who will have access to this data will be my PhD committee.

The data may be reanalyzed for the purpose of refining the theory or to add to the work of others up to and including the year 2018. Data will be destroyed in December, 2018. Audio files will be erased, e-files deleted and hard copies of data shredded.

Dissemination of Results

This research will result in a substantive theory that describes how CR4YR teachers meet their learning needs when implementing new knowledge in the classroom. This theory will indicate the role of both formal and informal professional development on teacher learning. The theory will be shared with others for educational purposes only and with the participants themselves. The educational purposes for sharing this theory are as follows: 1. completion of a PhD dissertation that will be published to *UVICSPACE*, an internet site 2. presentation at scholarly meetings/conferences 3. professional development sessions for members of the educational community. 4. articles or book chapters 5. dissertation executive summary to be distributed to members of the school community.

Human Research Ethics Board Approval and Contact Information

The Human Research Ethics Board at the University of Victoria has approved this research (Protocol Number 13-401). For further information you may contact: me at rwilmot@uvic.ca or by phone (778-676-0244); my faculty advisor, Dr. Begoray, at dbegoray@uvic.ca; or the Human Research Ethics Office, University of Victoria at ethics@uvic.ca. (250-472-4545).

Consent

Your signature below indicates that you understand the above conditions of participation in this study, that you have had the opportunity to have your questions answered by the researcher and that you consent to take part in the research project entitled *The next step: A grounded theory of how teachers network to learn*.

Please check off the additional data in the box at the bottom of this page that you are willing to share.

Printed Name: _____ Signature: _____

Date _____

E-mail: _____

- Planning logs
- Resources supplied to teachers such as research articles or textbooks as part of participation in CR4YR
- resources used either during CR4YR sessions and/or currently to help teachers implement and/or track action at the school levels

- copy of your contributions to online network professional groups

Let's talk ...

About CR4YR, change and you!

Researcher: Robin Wilmot

**Bio: University of Victoria PhD candidate and
long-time British Columbia Educator!**

The Research

- **Participant's role: share your experiences as a member of the CR4YR initiative in a supportive 1 to 1, confidential 45-60 minute interview designed to provide space for reflection!**
- **When: a time that is convenient for you between February 1 and June 15, 2014.**

Thank you!

I look forward to hearing from you soon!

About CR4YR, change and you!

Attention: Administrators/coordinators, coaches/literacy lead teachers involved in the CR4YR

My name is Robin Wilmot. I am a PhD candidate in the Department of Education at the University of Victoria. Currently I am undertaking research for my dissertation, a requirement for my degree. I am interested in studying how teachers who have recently participated in the British Columbia provincial professional development initiative *Changing Results for Young Readers* (CR4YR) move knowledge from the district level to the classroom. In particular, I am interested in the types of networks that teacher create or access to continue their learning as they strive to implement new practice in the classroom.

Why You Are Invited to Participate in this Research

As one of the professionals responsible for helping teachers apply knowledge gained through the CR4YR in schools and classrooms I would like to interview you because you can provide insight as to how teachers utilize both formal and informal networks when implementing new practices in schools. To protect your identity this letter has been sent through the school district communication system. **I would appreciate receiving indications of interest soon.** I anticipate conducting the interviews between February 1 and June 15, 2014, **at a time convenient to you.**

Importance of this Research

Your contributions will enable me to better understand how teachers in the midst of change can be supported as they implement new practice in schools and classrooms. Network initiatives such as CR4YR offer the environment necessary for first steps in learning. However, to implement new practices in classrooms often teachers require further professional development. Teachers utilize a variety of networks from creating face-to-face or online discussion groups to undertaking graduate work at universities to conferencing with coaches or literacy lead teachers to meet their further learning needs. Some of these are formally organized by employers/universities and others are teacher initiated and maintained. I am interested in both formal and informal learning networks and the ways in which teachers create, access, maintain and benefit from them when implementing new practice.

What is the Role of the Participant

Data will be gathered largely through interviews. I am hoping to have one to three individual interview with each participant. Interviews will be in a public venue – the participant’s workplace or by telephone or via Skype. Each interview will be between forty-five and sixty minutes in duration. The interviews will be audio recorded, then transcribed. Additional data that may be gathered is as follows:

- Resources supplied to teachers such as research articles or textbooks as part of participation in CR4YR
- resources used either during CR4YR sessions and/or currently to help teachers implement and/or track action at the school levels

Voluntary Participation and Ongoing Consent

Participation in this study is entirely voluntary; you may discontinue your involvement at any time with no repercussions. Participants can withdraw by telling me in person, by e-mail or by telephone. A document will be forwarded to sign that includes the date of withdrawal and specifies what is to be done with previously collected data. If you decide to withdraw from the study you will have the option of having your previously collected data destroyed or used in the study. The interview will begin with a reminder that participants have the right to withdraw from the study at any time. You will have the opportunity to view/change the information provided by you when the transcript of the interview is shared with you.

Confidentiality and Disposal of Data

I will endeavour to protect the identity of the participants at all times. Pseudonyms will be used on the audio tapes, on the transcripts, and in all uses made of the data. The audio and transcribed data will be saved on a USB stick and stored in a locked filing cabinet in the home of the researcher. Additionally the data will be stored on a password protected computer in the home of the researcher. The only other people who will have access to this data will be my PhD committee. However, as you are in a unique position in the district it is possible that readers may identify data provided by you.

The data may be reanalyzed for the purpose of refining the theory or to add to the work of others up to and including the year 2018. Data will be destroyed in December, 2018. Audio files will be erased, e-files deleted and hard copies of data shredded.

Dissemination of Results

This research will result in a substantive theory that describes how CR4YR teachers meet their learning needs when implementing new knowledge in the classroom. This theory will indicate the role of both formal and informal professional development on teacher learning. The theory will be shared with others for educational purposes only and with the participants themselves. The educational purposes for sharing this theory are as follows: 1. completion of a PhD dissertation that will be published to *UVICSPACE*, an internet site 2. presentation at scholarly meetings/conferences 3. professional development sessions for members of the education community. 4. articles or book chapters 5. dissertation executive summary to be distributed to members of the school community.

Human Research Ethics Board Approval and Contact Information

The Human Research Ethics Board at the University of Victoria has approved this research (Protocol Number 13-401), and a copy can be made available to you. For further information you may contact: me at rwilmot@uvic.ca or by phone (778-676-0244); my faculty advisor, Dr. Begoray, at dbegoray@uvic.ca; or the Human Research Ethics Office, University of Victoria at ethics@uvic.ca. (250-472-4545).

Consent

Your signature below indicates that you understand the above conditions of participation in this study, that you have had the opportunity to have your questions answered by the researcher and that you consent to take part in the research project entitled *The next step: A grounded theory of how teachers network to learn*.

Please check off the additional data in the box at the bottom of this page that you are willing to share.

Name of Participant

Signature

Date

Email: _____

- Resources supplied to teachers such as research articles
- 2012-2013 CR4YRs facilitator guidebook
- List and description of district professional development offerings

Appendix D: Recruitment Poster

Let's talk ...

About CR4YR, change and you!

Researcher: Robin Wilmot

**Bio: University of Victoria PhD candidate and
long-time British Columbia Educator!**

The Research

- **Participant's role: share your experiences as a member of the CR4YR initiative in a supportive 1 to 1, confidential 45-60 minute interview designed to provide space for reflection!**
- **When: a time that is convenient for you between February 1 and June 15, 2014.**

Thank you!

I look forward to hearing from you soon!

Appendix E: University of Victoria Recruitment Letter

Robin Wilmot

Faculty of Education

Box 3010 STN CSC

Victoria, BC V8W 3N4

Attention: (university professor/instructor)

RE: *The next step: A grounded theory of how teachers network to learn*

Dear (university professor/instructor),

My name is Robin Wilmot. I am a PhD candidate in the Department of Education at the University of Victoria. Currently I am undertaking research for my dissertation, a requirement for my degree. I am interested in studying how teachers who have recently participated in the British Columbia provincial professional development initiative *Changing Results for Young Readers (CR4YR)* move knowledge from the district level to the classroom. In particular I am interested in the types of networks that teacher create or access to continue their learning as they strive to implement new practice in the classroom.

I would like to invite the teachers who participated in CR4YR during the 2012-2013 school year to participate in this research. Additionally I would like to interview the administrators/coordinators and/or the coaches/literacy lead teachers responsible for supporting these teachers as they implement change in their schools and classrooms. Both the teachers involved in CR4YR and the professionals who support these teachers can provide insight as to how teachers utilize both formal and informal networks when implementing new practices in schools.

Teachers/administrators/coordinators and/or the coaches/literacy lead teachers involved in your (name of class) may have been involved in the CR4YR endeavor. I would like to speak to your class for approximately five minutes to make these professionals aware of my research and distribute information packages. I have attached my letters of invitation if you would prefer to distribute the materials.

Thank you for considering my request and for any help that you can give me with my research.

Sincerely,
Robin Wilmot

Appendix F: Letter of Withdrawal from the Research

(participant's name) withdrew from the research project entitled *The Next Step: A Grounded Theory of How Teachers Network to Learn* on (date).

Please check one of the following boxes:

- I **do** give permission for previously given data to be used; or
- I **do not** give permission for previously given data to be used. I want all previously given data destroyed, and no reference made to it in the research and/or subsequent uses of the research findings.

Participant's Signature: _____ on (Date)

Received by: Robin Wilmot

(Researcher's signature) on (Date)

Appendix G: RAs and Administrator Draft Interview Protocol

Setting the Stage

The purpose of research as explained to the participants:

The purpose of this research is to understand the type of networks that teachers access or create to help them further their own learning when implementing new practice in the school and classroom. I am interested in understanding this information as it applies to new knowledge that was gained while participating in the *Changing Results for Young Readers* district network professional development during the 2012-2013 school year.

Explanation of the format to be employed:

This interview is semi-structured in that I have prepared questions but may decide to ask questions about information that you have provided instead of the questions that I have. You may have information that you think is valuable to the research focus that is not directly related to the questions. Feel free to add this information at any time. I will ask you questions but you do not have to answer any questions that you do not want to. The interviews will be audio recorded, then transcribed. After the interview is transcribed I will forward a copy of it to you via e-mail. It can be sent to either your personal e-mail or to your work e-mail. If you want to change any part of the interview you can let me know by e-mail. Your name will not appear on the audio, the transcripts, in the dissertation or in any other uses made of the data. You may withdraw from the research at any time. During the interview you may think of points that refer to earlier questions. At any time you are free to interject with these comments.

My biography and interest in the research topic:

I was a teacher in the BC school system for many years. I taught Grades K-8, was a Learning Resource Teacher, a teacher of gifted and talented students and Literacy Lead Teacher in a large middle school. As a former Literacy Lead Teacher I am interested in how professionals create or access, as well as maintain and use professional networks when implementing new practice in the classroom. I believe that professional development can be accomplished through both formally and informally organized networks. Formal networks are those that are organized by employers like the CR4YR network or the provision of district or school based resource people. Informal are those organized by the teachers such as one to one conversations with a colleague, online professional groups, book clubs, etc.

Opportunity for questions:

Do you have any questions about the research process or about the reason for the research?

Semi-structured Interview Protocol

1. Describe your involvement with teachers who were CR4YR network members?
2. Could you describe in as much detail as you can a typical CR4YR meeting?
3. What do/did you see as the greatest needs of teachers who were attempting to implement new practice in schools and the classroom as a result of their involvement with CR4YR?
4. Describe the ways in which you or the people you work with provide structure to help teachers with their continuing learning needs.
5. How do teachers access the help described by you?

6. In what ways does the school district provide for the differentiated learning needs of the CR4YR members as they implement new practice in their schools or classrooms?
7. I will summarize the main points of the interview for you. Do you have any comments on this summary?
8. Do you have any additional comments that you would like to make?
9. The transcript of this interview will be forwarded to you by e-mail for comment. If you wish to change any of your comments you may do so by contacting me via e-mail.
10. Other questions as they emerge in the course of the interview.

Appendix H: Teacher Draft Interview Protocol

Setting the Stage:

The purpose of research will be explained to the participants

The purpose of this research is to understand how teachers access or create networks that help them further their own learning when implementing new practice at the school and classroom levels. I am interested in understanding this information as it applies to new knowledge that you gained while participating in the *Changing Results for Young Readers* district network professional development during the 2012-2013 school year.

These professional development networks could be those that were provided by the school district, the school or those that you accessed through post-secondary institutions. They could also be supports that are/were informal. Informal means those that are teacher created/accessed/organized such as online networks or face-to-face meetings.

Professional book clubs are one example of an informal network.

Explanation of the format to be employed

This interview is semi-structured in that I have prepared questions but may decide to ask questions about information that you have provided instead of the questions that I have.

You may have information that you think is valuable to the research focus that is not directly related to the questions. Feel free to add this information at any time. You do not have to answer any questions that you do not want to. The interviews will be audio recorded, then transcribed. After the interview is transcribed I will forward a copy of it to you via e-mail. I can forward this to either your personal or your school e-mail. If you want to change any part of the interview you can let me know by e-mail. Your name will not appear on the audio, the transcripts, in the dissertation or in any other uses made of

the data. You may withdraw from the research at any time. During the interview you may think of points that refer to earlier questions. At any time you are free to interject with these comments.

My biography and interest in the research topic:

I was a teacher in the BC school system for many years. As a former Literacy Lead Teacher I am interested in how professionals create or access, as well as maintain and use professional networks when implementing new practice in the classroom. I believe that professional development can be accomplished through both formally and informally organized networks. Opportunity for questions:

Do you have any questions about the research process or about the reason for the research?

Semi-structured Interview Protocol

1. Can you tell me about your experience in the *Changing Results for Young Readers* network
2. Could you explain, in as much detail as possible, a situation within the network in which learning occurred for you?
3. Describe how you used your learning experience in your school and classroom practice?
4. What challenges, if any, did you encounter in this process? What do you see as your most straight-forward successes?
5. What kinds of support, if any, did you need?
6. Did you access support? These supports could be those that were provided by the school district, the school or those that you accessed through post-secondary

institutions. They can also be supports that were informal. Informal means those that are teacher created/accessed/organized. If so please describe the supports that you accessed.

7. I will summarize the main points of the interview. Do you have any comments on this summary?
8. Do you have any additional comments that you would like to make?
9. The transcript of this interview will be forwarded to you by e-mail for comment. If you wish to change any of your comments you may do so by contacting me via e-mail.
10. Other questions as they emerge in the course of the interview.

Appendix I: Evolution of the Codes *Recognizing Competence and Detecting Safety*

Appendix I illustrates the evolution of the codes *recognizing competence* and *detecting safety*.

Participants noted during the first four interviews that establishing positive relationships with network members preceded the initiation of collaboration as defined within the CR4YR initiative. Therefore I created a code labelled *requiring relationship*. Re-analysis of the data and subsequent interview data added clarity to the meaning of *requiring relationship* and resulted in open codes such as the following: perceiving facilitator experienced primary teacher; advocating for children and teachers; respecting reputations of facilitators; (facilitators) communicating honestly; voicing opinions without judgement; resisting involvement transformed; collecting data non-judgemental; share-outs not evaluated; (facilitators) modelling knowledge gaps; leadership knowledgeable; building relationship time-intensive. Utilizing constant comparison the open codes were collapsed to create the two focused codes *recognizing credibility* and *detecting safety*.

At this point I accessed the work of Tschannen-Moran and Hoy (2000) and Bryk and Schneider (2002). The open codes subsumed under *recognizing credibility* indicated that the participants were assessing the facilitators on their ability to perform a job, a finding that aligned with how Tschannen-Moran and Hoy and Bryk and Schneider defined *competence*. Therefore I situated my findings within the work of Tschannen-Moran and Hoy and Bryk and Schneider by replacing the code labelled *recognizing credibility* with *recognizing competence*. Reviewing Foucault's (1980) work on disciplinary power and

norming enabled me to recognize that the participants' frequent references to judgement and evaluation reflected his notions of surveillance, and seemed to confirm my development of the focused code *detecting safety*.

Collapsing the open codes left me with two questions. First, why did issues to do with safety emerge so frequently in the data? Second, as the codes subsumed under *recognizing competence* and *detecting safety* referred only to the Ministry-appointed facilitators I wondered if these criteria for relationship were specific to them. When I probed these findings through interviews and re-examination of existing data, codes such as the following emerged: suspecting (the Ministry facilitators') motives for collecting data; feeling safe enough knowing union involved; developing respect for (facilitators') motives; and distrusting of Ministry of Education. In addition I found confirmation that comments to do with competence and safety focused on facilitators only. These findings enabled me to confirm my supposition that the focused codes *recognizing competence* and *detecting safety* were concerned with the establishment of relationship with the Ministry-appointed facilitators. To understand what appeared to be an initial negative relationship between the Ministry as an institution and the teacher participants I became familiar with written materials such as Fleming's (2011) history of the relationship between the BCTF and the Ministry of Education and newspaper articles that reported on the 2011-2012 job action. These materials illustrated the strained relationship that existed between the Ministry of Education and BCTF, and further confirmed that the use of the focused code label *detecting safety* was appropriate.

Finally, I questioned the participants and re-examined the data for further understanding of how the relationship between the Ministry personnel and teachers

changed over time. Additional codes emerged such as focusing on the child and spiral of inquiry, both of which applied to safety.

The codes *recognizing competence* and *detecting safety* became properties of a sub-process labelled *establishing trust* and although I continued to be alert to changes in the dimensions of these codes they remained largely unchanged beyond interview 12.

Appendix J: Member Check Questions

The member check questions and interview transcripts were emailed to participants. The questions were intended to guide the transcript review process.

Dear (participant's name),

Thank you for participating in my study. I transcribed and attached the interview transcript for you to view. As you are reading the transcript you may want to consider the following questions:

1. After reading your transcript is there anything else that you wish to add that might increase my understanding of your experience?
2. Are there points that you want to clarify or add to the information included in the transcript?
3. Are there questions that you would like to ask me?

I intend to complete my analysis and the resulting theory of how teachers create/access, maintain, and utilize networks (as applicable to your experiences in CR4YR) in the next four to five months. If you would be willing to view the theory and provide input as to whether it appears to reflect your experiences please send an email to wilmot94@telus.net.

Once again thank you for agreeing to be interviewed. I enjoyed each and every interview. Your input has helped me understand how teachers network to learn.

Sincerely,

Robin Wilmot