COLLABORATIVE INQUIRY:

TEACHER PROFESSIONAL DEVELOPMENT AS SITUATED, RESPONSIVE

CO-CONSTRUCTION OF PRACTICE AND LEARNING

by

Leyton M. Schnellert

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

in

The Faculty of Graduate Studies

(Curriculum and Instruction)

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

October 2011

Abstract

 The research reported here grappled with the challenge of designing and facilitating teacher professional development that bridges theory and practice so as to enhance teacher practice and learning and student learning outcomes. A case study design was employed to study a community of inquiry (CoI) located within a Southern Arctic school district within which classroom teachers and special education teachers worked as partners to improve their writing instruction and increase access to learning and outcomes for students in inclusive classrooms. This research addressed three questions: (1) what practices did educators engage in as co-teachers within a CoI to consider, explore, and construct more inclusive writing instruction?; (2) how and why did collaborative, action-oriented inquiry cycles help teachers to develop understandings and practices that addressed, nurtured and supported diverse students' literacy learning?; and (3) what conditions and qualities within professional development activities supported teacher learning and development of practice?. Findings suggested that teachers can make situated changes to practice that increase diverse students' access to curriculum and learning when they: (1) set, enact, monitor and adapt context-specific goals for both students and themselves; (2) work collaboratively and problem-solve with others while trying to make shifts in practice; and (3) draw in resources as supports that can be adapted within their inquiries. In addition, co-teaching was found to be an approach that not only increased student access to curriculum and learning but had significant potential to support teacher learning and sustained shifts in practice. Implications for teachers' learning, changes to practice, collaboration and professional development are discussed.

Preface

Approval for this research was granted by the University of British Columbia Behavioral Research Ethics Board (Certificate of Approval B04-0764). All participants received the opportunity to provide consent to participate in the research following university and school district ethical protocols. Pseudonyms were used for all participants and the name of the community has not been identified in this document.

Drafts of portions of this work have been presented at international and national conferences (Schnellert & Butler, 2009a, 2009b, 2009c, 2010a, 2010b).

Table of Contents

List of tables

List of figures

Acknowledgements

- I offer my enduring gratitude to the faculty, staff and my fellow students at UBC who have nurtured and spurred my learning and practice.

- I owe particular thanks to Dr. Deborah L. Butler, whose scholarship, mentorship and collaboration have helped me to sharpen and extend my thinking and research.

- I thank Dr. Carl Leggo for his sage teaching and example and Dr. Anthony Clarke for his thoughtful advice when I began this journey. Thank you both for joining this committee and offering your perspectives and counsel.

- Thanks also to the professors and colleagues who offered their support over the course of my program: Dr. Joe Belanger, Dr. Michael Ling, Dr. Jill McClay, Suzanne Collette, Shelley Moore, Faye Brownlie, Dr. Lannie Kanevsky, Dr. Lynn Fels, Gina Rae, Mehjabeen Datoo, Dr. Margaret MacDonald, Dr. Anne Phelan, Dr. Gaalen Erickson, Deidre Bjornson, Patricia Holborn, Vicki Rothstein, Dr. Neil Smith, Dr. Karen Meyer, Kimberley MacNeil, Dr. Cher Hill and Dr. Michelle Nilson-Levisohn.

- Thank you to SSHRCC, The Killam Foundation, The UBC Faculty of Education, and LOMCIRA for the awards and scholarships that supported my research and study.

- Special thanks are owed to my partner, Dr. Trevor Corneil, who has supported and encouraged me on so many levels. Because of you I continue on this path.

- To family and friends thank you for making it possible for me to be a teacher and researcher and still participate as a family and community member. Thank you Miriam Schnellert, Preston and Lori Schnellert, Rachael Corneil, Daphne Corneil, Brendan and Benjamin Canning, Barry and Ruth Corneil, Kara Thompson, Carole Fullerton and Cameron Saundry, Tim McCracken and Judith Smith, Celest Nygaard, Jeff Stull, Nicole Widdess, Linda Watson and many others.

Dedication

For M. Miriam Schnellert

and Trevor A. Corneil

Chapter 1 - Introduction

Background

Many teachers struggle in their attempts to develop and/or integrate inclusive, responsive, constructivist and collaborative approaches into their teaching, despite countless professional development initiatives that have been launched to help them develop and/or change their practice in one or more of these areas. An overarching problem is that professional development opportunities are rarely set up in ways to help teachers develop, explore and integrate *situated* understandings and practices (Richardson, 2001). It is ironic that many professional development initiatives are trying to teach teachers about constructivist and socio-constructivist approaches, yet are using methods that leave little room for teachers to contextualize, inquire, explore, reflect, or collaborate. In response to this constellation of issues, this study is grounded in literature which suggests that teacher professional development requires teachers to be inquirers who construct knowledge through situated practice, agents of change, and collaborative colleagues (Butler & Schnellert, 2008; Cochran-Smith & Lytle, 1993a, 1999b, 2009; Fullan, 2005; Pennington, 2007).

Statement of the Problem and Purpose of the Study

Despite research that suggests collaborative, longitudinal inquiry models of professional development support teachers in developing and implementing understandings about and practices for teaching and learning, professional development efforts are still primarily didactic experiences designed *for* (rather than with) teachers (Ball, 1995; Borko, 2004; Cole & Knowles, 2000; Palinscar, 1999; Schnellert, Butler & Higginson, 2008). We know that sustained, situated, collaborative, inquiry-based professional development models hold potential for teachers to develop new understandings, approaches and agency (Butler, Schnellert & Higginson, 2007; Campbell, McNamara, & Gilroy, 2004; Cochran-Smith & Lytle, 1999b, 2004, 2009; Fichtman Dana & Yendol-Hoppey, 2008; McLaughlin & Talbert, 2006), yet most

professional development initiatives gloss over the role of some or all of these factors and many, in the end, resort to other types of less effective approaches. This study provides insight into how a situated, collaborative, inquiry-based professional development approach can work and be sustained, thus supporting researchers and educators in understanding how to develop and enact these types of approaches as an alternative to short-term, top-down, generic and/or formulaic approaches.

A focus on situated, collaborative inquiry.

Across studies, the importance of collaboration as related to teachers' professional learning is highlighted, but few articulate how teachers' understandings, intentions, plans, actions, and reflections are related to context, autonomy *and* interdependence. Promising (and robust) models of teacher professional learning highlight the potential benefits of iterative cycles of collaborative inquiry where teachers explore, create and reflect on innovations enacted in practice (Borko, 2004; Butler et al., 2007; Guskey, 2002; Robertson, Hill & Earl, 2004; Timperley & Alton-Lee, 2008). Consistent with these professional development models, this study positions teachers as (co-)inquirers into their practice and, thus (co-)authors of situated innovations (Cochran-Smith & Lytle, 1993a; 2009; Fullan, 2005; Pennington, 2007; Schnellert, Butler & Higginson, 2008; Shagoury Hubbard & Miller Power, 2003). Thus it is rooted in a socio-constructivist perspective of teacher learning and professional development focusing on the social nature of practice and knowledge construction (Borko & Putnam, 1998; Butler et al., 2004; Cochran-Smith & Lytle, 1999a, 2009; Dillon et al., 2000; Lave & Wenger, 1991; Paris, Byrnes & Paris, 2001). But this study also extends prior research by providing a more detailed analysis of the combined impact of teacher inquiry, collaboration (i.e., shared and co-regulation) and

context-specific reflexivity on teachers' learning and practice.

Collaboration, particularly within a community of practice (Wenger, 1998), has been promoted as a key factor for both creating and sustaining conditions for teachers' learning (e.g., Cochran-Smith & Lytle, 2009; Erickson, Minnes, Brandes, Mitchell & Mitchell, 2005) and goal-oriented revision to practice (e.g., Butler et al., 2007; Hilden & Pressley, 2007). A foundational theory upon which this study builds is a social theory of learning within a "community of practice," which is a group of people who share a concern or a interest for something they do and learn how to do it better as they interact regularly (Wenger, 1998). As early as 1938, Dewey examined how teachers' knowledge, beliefs and practices were shaped through engagement in action within communities of practice. Similarly, Lave and Wenger (1991) showed how learning takes place through the lived experience of social participation. Wenger describes communities of practice (CoP) as a theory of *situated* experience that "mostly address[es] the interactive relations of people with their environments"(1998, p. 13). Wenger's social theory was applied in this study to understand and describe teachers' engagement in collaborative professional learning. Key aspects of professional development traced in this research included teachers' mutual engagement in action, feelings of being valued, creating practices and histories together, and talking about how they were experiencing and understanding their practice differently.

The *situated* nature of practice and learning is a second key element of this study. In a community of practice approach to teacher professional development and learning, a community forms - or members of a community gather - to address situated aspirations, challenges, and concerns. The concept of community emphasizes the importance of

context, extending beyond geography to include social perspectives. Communities may define themselves through geography, culture, religion, gender, disability, and various social roles - the possibilities and combinations are many. But what is key is that the group learns together through reflection on practices they share (or are mutually exploring) in common within a given context or situation. The community in this study consisted of a group of educators who came together over the course of a school year to consider issues and factors that were specific to them within a particular setting, namely inclusive grades 1-8 classrooms within a school district in the Southern Arctic of Canada (Dillon et al., 2000).

In addition to collaboration and situatedness, *inquiry* has also been described as having an important influence on teacher learning. In this dissertation I use the term community of inquiry (Lipman, 2003) to highlight the role of inquiry within a community of practice (CoP) approach to professional development. Teachers engage in collaborative inquiry when they work together to consider, explore and reflect on issues and approaches related to shared questions and intentions. Attention to and support for inquiry within professional learning communities can support teachers to focus on issues and practices that can spur and sustain professional learning (Butler et al., 2007; Campbell, McNamara & Gilroy, 2004; Fichtman Dana & Yendol-Hoppey, 2008). For example, a focus on inquiry can support members to be open to, consider and explore multiple pedagogical choices of action. In this research, I investigated how educators comprising an inquiry community worked together to develop understanding(s) and practices related to their shared interests and concerns derived within the contexts in which they were working.

Collaborative teaching and professional development.

Despite the promise of community of practice (CoP) and community of inquiry (CoI) approaches to professional development, it is challenging for educators to actually situate, develop and integrate new understandings and practices. One significant strength of CoP and CoI approaches to professional development is that they bring community members together to talk about issues and reflect on approaches and practices (Borko & Putnam, 1998; Cochran-Smith & Lytle, 1999; Dufour, Dufour, Eaker & Karhanek, 2004). This helps educators to take a step out of practice and become increasingly reflective (Campbell, McNamara & Gilroy, 2004; Robertson, 2000). However, research and PD practice have evidenced how hard it is to bridge from planning for and reflecting on action to actually making situated, responsive changes in action (Butler et al., 2007; Cochran-Smith & Lytle, 2009; Hamilton, 2004; Hilden & Pressley, 2007; Shulman, 1987). As social learning theory focuses on collaborative, situated learning, we need to extend beyond approaches that help teachers to plan *for* and reflect *on* action to those that have them co-inquiring in classrooms where they are actually practicing and supporting one another to make and reflect on situated, responsive changes *in* action.

One potential solution can be found in literature related to collaborative teaching, where classroom and learning resource (i.e., special education) teachers work together to support groups of diverse students (Friend, 2005; Hourcade & Bauwens, 2002; Thousand, Villa & Nevin, 2006). More specifically, in co-teaching literature, classroom teachers and special educators work together to plan, enact and reflect on instructional practice as they work with a common group of diverse learners (Howland, 2003; Santamaria & Thousand, 2004; Singh & Shifflette, 1996; Villa, Thousand & Nevin, 2004). Such approaches offer a

way for teachers to work together *in* classrooms to develop and enact situated approaches and to observe one another and reflect on when and how these practices are serving diverse learners' needs. In this study, I combine the element of teachers planning and reflecting on shared areas of inquiry within a CoI with collaborative teaching approaches where teachers work together in classrooms to develop responsive approaches. Thus, this study involves analysis at two levels - the networked community as a whole, and the co-teachers working within it.

Linking CoI and co-teaching to shared concerns about inclusion and writing instruction.

This professional development study occurred in a particular context where teachers were motivated to come together to address two areas of common concern: inclusion and literacy. Because content cannot be divorced from process in a situated model of learning and professional development, in this study I attend to how teachers engaged together in collaborative inquiry focused on these two areas.

In terms of their priorities related to literacy, like many school districts in North America, the district where this study took place had spent several years focusing goals and professional development on reading. At the time of this study, a CoI came together based on a recognized need to turn their attention to writing, given low scores on the region's year-end achievement test in that area. This issue was compounded by many classroom and learning resource teachers' lack of confidence about their writing instruction and knowledge of "current" research and theory.

Many teachers who participated in this study did so due to their interest in writing. However, there was a second key inter-related focus that was of interest and shared

concern: teaching in inclusive classrooms. An ongoing challenge for teachers and school districts is developing practices that support the diverse needs of learners in inclusive classrooms. It was this shared interest and focus on inclusion that made it possible for collaborative teaching to play a part in the design of the community of inquiry. In the jurisdiction where this study took place, the role of special educators, called learning resource teachers (LRT) was designed to include collaborative teaching (co-teaching). As co-teachers, LRTs work together with classroom teachers in inclusive classrooms, not just in resource rooms using tutorial or intervention methods. Participants in this study were invited to attend as classroom teacher - LRT partners. With CoI members participating as co-teachers focusing on writing and inclusion, collaborative teaching was an option for how partners might work together to support their mutual learning and professional development.

A focus on diverse learners and inclusive classrooms.

Canada's policy on persons with disabilities emphasizes inclusion (Hutchinson, 2007). Every province and territory is striving for inclusion of students with special needs (i.e., exceptional students). For example, within Manitoba Education's standards document (2006), inclusion is defined as

> …a way of thinking and acting that allows every individual to feel accepted, valued and safe. An inclusive community consciously evolves to meet the changing needs of its members. Through recognition and support, an inclusive community provides meaningful involvement and equal access to the benefits of citizenship (p. 1).

This study took place in Canada's Southern Arctic, in one of Canada's three territories,

where the philosophy on inclusion is similar to that in Manitoba. In this territory's Ministerial Directive on Inclusive Schooling (2006), there is a section that defines what "diversity/diverse learners" means in this context,

> students differ from one another in many ways. Cultural background, gender, socioeconomic status, ability levels, learning styles, and interests, all impact students' strengths and challenges as learners…classrooms are characterized by diversity (p. 6).

Across Canada, there is also an increasing focus on inclusivity for Aboriginal students with and without special needs (Government of Canada, 2004). Many Aboriginal Peoples view differences and challenges as gifts to help a community learn. In the territory where this study took place, the Ministry's inclusion directive is supported by local indigenous ways of knowing.

Across Canada jurisdictional documents call for culturally responsive teaching and differentiated instruction and adaptations to assist students in meeting outcomes. However, the approaches recommended in jurisdictional curriculum and policy, while research-based, are often not used frequently or consistently in inclusive classrooms to meet the learning needs of students. In the school district where this study took place, school district administration recognized learning to teach diverse learners is an ongoing process; the CoI formed for this study was encouraged and supported by district administration.

Linking inclusion and writing instruction.

There is great potential for shared inquiry and professional development that links inclusive practices and the teaching of writing. In Graham and Perrin's (2007) meta-

analysis of research related to the teaching of writing and struggling writers, recommendations are made regarding the strengths and effects of instructional practices on student writing quality. Interestingly, those instructional approaches that had the most impact were not based on where the instruction occurred (i.e., whether students were in inclusive or support settings), but rather on the qualities of instruction. The instructional approaches that held the most promise for those with writing difficulties (both in and out of inclusive classrooms) also resulted in increased success for students who were not identified with learning challenges. Within this study, the members of this CoI considered and took up several of the features of instruction that Graham and Perrin identified as supporting writing development for all learners, including providing specific product goals, inquiry activities, and a process approach to writing.

CoP models hold great potential to be useful for understanding learning collaboratively around writing (e.g., Prichard & Honeycutt, 2006). In this case exploring writing instruction within a CoI also served as a way for teachers to focus their co-teaching in inclusive classrooms. In sum, this dissertation examines teachers' collaborative inquiry within a CoI, and as co-teachers, with shared attention to writing instruction and meeting the needs of diverse learners.

Contribution to the Literature

Collaborative professional development activities hold great potential for helping teachers make and sustain context-specific changes to practice that better meet the needs of learners. This study offers a rich description of teachers' activities and learning that includes teachers' intentions, collaborative activities, learning and practice within cycles of inquiry. It considers how activities within cross-school CoI meetings and collaborative

teaching related to what teachers did and learned. On one level this dissertation research seeks to paint a richer, more complex picture of how and when teachers gained new understandings and changed and/or refined their practices, while at a second level, it seeks to discern conditions that supported them in their learning and development of practice.

To achieve these goals, this dissertation research was designed to address the following research questions: (1) what practices did educators engage in as co-teachers within a CoI to consider, explore, and construct more inclusive writing instruction?; (2) how and why did collaborative, action-oriented inquiry cycles help teachers to develop understandings and practices that addressed, nurtured and supported diverse students' literacy learning?; and (3) what conditions and qualities within professional development activities supported teacher learning and development of practice?.

Overview of the Dissertation

This dissertation consists of five chapters. Chapter two situates this study in relevant literature by articulating the theoretical perspectives that frame the investigation and by defining key concepts that are taken up throughout the rest of the dissertation. Within chapter two I identify constructivism, in particular, socio-constructivism, as a common thread in this study. I then outline how conceptions of constructivism and socio-constructivism are linked to inquiry learning and intersections between students' literacy learning and teacher professional development as situated, practice-based learning.

Chapter three describes the methodology and data collection and analysis procedures used in the study. I also describe the context of the study and present profiles of the participants (i.e., educators who took part in the learning community), discuss the

role of the researcher, and the trustworthiness and ethical considerations of the study.

Chapter four presents the patterns that emerged through data analysis and the findings that were derived. In this chapter I present patterns that emerged through analysis of learning community members' activities, illustrate teachers' collaborative activities and learning by examining classroom teacher and LRT dyads, and present findings related to qualities of the learning community and partnerships that supported participants' learning. Finally, chapter five considers several key findings and implications for teacher learning, changes to practice, collaboration and professional development activities. Limitations of the study and implications for future research are also identified and discussed.

Chapter 2 – Theoretical Framework: Drawing From and Building Upon a

Foundation of Theory and Research

In chapter one I outlined four attributes of initiatives that have been found and/or have potential to develop and nurture teachers' professional learning (Figure 2.1). I also noted that the group of teachers I worked with in this study were interested in, and thus were focused together on, writing instruction and/or collaborative teaching. Here in chapter two, I lay out a theoretical and empirical basis for both how this inquiry was carried out and the kinds of patterns that are presented and explained later in this dissertation, specifically, how what emerged in the data presented in chapter four relates both to the professional development processes we engaged in (means) and the ideas and practices we inquired into (content). To build coherence throughout the dissertation, this chapter summarizes information related to (1) professional development as a sustained, practiced-based, situated, inquiry-oriented and collaborative process, (2) outcomes associated with process-oriented professional development approaches, and (3) concepts and approaches related to writing instruction and collaborative teaching that teachers in this study considered and explored within our community of inquiry meetings and their school-based activities.

Figure 2.1   Four attributes of teacher professional development initiatives

Situated

Longitudinal

Inquiry Oriented
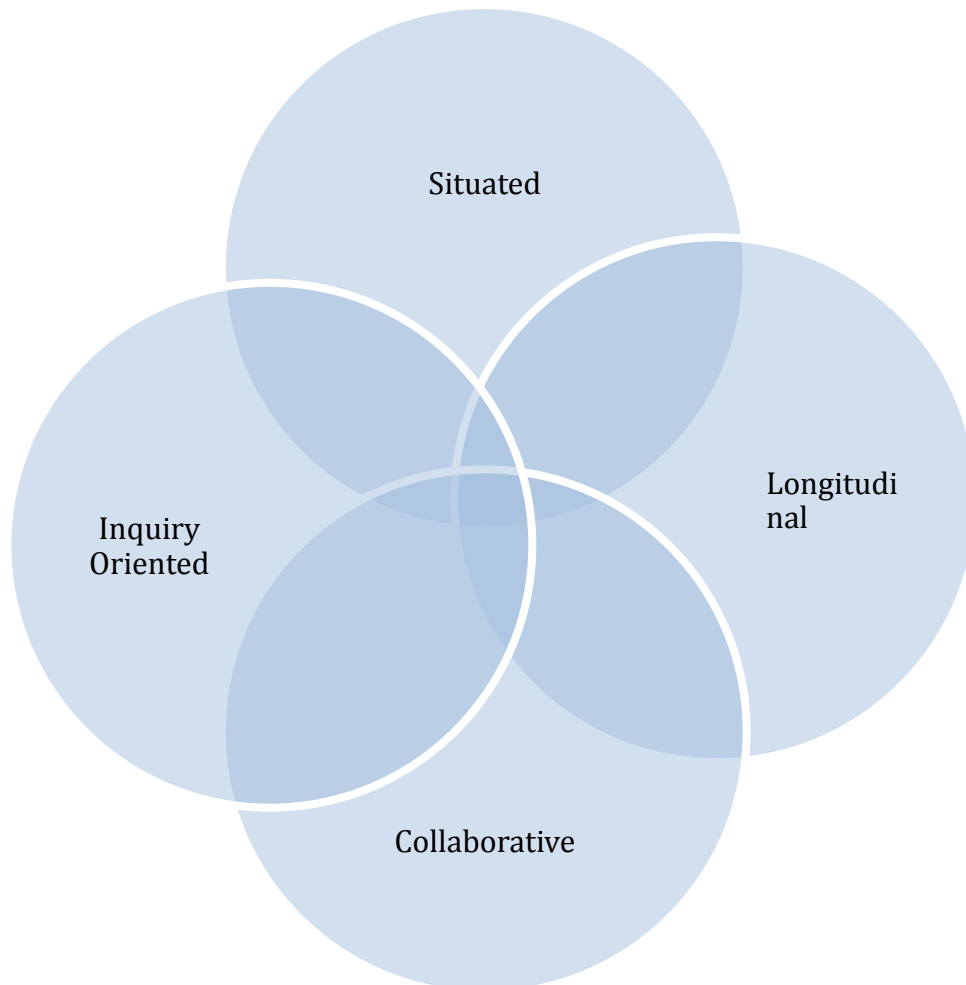
Collaborative

Professional Development as a Practice-Based, Sustained, Situated, Inquiry-Oriented and Collaborative Process

Central to the theoretical framework underlying this study is research and thinking related to teacher professional development. In this section I draw from this area of scholarship to highlight *contextualist* and *socio-constructivist* understandings of

teacher professional development. I point out how the study of teacher knowing, learning and practice has laid a foundation for attention to both the practical and the social within this case study. Across the paragraphs of this section I build a theoretical framework that includes the following layered perspectives: (1) teacher knowledge as derived through practice; (2) teacher learning involves considering contextual factors and developing practice in relation to one another; (3) inquiry approaches to professional development can support the development of teachers' self- and co-regulation of learning and practice, which may result in an increased sense of agency; and (4) sustained, situated, collaborative inquiry is congruent with a socio-constructivist perspective of practice and knowledge construction.

Teacher knowledge as derived through practice.

Theorizing regarding knowledge and practice in the professions has established a well-researched school of thought that investigates how teacher knowing and learning are derived through practice (e.g., Campbell, McNamara & Gilroy, 2004; Clandinin & Connelly, 2004; Clarke & Erickson, 2006; Cochran-Smith & Lytle, 1999b, 2004, 2009; Eisner, 2002; Schon, 1983; Stenhouse, 1975). Teaching practice is filled with moments of complexity, "uncertainty, instability, uniqueness, and value conflict" (Schon, 1983, p. 49). To navigate these moments, teachers make decisions based on a number of factors, many of which are unpredictable.

Challenging technical-rational conceptions of researcher-as-theory-creator and teacher-as-theory-applier, many researchers (e.g., Clandinin & Connelly, 2000, 2004; Cochran-Smith & Lytle, 1993b, 2009; Grimmett & MacKinnon, 1992; Heron & Reason, 1997; Hobson, 2001; Schon, 1983, 1987) have described teachers as knowledge-makers

who tailor their practice using wisdom derived from the situation at hand. In terms of teacher professional development, teachers who explore various aspects of their professional context in relation to their practice and theory have the opportunity to "theorize their own work, the assumptions and decisions they make and the interpretations they construct" (Schon, 1983, p. 42). Schon (1983) argues that teachers' practice-based learning does not occur from the "use of techniques derived from applied research. It is through the non-technical process of framing the problematic situation that [teachers] organize and clarify both the ends to be achieved and the possible means of achieving them" (p. 41).

As I reviewed studies that conceptualized professional development as longitudinal, situated, inquiry-oriented and collaborative, one additional factor was common to them all: they each had a practice orientation. In each of the twenty-plus studies that employed some degree of all four characteristics, practice was a vehicle for teacher learning and development. Sometimes it was a specific teaching practice that was the object to be learned (e.g., Hilden & Pressley, 2007), while sometimes a practice was provided as a way to explore a value (Santamaria & Thousand, 2004), theory (Klein, 2008), and/or a way to better support student learning (Huziak-Clark et al., 2007). Decisions about what practices were developed ranged from Sailors' (2009) and Timperley and Phillips' (2003) studies which prescribed the practices teachers were to use related to reading instruction to the studies of Mitchell (2000) and Butler et al. (2004) who invited teachers to develop practices to match instructional goals related to students' self-regulated learning. In this study, practice is a site for teachers' learning; it is both a means and an end.

Situated professional development and practice-based learning.

In literature that focuses on practice-based learning (in fields as diverse as medicine, social work, architecture and education), theorists (e.g., Carr & Kemmis, 1986; Dewey, 1938; Lave & Wenger, 1991; Schon, 1983, 1987; Wenger, 1998; Zeichner, 1996) illustrate how professionals' understandings and practice are developed through reflective and reflexive attention to how context is related to one's practice. However, many teachers do not purposefully or even consciously reflect on how their behavior relates to the complex situations they are acting within (Campbell, McNamara & Gilroy, 2004). The complex, situated demands of classrooms and schools do not afford teachers many opportunities to purposefully pause and reflect on what they are doing and noticing. Yet much professional development literature points out the importance of considering and adapting to aspects of context (Borko, 2004; Cobb & Bowers, 1999; Driver et al., 1994; Putnam & Borko, 2000). Borko (2004) has noted, "[a] central tenet of situative perspectives is that the contexts and activities in which people learn become a fundamental part of what they learn" (p7).

It is ironic that many researchers, curricula and policies now call for students to be reflective thinkers and problem-solvers, but such references rarely suggest the same qualities be nurtured in teachers. In many cases, the recent proliferation of accountability agendas related to student outcomes has been used to define what teachers' practice should look like (Cochran-Smith & Fries, 2005; Darling-Hammond, 1996). This runs somewhat counter to a situative perspective of professional development. While attention to the role of context and teachers' practice-based learning should play a crucial role in this current climate of accountability, teachers in many nations (i.e., Australia, UK, USA,

Canada) are encountering scripted curriculum and top-down approaches to instruction that are deprofessionalizing teaching *(*Campbell*, McNamara*, *& Gilroy*, 2004; Darling-Hammond, 1996, 2000).

There are many ways that context can be considered and addressed within the design of a professional development study. In some cases, researchers consider contextual factors to help decide what to focus professional development activities on (e.g., Hilden & Pressley, 2007). Some studies show how teachers can be invited, encouraged and supported to plan, enact and reflect on how a practice might be adapted based on the needs of their students (Sailors, 2009) or the interests and/or learning skills and needs of students are taken into account in order to develop a practice (Elster, 2009; Santamaria & Thousand, 2004). At a second level, the teachers themselves are considered as part of the make up part of an educational ecology. These situative professional development approaches might be designed around teachers' skills, interests and needs (Mitchell, 2000; Wood & Lieberman, 2000) or at least the diversity within participating educators' interests, experiences and learning needs is taken into account. A final situative approach involves inviting teachers to be part of the development of the study itself. This may include inviting teachers and, occasionally, students to co-construct, enact, reflect on, and adapt practices based on contextual factors (Butler et al., 2004; Klein, 2008).

In professional development-related studies, there is a range in the ways and the degree to which students and their learning are considered and/or addressed. In Figure 2.2 studies reviewed are organized from those on the left side of continuum where only one study resides (Fazio, 2009). Fazio's was the only study that did not report researchers

considering or inviting teachers to consider students as a situative aspect of the professional development model. At the next level of the continuum, researchers and/or staff developers introduced teachers to predetermined instructional approaches that they were to integrate into their practice in the service of student learning (Hilden & Pressley, 2007; Sailors, 2009; Timperley & Phillips, 2003). Here considering students and their learning is a key aspect of context and thus professional learning. In the third and fourth levels, practices were developed, and even derived, from contextual factors such as formative assessment of student learning (Klein, 2008) and/or students' interests (Elster, 2009) with and/or by participating teachers (Butler et al., 2004; Klein, 2008; Snow-Gerono, 2005)

Figure 2.2 **Student learning as an aspect of context in professional development studies**

- Fazio (2009)

- Brownell et al. (2006)
- Hilden and Pressley (2007)
- Kaplan (2008)
- Levine and Marcus (2010)
- Robertson (2009)
- Sailors (2008)
- Timperley and Phillips (2003)
- Walther-Thomas (1997)
- Whitney (2008)

- Elster (2009)
- Horn and little (2010)
- Huziak-Clark et al. (2007)
- Santamaria and Thousand (2004)
- Snow-Gerono (2005)

- Ball (2008)
- Butler et al. (2004)
- Klein (2008)
- Mitchell (2000)
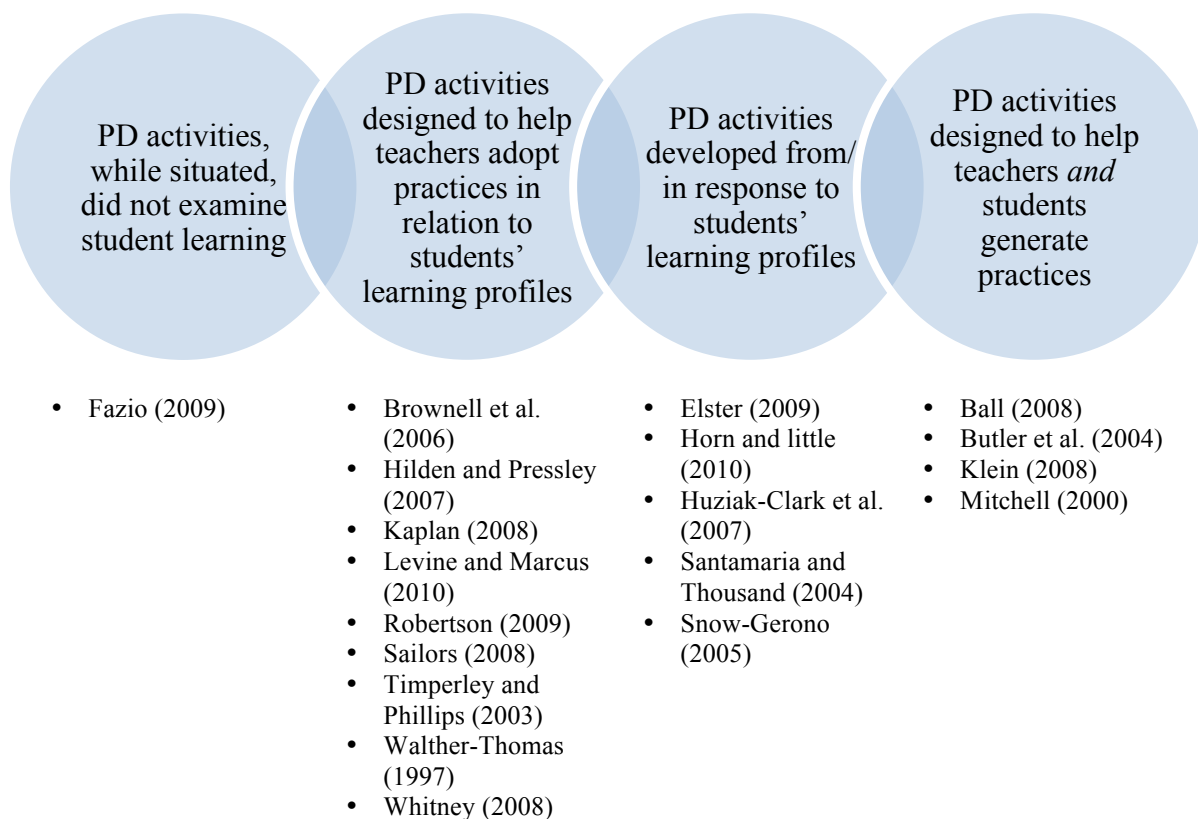
It is important to note that context was considered and addressed in all of these studies, but that the design of the professional development model, in particular the role of participating teachers, helped to define what this meant. For example in studies by Timperley and Phillips (2003), Hilden and Pressley (2007) and Sailors (2009), predetermined practices were introduced that were to be learned by teachers and implemented in their classrooms. Teachers were to develop the same skill set over time; from this perspective "problems of practice" that arise are often assumed to be solvable by flexibly using the approaches taught. PD activities were designed to accommodate teachers' learning needs, but in relation to best practices. In contrast, Butler et al. (2004), Klein (2008) and Fazio (2009) worked with teachers as they selected and/or developed approaches to be explored in their classrooms, building from theory and research presented to participating teachers and in light of contextual factors identified by teachers. In Fazio's study principles to explore were predetermined, but there was flexibility in how practices were chosen, used and even created. Researchers adapted the shape of PD meetings based on how teachers' interests and practices were developing. At the far end of the continuum, PD activities were developed with and/or by teachers based on their expressed learning and/or practice needs and goals (e.g., Butler et al, 2004; Klein, 2008; Mitchell, 2000). In all studies reviewed, approaches were linked to research and/or theory while context was at least considered, if not central to professional development activities. In the most situated examples, teachers had some degree of choice in what was focused on and why based on what they thought was most applicable for both them and their students.

In this dissertation study, teachers' and students' learning profiles were taken into account. Professional development activities invited teachers to surface their opinions and beliefs, share their current and emerging practices and draw from what was being read and discussed. Teachers chose what to adopt and adapt based on the professional development goals they set for themselves and their students. Building from the perspectives described in this section, one aim of this dissertation research was to study how contextualist, practice-oriented professional development initiatives might be a viable path to teacher learning and shifts in teaching practice with the potential for better outcomes for students.

Inquiry-oriented professional development links context and practice.

A third important aspect of current thinking and practice regarding professional development (and outlined in chapter one) is inquiry. Teacher learning and context can be connected through inquiry. Many researchers and theorists have pointed out that to develop understandings, practices and agency, teachers engage in cycles of inquiry that involve action and reflection (e.g., Butler & Schnellert, 2008; Cochran-Smith & Lytle, 2009; Hobson, 2001; Shagoury Hubbard & Miller Power, 2003). For example, a Deweyian perspective suggests that a reflective teacher engages in inquiry, pursues solutions to a perplexing situation, takes up dispositions that allow for careful attention, makes judgments based on what they are noticing, and keeps an open mind as possibilities are considered, pursued and new observations made (Simpson, 2006).

Building on the notion that teachers' understandings and practices develop when they inquire into the relationships between what they know, what they do, and how this relates to various, often unpredictable contextual factors, professional development

approaches such as teacher research, action research and self-study have emerged. Fichtman Dana and Yendol-Hoppey (2008) and Cochran-Smith and Lytle (2009) have noted that "practitioner inquiry" might be the best overarching term to describe and position these related inquiry approaches where teachers reflect on and refine their practices. Cochran-Smith and Lytle (2009) posit that "a unique feature of the questions that prompt practitioners' inquiry is that they emanate from neither theory nor practice alone but from critical reflection on the intersections of the two" (p. 42). A key aspect of such approaches is that the teacher defines the area of practice to be addressed and feels empowered to learn through the development and sharing of new knowledge (also see Borko, 2004). Inquiry approaches to professional development position the locus of control for learning within the teacher. Such a teacher engages in making meaning and theorizing through reflection on what they encounter in practice.

When professional development initiatives allow teachers to develop and test their own conceptions of teaching, teachers can better consider, interpolate and investigate theories and practices in relation to their own thinking and actions (Campbell, McNamara & Gilroy, 2004; Cochran-Smith & Lytle, 2009). Inquiry-oriented learning and attention to context - teachers developing local knowledge through inquiry - are qualities that braid together in such professional development projects. Eisner (2002) has noted how teacher-inquirers judge the benefits of various actions and create understandings and approaches *in situ,* rather than simply using their knowledge base to act. Eisner helps to point out how gaps between teachers' professional knowledge and the demands of real-world practice require teacher-inquirers to think and act in new and creative ways.

Central to this study is the perspective that teachers' understandings, learning and practice are derived through situated, practice-based inquiry, and thus professional development initiatives and research intended to support teachers in better meeting the needs of their students should be developed *with* and/or *by* teachers based on their contextual questions (Clarke & Erickson, 2004; Cochran-Smith & Lytle, 1993a; Zeichner & Liston, 1996).

A key concept related to teachers' inquiry learning concerns how teachers' iterative cycles of inquiry involve self- and co-regulation of practice and learning (i.e., Butler & Schnellert, 2008). Central to this study is a foregrounding of inquiry as self- and co-regulation that fuels and sustains changes to practice and fosters agency. This entails teachers having a voice in determining and developing learning opportunities and activities, constructing inquiries and action plans, enacting these plans, and monitoring their decisions and actions based on contextual information. Ecological (i.e., naturalistic) professional development studies like those of Butler, Novak Lauscher, Jarvis-Selinger and Beckingham (2004), Luna et al. (2004), and Moje (1996) offer examples of how teacher agency is nurtured when teachers surface questions and issues and then (with peers and/or researchers) collaboratively construct, monitor and adapt context-specific approaches and strategies to address goals they have set.

Deborah Butler and I have built on and extended this work by examining teachers' activities within inquiry cycles (also see Butler et al., 2006, 2007, 2008; Schnellert et al., 2006, 2008). We have found that teachers' situated inquiry learning could also be understood as self-regulated practice and learning. We have represented the ways teachers engaged in learning with multi-layered models of teachers' reflective,

contextualized inquiry cycles (see Figure 2.3), a perspective that emerged from our juxtaposition of various theoretical accounts within an iterative analysis of teachers' activities as they were attempting to make changes in practice and then monitor and account for outcomes associated with their efforts (Butler, Schnellert & Higginson, 2007; Butler & Schnellert, 2008).

Figure 2.3   Multi-layered inquiry processes
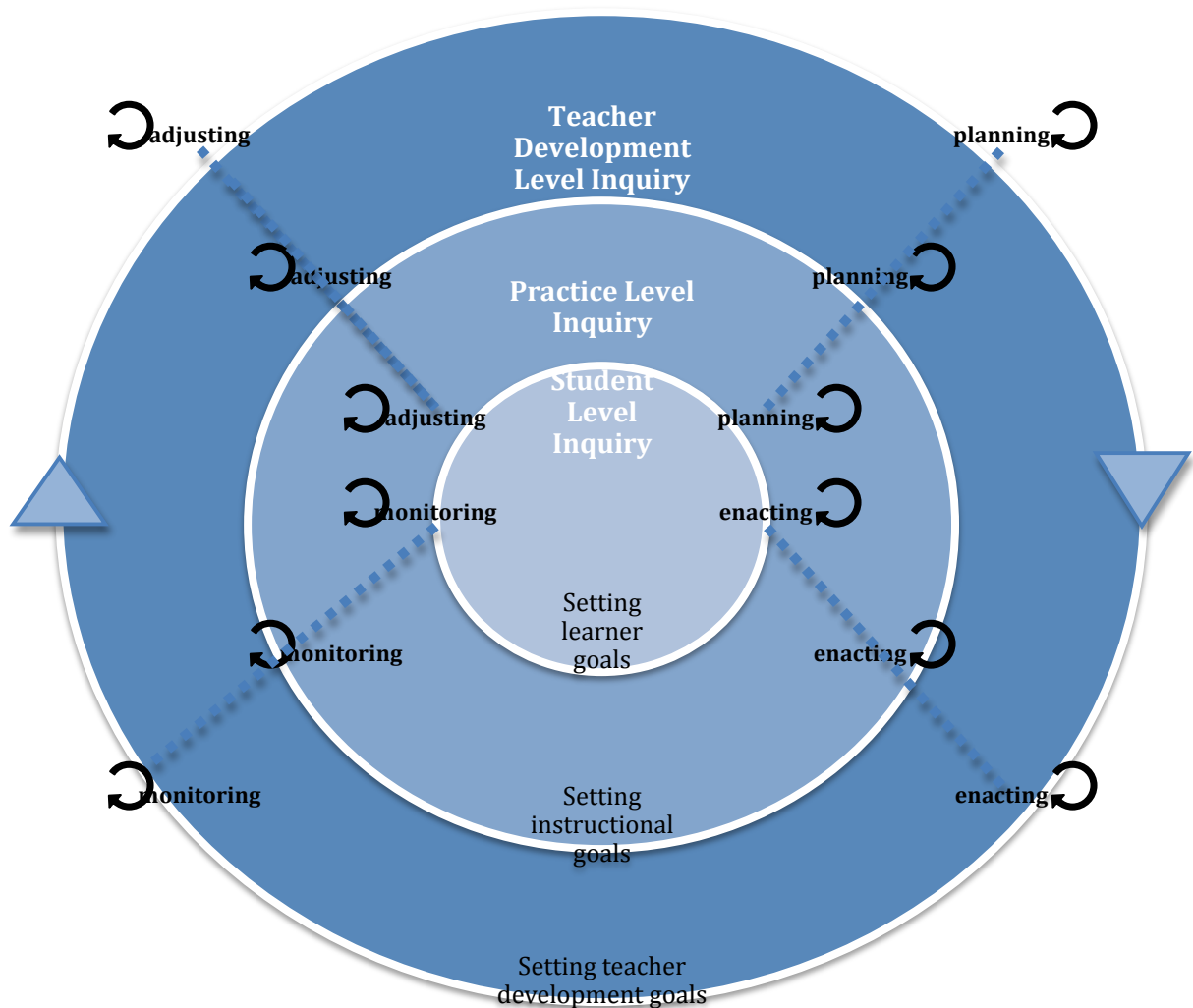
Similar to studies of students' self-regulated learning, in our research, Butler and I have described how teachers self-regulate their practice and learning by strategically and deliberately engaging in situated, goal-directed inquiry. In three studies of teachers' practice-based learning we found that, to varying degrees, teachers identified situated, practice-related goals, planned and enacted instructional approaches, defined and collected indicators of progress, monitored outcomes against desired goals, and adapted instruction as needed (see Figure 2.3, middle layer) (Butler et al., 2007, 2008). The outside layer of our model focuses on teacher inquiry cycles that involve setting goals, and developing and enacting and monitoring plans related to developing understandings about teaching and learning. At this level of inquiry, teachers identify goals for their own learning or development (e.g., to learn about new theories related to literacy; to better understand the diverse ways that students learn; to develop particular pedagogical content knowledge), plan approaches to achieve their own learning or development goals (e.g., working with colleagues to construct, test and/or integrate ideas), define and collect indicators of progress (e.g., a sense of having developed new understandings; to have adopted a new approach that links to that understanding), and monitor success by comparing outcomes to desired goals. Teachers whose inquiries included this level of reflection and action were more likely to feel a sense of agency regarding their contributions to and influence beyond the classroom.

Across the 20 professional development studies that included combinations of the four qualities of PD considered for this review, there was also variance in the degree to which practitioner inquiry was part of and/or nurtured within the study (see Figure 2.4). In some studies, opportunities for teacher inquiry was limited, as the focus of the studies

24

and the instructional methods to be used were predetermined. However, teachers'
questions, observations and needs guided how researchers and staff developers worked
with and supported teachers. In Figure 2.4, these studies are represented at the left-hand
side of the continuum. Studies that engaged teachers as co-inquirers or co-researchers and
encouraged them to share what they were learning and wondering as they engaged in
professional development activities are represented in the centre of the continuum. At the
most inquiry-oriented end of the continuum (on the right side of Figure 2.4), participating
teachers engaged in ongoing cycles of asking questions and/or setting goals, selecting,
planning and enacting approaches that they determined relevant, and reflecting upon
these actions. These cycles helped to shape both professional development and classroom
activities (e.g., Butler et al., 2004; Hilden & Pressley, 2007; Santamaria & Thousand,
2004).

In this dissertation study I applied Butler and Schnellert's (2008) layered,
empirically derived, inquiry-oriented model of teacher learning and professional
development. In particular I attended to participating educators' intentions, plans,
actions and reflections. Hence, this study looked at educators' professional learning to
further test out, validate and extend this conceptual model.

Figure 2.4   **Inquiry within professional development studies**

Participants enacting and reflecting on approaches adopted from PD	Participants setting goals enacting and problem solving using ideas/ approaches from PD	Participants open ended inquiry cycles exploring relationships between contexts, ideas and approaches from PD	Participants inquiry cycles drawing in ideas and approaches in ways that generate practices and knowledge
Timperley & Phillips (2003)	Brownell et al. (2006)	Elster (2009)	Ball (2008)
Sailors (2008)	Hilden & Pressley (2007)	Fazio (2009)	Butler et al. (2004)
	Huziak-Clark et al. (2007)	Horn & Little (2010) • English teachers	Horn & Little (2010) • Math teachers
	Robertson (2000)	Kaplan (2008)	Klein (2008)
		Levine & Marcus (2010)	Mitchell (2000)
		Snow-Gerono (2005)	Santamaria & Thousand (2004)
		Whitney (2008)	Wood & Leiberman (2000)

Collaboration in situated, practice-oriented inquiry.

The fourth set of concepts that flesh out this section of my theoretical framework draws on thinking and research related to collaboration between teachers. The importance of collaborative inquiry, a central approach adopted within this study, is supported by theories and research related to professional learning as co-regulation, social practice, communities of practice, and collaborative teaching. Building on research emphasizing how individuals' learning and change processes do not occur in isolation (Borko, 2004; Bruner, 1996; Fullan, 1993, 2005; Putnam & Borko, 2000; Lave & Wenger, 1991; Vygotsky, 1978), within this study I examine how collaboration between teachers relates to their engagement in planning and implementing changes to practice, and their development of understandings (i.e., beliefs about teaching and learning, theory-practice connections, what it takes to make a difference).

Earlier in this chapter I used the concept of self-regulation to help describe and understand the inquiry-oriented learning of teachers. The term "self" in this context can be misleading as it can invoke a more limited "in-the-head" perspective on learning and teaching. Rather, teachers' learning and their thoughts, actions and practice are shaped by many factors. I am using a socio-constructivist conception of self, and thus, co-regulated learning which acknowledges that teachers' learning and practice are constantly shaped by historical, social, and political forces (Adler, 2000; Greeno, 2003; Lave & Wenger, 1991). Clarke and Erickson (2004) point out that learning "described in terms of an individual constructing personal meaning in relation to their interactions and experiences with phenomena has been challenged by a description of learning as a social phenomena resulting from the multifaceted interactions between an individual and a

complex set of social and cultural forces" (p. 45). This social perspective has specifically drawn attention to how individuals and groups make meaning within discursive practices (i.e., discourses that teachers and teaching are positioned and subsumed within).

I adopt a socio-constructivist perspective that learning and teaching are both individual and social practices that require dialogue and negotiation. As Borko (2004) and other scholars (e.g., Cobb & Bowers, 1999; Driver et al., 1994) have argued, the learning process is "one of enculturation *and* construction" (p. 4). Thus, a central element in this professional development study is that participants had opportunities to work collaboratively to consider and construct class learning profiles, set goals for their students' and their own learning, explore learning- and literacy-related approaches, and reflect on and adapt their learning and practice.

Generally speaking, collaboration, particularly within communities of practice, has been promoted as a key factor in both creating and sustaining conditions for teachers' learning (Borko, 2004; Cochran-Smith & Lytle, 1993b, 2009; McLaughlin & Talbert, 2006; Morrell, 2004). But what does collaboration look like? With the proliferation of calls for the establishment of professional learning communities (PLCs) to support optimal professional development for teachers (e.g., Harris, 2005; Laskway, 2003; Van Horn, 2006; Wiliam, 2007/2008), there needs to be more research attending to what teachers' practice-based learning looks like within current PLCs, the limitations of current models, and examples of context-specific inquiry communities versus generic approaches or models (Butler & Schnellert, 2008; Little, 2003).

For example, to examine the usefulness of conceptualizing teachers'

collaborative inquiry as a form of co-regulation, in one study Butler and I (Butler, Schnellert & Higginson, 2007) constructed a collaboration map to represent how pairs of teachers shaped each other's participation in inquiry cycles at practice and teacher learning levels. We developed a model of co-regulated learning based on analyses of interview transcripts, field notes, and artifacts focused on teachers' engagement in professional learning together. Through our analyses we illustrated how collaboration can be characterized in terms of how much teachers support one another to engage in and reflect on inquiry cycles.

Some researchers claim that there is a lack of evidence that professional learning communities have had much impact on teachers' actual practice (Little, 2003). Of course there is a significant range in what PLCs look like and how they play out. While many PLCs attend to local context and use inquiry cycles, Cochran-Smith and Lytle (2009) caution that many have historical and epistemological roots in business models or notions of "best practices", and may, in the end, set aside the complexity and personal nature of teacher learning, knowing and practice (p. 55). In this study, I take up a position closer to some of the longest-lived "grass roots" inquiry communities that are teacher initiated and often co-led by teachers; in such settings researchers are members of a learning community where all members are valued for their expertise, rather than those where the most expert member (ie. researcher) is deferred to (e.g., Carini, 2000; Cochran-Smith & Lytle, 2009; Himley & Carini, 2000; Mitchell, 2000).

Whereas PLC literature and models often focus on better student achievement as the desired end, in this study, teachers' self- and co-regulation and development of personalized practices, understandings and agency are the focus. Yet the importance of

linking PD activities to shifts in practice that make a difference for students is key

(Borko, 2004; Butler, Schnellert & Cartier, 2005; Hilden & Pressley, 2007; Santamaria

& Thousand, 2004). That said, it is also critical to focus in on how PD activities might

be associated with teacher learning/knowing and agency, which is the focus adopted

here. Thus in this study, the processes of collaboration and teachers' learning are

examined to afford greater understanding of how collaboration might work to enhance

teacher learning and contextual, situated, co-construction of practice.

Across the studies reviewed, collaboration was often present in large group

workshops and discussions outside of the classroom such as study group meetings. In

some cases there was collaboration in the school day where a literacy coach or

"knowledgeable other" observed, modeled for and debriefed with teachers (Sailors, 2009;

Timperley & Phillips, 2003). At the most collaborative end of the continuum were those

studies where teachers had opportunities to co-plan, co-enact and co-debrief lessons

and/or teaching practices with peers, most often as special educator and classroom

teacher partners, particularly when they had identified practices they were working to

develop together (Brownell, Adams, Sindelar, Waldron, & Vanhover 2006; Santamaria &

Thousand, 2004; Walther-Thomas, 1997). Similarly, through this dissertation study I add

to the literature on what we know about inquiry-community-based professional

development by articulating if and how teachers' co-regulation within a community of

inquiry, that included co-teaching partners, helped them to develop their practice and

understandings.

One concern related to communities of inquiry (CoI) approaches to professional

development is how difficult it is for teachers to make and reflect on situated, responsive

changes *in* action (Cochran-Smith & Lytle, 2009; Schon, 1983). As I noted in chapter

one, a potential solution can be found in collaborative teaching, where classroom and

learning resource (i.e., special education) teachers work together to support groups of

diverse students (Brownlie & King, 2000; Friend, 2005; Hourcade & Bauwens, 2002;

Walsh & Jones, 2004). As part of their inquiry-oriented learning in this study, co-teachers

planned how they worked together as well as developed classroom approaches to support

the literacy learning of the diverse students in a classroom. In a study of how these

teacher pairs engaged in collaboration, I am working to build a richer understanding of

the theory-practice relationships that emerge between cycles of collaborative inquiry and

teachers' shifts in practice and understandings.

Pulling the pieces together: A multi-faceted conceptual framework.

Across this section I have introduced several perspectives regarding teacher

professional development that, when linked together, serve as a multi-faceted conceptual

framework. With this study I seek to add to the professional development literature by

articulating how a sustained, practice-based, situated, inquiry-oriented and collaborative

approach can result in teachers refining understandings and changing practices at the

classroom and school levels. Such professional development approaches offer teachers

the opportunity to research their perceptions, conceptions and practices in relation to

other factors (i.e., what they learn from and about their students, peers, theories,

professional resources, knowledgeable others and various discourses).

Cochran-Smith and Lytle (1999a) speak of "teacher research as an agency for

classroom and school change" (p. 18). The premise of their position is that when teachers

engage in inquiry, generating local knowledge through their classroom-based inquiries,

they become empowered to address factors that, when changed, better support student learning. Many of these factors are embedded in discourses that teachers become aware of and begin to challenge when they engage in inquiry. Thus teachers' practices and understandings can shift as they engage in inquiry.

This theoretical framework presents a contextualist, socio-constructivist conception of teachers' self- and co-regulated learning and practice. Accordingly, in this study, I focused on participating educators' intentions, the actions they undertook to meet them, and how they adapted what they were doing within iterative cycles of inquiry. Attending to the situated nature of teachers' learning within cycles of practice-based inquiry also entailed acknowledging and addressing discursive factors that might limit and impact learning. In chapter four of this dissertation, facets (and perspectives) introduced here help me to richly describe and analyze what teachers did and learned, how they worked together, and the conditions and qualities that supported their practice-based learning.

Outcomes Associated with Practice-Based, Sustained, Situated, Inquiry-Oriented, Collaborative Professional Development

In this section I describe the different kinds of outcomes sought and/or reported in empirical practice-based, sustained, situated, inquiry-oriented, collaborative professional development studies. While most of the studies (18/20) I considered in depth had research questions or objectives that considered the impact of the professional development approach being employed, a situated, socio-constructivist perspective recognizes that there are many factors and layers of context at play and thus it is difficult to ascertain which factors in a study's design had the most significant role. Despite this

caution about linking specific aspects of professional development to differences in various outcomes, a review of these studies suggest patterns relevant to the design and emphasis of this study. This dissertation research is positioned in relation to these outcomes and helps to address and contribute to the growing body of research about what counts and should be counted in profession development research.

Looking across 20 empirical professional development-oriented studies, several kinds of positive changes were reported or could be derived including: teacher learning (e.g., teacher attitudes/dispositions, teacher knowledge), teacher practice, student learning, and collaboration.

Teacher learning as a valued outcome in process-focused professional development.

Across studies there was attention to teachers' shifts in thinking including their attitudes/dispositions and knowledge. In fact, only four of the twenty studies did not have a research question or objective looking for shifts in teachers' perceptions and/or understandings.

Shifts in attitude and disposition.

Goals and findings related to teachers' attitudes and dispositions (perceptions, expectations, beliefs, agency, affect, etc.) could be found across studies. In some cases, a research question was focused on teachers' expectations or beliefs (e.g., Butler et al., 2004; Elster, 2009; Klein, 2008; Timperley & Phillips, 2003; Walther-Thomas, 1997). For example, Timperley and Phillips' (2003) study with teams of primary teachers sought to determine if a longitudinal, practice-oriented professional development project would help teachers to change their expectations of their students' literacy-learning ability and

potential. The researchers were particularly concerned with changing teachers' low expectations for students who were at-risk and/or struggled. Over the course of their study, they found that, indeed, teachers increased their expectations for students. With this shift they found teachers developed an increasing sense of agency. They reported that "as teachers became more able to understand and use different ways of teaching, their sense of self-efficacy increased and different student achievement goals became obtainable" (p 13).

Similarly, Fazio's (2009) study looked at shifts in secondary school Science teachers' beliefs. This study examined if longitudinal, inquiry-oriented professional development activities that involved teachers coming together to learn about and investigate scientific inquiry and the nature of Science would change their views of Science and practice. Teachers carried out individual action research projects in their classrooms and came to group meetings to share and plan together. The researchers found that teachers' views changed as they engaged in the construction, evaluation and acceptance of knowledge while concurrently dealing with the emotive components of belief. Note that the design used by Fazio is similar to that used in this dissertation research where teachers came together to inquire into writing pedagogy and supporting diverse learners, made plans to try things out in their classrooms, and then returned to the cross-school community of inquiry to share what they were doing and learning, and engaged in group problem-solving.

Ball (2008), Whitney (2008) and Brownell et al. (2006) also identified research objectives related to teachers' attitudes and dispositions. As in the two previous studies, these researchers also observed positive outcomes related to teacher agency. For

example, Whitney observed that teachers involved in a National Writing Project (NWP) summer institute experienced a shift in thinking that also impacted how they thought of themselves and their decisions; teachers "explicitly named a gain in confidence" (p. 30) and "the self-assurance to trust and even argue for and defend their own professional judgments" (p. 35). Similarly, Ball (2008) found that teachers gained confidence in themselves as teachers and found an "increased sense of agency, advocacy and efficacy" (p. 6). Teacher agency is often identified as a valued outcome in the literature related to teacher inquiry (e.g., Butler, Schnellert & Higginson, 2007; Campbell, McNamara, & Gilroy, 2004; Cochran-Smith & Lytle, 2009; McLaughlin & Talbert, 2006). The premise is that when teachers engage in inquiry, generating local knowledge through their classroom-based inquiries, they become empowered to address factors that, when changed, better support student learning.

While these studies looked for and found positive shifts in teachers' attitudes and dispositions, reports of general trends can obscure differences in the beliefs and attitudes present in a group of teachers engaged in professional development. Brownell et al. (2006) point out that those teachers who were "high adopters" of the practices introduced in their study developed "friendly beliefs towards managing student behavior" (p. 9) while "low adopters" showed few to no shifts in attitude. Timplerley and Phillips (2003) reported a shift in teachers' thinking for all but one school. Teachers from this one school elected not to try out the methods introduced and, in turn, did not demonstrate or report shifts in their expectations of, or attitudes toward, their students' literacy learning. Looking carefully at these studies where researchers hoped for attitudinal change brings out three points: process-oriented professional development can help teachers make

positive shifts in attitude and disposition; however, not all teachers shift their dispositions in process-oriented professional development, or at least to the same degree; and shifts in thinking may be connected to shifts in action (i.e., practice).

Researchers in eleven of the studies where teachers' attitudes were not specifically identified as an outcome also saw a shift in participants' attitudes and/or dispositions. The shifts were quite different from study to study. For example, Huziak-Clark, Van Hook, Nurnberger-Haag and Ballone-Duran (2007) reported an increase in teachers' confidence as a result of their co-teaching experiences. In Kaplan's (2008) study teachers found their relationships with students more meaningful, while Horn and Little (2010) reported how the Algebra Group not only positioned a novice teacher with the "agency and identity to identify, investigate and learn from her own teaching dilemmas," but also positioned themselves as a group to deepen their "collective sense of competence and their norms of mutual support" (p. 28).

In sum, when teachers are engaged in practice-oriented professional development activities that are situated, longitudinal, collaborative and inquiry-oriented, it seems that positive shifts in attitudes and dispositions can be hoped for, even when this is not an explicit intention of the study. In particular, engaging in collaborative, situated professional development where teachers explore ideas, plan approaches, take action in their classrooms, and debrief with others appears to be associated with positive outcomes in terms of affect and agency. In this dissertation study I did not set out with an overarching research question related to these areas. But shifts in attitudes and dispositions became evident through cycles of data analysis.

Shifts in teacher knowledge.

A common goal in professional development studies is teachers' development of knowledge. All 20 of the empirical PD studies reviewed here had expectations that teachers would develop knowledge related to a shared focus. Whether teachers were developing knowledge "for" or "of" practice (Cochran-Smith & Lytle, 2009; Schon, 1983), one common theme was that they were working with, trying out and/or developing understandings related to teaching, learning and/or a content area (e.g., reading, writing, Science, inquiry, supporting diverse learners).

Looking at the outcomes of these professional development studies, development of content knowledge (CK) was considered in addition to, or subsumed within, development of pedagogical content knowledge (PCK). Content knowledge refers to the amount and organization of subject-specific knowledge in the minds of teachers. For Schwab (1978), knowledge of a subject includes both the substantive and the syntactic structures. The substantive structures are the variety of ways in which the basic concepts and principles of a discipline are organized to incorporate related information. The syntactic structure of a discipline is the set of ways in which logic, decisions, and validity are established.

Pedagogical content knowledge (PCK) – an idea proposed by Shulman (1986) – is a form of content knowledge that embodies the aspects of content most germane to its teachability. It includes forms of representation of ideas, analogies, illustrations, examples, explanations, and demonstrations (i.e., ways of representing and formulating the subject that make it comprehensible to others). It also includes an understanding of what makes the learning of specific topics easy or difficult, and the conceptions and

preconceptions that students of different ages and backgrounds bring with them to the learning contexts and events (Shulman, 1986, 1987; Wilson, Shulman, & Richert, 1987). In many cases, teachers in the empirical studies reviewed here developed understandings about the "hows" of teaching (e.g., Butler et al., 2004; Elster, 2009; Horn & Little, 2010; Huziak-Clark, 2007; Kaplan, 2008; Klein, 2008; Mitchell, 2000; Hilden & Pressley, 2007; Snow-Genono, 2005; Thousand & Santamaria, 2004; Walther-Thomas, 1997; Wood & Lieberman, 2000). Across studies three different routes to teachers' development of pedagogical content knowledge were evident: PCK arrived at by connecting theory and practice; PCK grounded in reflecting on problems of practice and possible actions; and PCK that emerges when teachers actively took note of, reflected on and problem-solved *while* practicing, including making theory-practice connections.

CK and PCK arrived at by connecting theory and practice.

When looking across sustained, situated, inquiry-oriented, collaborative studies, one key element reported was that teachers developed PCK, at least in part, by making theory practice connections (e.g., Brownell et al., 2006; Fazio, 2009; Huziak-Clark et al., 2007; Timperley & Phillips, 2003; Wood & Lieberman, 2000). In Hilden and Pressley's (2007) study, teachers reported and demonstrated new ways to think about reading (CK) and new ways of teaching reading (PCK). In this study the researchers shared theory-based ideas, readings and examples, then teachers tried approaches in their classrooms and came back to the group to share and get more ideas. Study participants felt that professional development activities that included sharing and discussing theory and research helped them to develop new understandings about reading comprehension and reading comprehension instruction. Similarly, teachers in Huziak-Clark et al.'s (2007)

study reported that participating in their professional development program "improved their content knowledge and ability to plan inquiry-based lessons" (p 11). In particular these teachers were supported to use inquiry as a pedagogical tool (PCK). The shift in teachers' thinking and practice was confirmed by external observations of the participants. The design of both studies was focused on teachers developing specific understandings about reading comprehension instruction and inquiry as a pedagogical method, respectively. The design of this dissertation study is similar to these studies in that there was space in each cross-school gathering for teachers to explore ideas and report the understandings they were coming to through reading theory-informed professional books, their ongoing explorations in classrooms, and discussions within our community of inquiry.

In Elster's (2009) study, CK and PCK were developed and reinforced as teachers explored the theoretical principles of Biology in context and competencies related to learning biology through three approaches, namely inquiry learning, problem-solving approaches, and self-directed learning. Elster explained how these approaches are commensurate with the theoretical perspective that learning biology is both competency- and context-oriented. Initially not all teachers tried one or more of the above mentioned approaches. However, as individuals tried them out and came back to share with the group, other community members took up and explored inquiry learning, problem-solving approaches and/or aspects of self-directed learning. Ultimately, Elster observed increases in teachers' understandings and classroom use of all three strategies. In this dissertation study, teachers were all introduced to theories and research-based concepts related to writing instruction and collaborative teaching. As in Elster's study, they were

not required to try a particular approach, rather they tried ideas and approaches that resonated with them. But over time teachers in this study also took up concepts and approaches that co-teaching partners and/or inquiry community members focused on and shared.

It is difficult to discern the kinds of knowledge teachers were introduced to or acquired in Sailors' 2009 study as those details were not reported, though based on other research described above, it is likely that such gains were made. On a very practical note, if teachers are not asked about the understandings they are developing it is hard to determine and describe whether shifts in knowledge were made. In this dissertation research, teachers were asked what they learned in addition to what they were doing (i.e., practices). Teacher learning – what knowledge educators constructed – was elicited and reported. Attending to understandings teachers develop from process-oriented professional development can advance understanding about how to tailor professional development activities and expectations to better foster teacher learning.

PCK grounded in reflection on problems of practice and possible actions.

In the studies reviewed here, some of the researchers who introduced particular theories, research and/or approaches witnessed participating teachers actively refashioning, reframing, and consolidating information in ways that allowed them to draw upon and adapt it based on problems of practice that arose. This observation might be considered or conceptualized in line with Shulman's (1987) notion of pedagogical reasoning and action. According to Shulman, sound reasoning requires both a process of thinking about what one is doing and an adequate base of facts, principles, and experiences from which to reason. Teachers, in cycles of reasoning and action, can draw

on their knowledge base to provide the grounds for choices and actions (Wilson, Shulman, & Richert, 1987).

In studies conducted by Butler et al. (2004), Ball (2008), Mitchell (2000), Snow-Gerono (2005), and Horn and Little (2010), teachers were invited or encouraged to frame and draw on their ongoing learning in ways that allowed them to define what they were attending to based on current problems or questions related to practice, draw in ideas, approaches and peers' perspectives and articulate how what they were learning helped them to understand and approach teaching and learning in different ways. A common feature across these studies was that teachers could share, analyze and theorize relationships between theories, practices, student data, and adaptability of thinking and practice in relation to what they were doing and noticing in their teaching. For example, Horn and Little studied two teacher inquiry groups that had formed based on shared secondary school content (Mathematics or English). The researchers attended to the protocols and the kinds of talk used by teacher groups and the degree to which these helped them to take up problems of practice. The more productive group focused on algebra, normalized a problem together, then specified it, revised their idea of what would happen in a lesson based on the issue at hand, resolved how they might address the issue in their teaching, and generated approaches together.

Similarly, in this dissertation study, educators were invited to surface what they knew and wanted to know related to a shared area of inquiry (writing instruction in diverse classrooms). Participants were able to work with each other to set goals, make plans and select, adapt and/or develop and apply practices within their classrooms. Within cross-school meetings time was dedicated to small group and whole group

reflection on what was working and what needed to be addressed differently. It was possible to study how engaging teachers in these activities provided an opportunity for educators to refine and develop new pedagogical content knowledge of and for practice.

*PCK that emerges when teachers actively take note of, reflect on and problem-solve **while** practicing.*

A final way in which PCK seemed to be fostered was evident in three of the studies, where teachers actively took note of, reflected on and problem-solved *while* practicing, including making theory practice connections (Ball, 2008; Butler et al., 2004; Snow-Genono, 2005). The activities of teachers in these studies can be likened to Schon (1983) and Cochran-Smith and Lytle's (1993, 2009) notion of reflection-in-action. In these three studies, researchers described how teachers took an inquiry stance while teaching, and in so doing were able to draw on their PCK while actively considering and addressing problems of practice. For example, in Butler et al.'s (2004) study, the researchers sought to find out if teachers gained new conceptual understandings through professional development activities *and* working with their students. The teachers were introduced to an approach called Strategic Content Learning as a way to support students' active self-regulation of their learning. Like other studies mentioned in this review, Butler et al. reported that teachers gained insights into teaching practices and effectiveness that reflected changes in their knowledge about teaching and learning. Of note, part of the way that teachers constructed new knowledge about teaching and students' self-regulated learning came from teachers actively thinking about teaching while actively revising their practice.

Ball's (2008) study helps to further build a case for attention to pedagogical reasoning and action in professional development activities. In her study, teachers seeking to develop culturally responsive teaching practices moved from making meaning, through exploring new theories in discussion and trying out related practices, towards thinking about and using their knowledge generatively. These teachers were able to express how the interactions they had with their students caused them to question, reframe and apply what they had learned in their professional development course to inform their pedagogical choices of action. Such a perspective moves away from teacher knowledge and research as final outcomes, to a more relative, on-going, dynamic, and situated process of making meaning by drawing on theory and practice in the moment to make decisions and tailor instruction.

Building from this research, in this dissertation I also examine the development of and/or shift in teachers' understandings of teaching and learning as associated with their engagement in professional development activities. The literature reviewed here suggests that the development of PCK and pedagogical reasoning is supported when teachers have opportunities to frame and draw on their ongoing learning in ways that allow them to define what they are attending to based on current problems or questions related to practice; draw in ideas, theories, approaches and peers' perspectives as part of ongoing inquiry; and articulate how what they are learning helps them to understand and approach teaching and learning in different ways. In a few of the studies, educators reported actively working to adapt what they were doing by reflecting and problem-solving *in action* by attending to challenges that emerged while teaching, drawing on theoretical and experiential knowledge and taking an inquiry stance. In this dissertation study,

collaborative teaching offered participating educators support to notice, reflect on, problem-solve and develop practices *within* their classrooms. This *in situ* collaborative inquiry was nested within cross-school meetings where co-teaching partners shared inquiry vignettes, reflected *on* action, offered ideas to one another and were encouraged to articulate what they were learning. Thus in this research I explored how these opportunities for teachers might have supported them to develop pedagogical content knowledge of, for and in practice.

Shifts in teacher practice.

Perhaps the most common type of outcome identified in situated, longitudinal, inquiry-oriented and collaborative professional development studies is teachers' use and/or development of practice. As noted earlier in this chapter, in each of the twenty studies I reviewed, practice was a vehicle, and often the desired outcome for, teacher learning and development. In many studies, trying out approaches in their teaching offered ways for teachers to make sense of ideas and develop knowledge that was both theoretical and practical. Only two of the twenty studies reviewed here did not have a practice-related research question or objective. When considering practices as outcomes, attention focused both on particular pedagogical practices developed by teachers (e.g., for supporting reading comprehension) and on inquiry as a kind of practice (e.g., trying out, monitoring, and revising practice so as to foster student learning).

Shifts in pedagogical practices.

To look at the outcomes sought out and/or observed, I grouped the studies reviewed here by types of hoped for practice-based outcomes. Across studies, attention focused on teachers' development of practices for: improving students' access to and

learning of curriculum in general education settings (e.g., Brownell et al., 2006; Santamaria & Thousand, 2004; Walther-Thomas, 1997); nurturing/developing students' cognitive skills/strategies (e.g., Hilden & Pressley, 2007; Sailors, 2009; Timperley & Phillips, 2003; Walther-Thomas, 1997); being responsive to the needs of others (e.g., Ball, 2008; Robertson, 2000; Sailors, 2009); encouraging and supporting students' active learning (e.g., Elster, 2009; Huziak-Clark et al., 2007; Klein, 2008); and helping students be generative thinkers/learners (e.g., Butler et al., 2004; Elster, 2009; Fazio, 2009; Wood & Lieberman, 2000).

Practices intended to improve students' access to and learning of curriculum.

Several of the studies reviewed focused on practices that have potential to increase access to learning and curriculum for students with learning challenges, for whom English is an additional language, and/or who struggle with learning (Ball, 2008; Brownell et al., 2006; Santamaria & Thousand, 2004; Walther-Thomas, 1997). In each of these studies, researchers did not require that teachers use specific practices. In three of the studies (Ball, 2008; Brownell et al., 2006; Santamaria & Thousand) teachers were introduced to approaches that they *might* take up and/or adapt within their contexts. Similar to this dissertation study, in their analyses researchers examined what kinds of practices teachers selected, used, adapted and/or developed with diverse learners in mind.

For example, Ball (2008) saw positive outcomes in terms of teachers' ability to develop and adapt plans and approaches that were responsive to their students' diverse funds of knowledge. In so doing Ball found that several teachers used generative thinking to make lessons relevant to and more engaging for their students. Using the lens of differentiated instruction (Tomlinson, 2001; Tomlinson & McTighe, 2006), Santamaria

and Thousand (2004) found that teachers promoted student choice, developed and used process-based student supports, varied learning tasks and used assessment as a teaching tool. They saw positive gains in teachers' practice in each of these areas – specifically in a special education teacher and primary teacher who co-taught together. Brownell et al. (2006) identified and introduced an extensive range of research-based practices that had potential for helping students with disabilities and other struggling learners progress academically and behaviorally in general education classrooms. Teachers were encouraged to identify individual students' needs and adjust curriculum and try out various instructional methods and behavior management techniques. Brownell et al. found that teachers adapted their instructional and behavioral expectations and techniques to help them better organize instruction, create supportive environments, and carry out cohesive instruction.

In this dissertation study the work of the inquiry community afforded teachers with opportunities to consider theory-informed examples of ways that writing workshop and other approaches to writing instruction could provide diverse learners increased, personalized access to writing instruction. Resources available to participating teachers included theory-informed professional resources, myself and examples from my teaching practice, their co-teaching partners, and the cross-school learning community where participants shared and discussed what they were doing and learning through their practice-based inquiry activities.

Practices intended to develop students' cognitive skills and strategies.

In several studies, the development of practices intended to nurture and develop students' cognitive skills and strategies were an intended and valued outcome. Three

studies focused on reading instruction reported positive shifts in teachers' practices, despite the different ways professional development activities positioned teachers in professional development activities (Hilden & Pressley, 2007; Sailors, 2009; Timperley & Phillips, 2003). In Timperley and Phillips' (2003) study, teachers were introduced to a variety of research-informed ways to support struggling learners based on the kinds of challenges students had. As teachers focused on getting better at reading comprehension instruction they engaged in a teach-, test-, re-teach process to determine if practices were working for students. Hilden and Pressley (2007) and Sailors' (2009) studies also involved the teaching of reading strategies. Like Hilden and Pressley, Sailors focused on helping teachers be more explanatory with students in their conversations about strategy use. However, while Hilden and Pressley invited teachers to determine the focus of their professional development meetings based on questions and challenges that emerged related to strategy instruction, Sailors' professional development sessions and in-class instructional coaching by researchers were more focused on teachers teaching a strategy in a particular way. One reason for this may be that there was not a structure in place for teachers to come together and share ideas and problem solve with others. Having an expert deliver the information at professional development sessions and be the coach in classrooms in between may have contributed to a more transmission-like approach and uniformity to the methods enacted.

In each of these studies, teachers explored how to explicitly teach and coach reading comprehension strategies. While practice gains related to teachers' reading instruction were reported in each study, only Hilden and Pressley and Timperley and Phillips reported related knowledge *and* practice gains.In this dissertation study, teachers

explored different ways to support students to develop writing skills and strategies. Teachers considered ways to target strategy instruction, but could take up and/or refashion practices related to students' strategy and skill development in ways that they saw fit.

Practices that help teachers to be more responsive in their interactions.

Many studies looked for outcomes related to practices that helped educators to seek out and act on the perspectives and needs of others (e.g., formative assessment; critical reflection). In Robertson's (2000) study with administrators, participants developed skills related to working effectively with others (e.g., teachers, other administrators) such as active listening, questioning and giving feedback. They practiced with each other first in sessions with Robertson and then as mentors to one another in their schools. Teachers in Ball's (2008) study sought out and tapped into the cultural and linguistic resources of their students and used this information to adapt their instruction. Similarly, in the studies of Fazio (2009), Sailors (2009), and Timperley and Phillips (2003), teachers demonstrated that they could seek out information from those they worked with to make their teaching more responsive. In studies involving teachers in the National Writing Project (Kaplan, 2008; Whitney, 2008; Wood & Lieberman, 2000) educators learned to give one another feedback on their writing.

In each of these studies educators sought out information from others and then used this information to shift their ongoing interactions. In this dissertation study, the notion of responsive teaching was surfaced in the professional resources read (Atwell, 2002; Calkins, 2003), examples shared from my teaching practice, and in examples by participants in cross-school inquiry community meetings. While no particular practice

was required of participants, responsive teaching was a practice that was valued and highlighted and became a focus for some teachers in the study.

Practices that nurture and support students' active learning.

Another goal adopted by researchers and/or teachers in the professional development studies reviewed here focused on supporting students to more actively engage in learning. This included practices that invite cognitive and metacognitive processes (e.g., Butler et al., 2004; Mitchell, 2000) and discipline specific ways of learning and doing (e.g., Elster, 2009; Fazio, 2009; Whitney, 2008) that are associated with active learning. For example, Mitchell (2000) reported that participating teachers tried out new teaching approaches to determine if they stimulated students' cognitive behaviors such as linking and monitoring. In Elster's (2009) research, teachers worked to get better at encouraging student problem-solving, self-directed learning, and inquiry. Practice outcomes included teachers planning inquiry units and developing challenging, ambiguous tasks in the service of developing students' competencies related to learning in Biology.

Huziak-Clark et al.'s (2007) study reported positive outcomes related to teachers' development of inquiry lessons. The researchers introduced teachers to a constructivist approach to Science education that involved five stages: engage, explore, explain, extend, and evaluate. Similar to these two Science education examples, Klein's study at the Big Picture School examined teachers working to become better at enabling and mediating relationships between students and content. A practice outcome in this study was observed in teachers' ability to integrate a self-directed learning approach to student learning and curriculum. Teachers worked to develop learning projects for and with

students that engaged students in setting learning goals, determining what content was to be learned, planning how to go about the learning, and problem-solving issues that came up in their learning as they engaged in inquiry projects. A second set of practice outcomes for the teachers was to learn how to work with students to ask questions and facilitate student learning in ways that left ownership for learning and inquiry in the hands of the student.

In this dissertation study, teachers also considered how they might increase students' ownership and authorship of their learning. Practices with potential to nurture and support students' active and metacognitive learning were introduced, considered and, in some cases, taken up by teachers within their inquiries.

Practices that help students to be generative thinkers/learners.

A number of studies reported practice outcomes related to helping students become not just active learners, but more generative thinkers and learners (Butler et al., 2004; Elster, 2009; Fazio, 2009; Huziak-Clark et al., 2007; Klein, 2008; Wood & Lieberman, 2000). For example, in Butler et al.'s study, teachers engaged students in interactive discussions that that helped them to reflectively guide their own learning. In Klein's study, teachers developed practices that helped students create individual learning plans. These student-generated learning plans supported students to engage with content in both an active and personalized manner. Fazio's study saw teachers use their new knowledge related to the nature of Science and Scientific inquiry and invite students to generate empirical knowledge using their background knowledge, resources at their disposal and inquiry learning. Finally, Huziak-Clark et al.'s participants planned inquiry units around the 5 E learning cycle model (engage, explore, explain, extend and

evaluate). Teachers in this study demonstrated that they were helping students to develop their own hypotheses, questions and explanations for phenomena and interactions they encountered through inquiry learning. Similarly, in this dissertation study teachers had opportunities to consider and explore ways to support students to be generators of their own topics, texts, and opinions.

Each of the types of practice outcomes reviewed in this section relate to this dissertation research; however, teachers in this study were not required to take up or develop a particular practice. While we read about, shared and discussed practices intended to improve students' access to and learning of curriculum in general education settings, nurture/develop students' cognitive skills/strategies, be more responsive to the needs of others, encourage and support students' active learning, and help students to be generative thinkers/learners, participating teachers chose what to work on and why.

In addition, the same kinds of practices that were presented and promoted for classroom use were valued and used by myself as a large group facilitator. Participating teachers were offered multiple ways to access the ideas and approaches our inquiry community explored. Teachers' use of cognitive skills and strategies such as asking questions, critical reflection, setting goals, making plans, and problem-solving were scaffolded within our group times together. I elicited what teachers believed, did and wanted to get out of the professional development experience and used this information to tailor our times together and inform my ongoing informal interactions with participants. I strove to shape our discussions and activities together in ways that were open-ended and required teachers to be active learners who made connections between ideas, process new information, personalize information and act on what they were

wondering and learning. Finally, our time together was designed to position teachers as generative learners and professionals. They made their own goals and plans, had time to reflect on what they were doing and learning, shared what they had done and developed, and adapted their goals and made new plans based on what they were learning through cycles of action and reflection, sharing and discussion with peers, and drawing in resources from me and the cross-school learning community.

Shifts in inquiry as a practice.

It was not just pedagogical practices that were considered as outcomes in the longitudinal, situated, inquiry-oriented, collaborative professional development studies reviewed here. Practices teachers enacted in the process of reflecting on and refining practice were also valued. Teachers' self- and co-regulation of and inquiry into practice are practices themselves, particularly in relation to developing pedagogical practices and achieving outcomes for students. Thus, in this review of practice-based outcomes, I consider how teachers within these 20 studies were selecting and adapting and/or creating pedagogical practices to respond to situations that arose with their students.

With this lens, such practices were sought and reported in several of the studies reviewed here, particularly those that recognized and/or worked from more relational and relativistic perspectives about teaching and learning. For example, in Ball's (2008) study, CK and PCK related to diversity and culturally responsive teaching were considered generative when teachers applied knowledge to solve instructional and pedagogical problems in the classroom. Whitney (2008) reports that teachers participating in the NWP summer institute engaged in reframing the practice of writing. They began to see writing as a social process of learning and discovery. Skills for writing and teaching writing were

then positioned within the writing of narratives, sharing works in progress, and giving feedback (Whitney, 2008; Wood & Lieberman, 2000). Fazio (2009), whose study focused on teachers' CK, reported that learning for teachers was visible through their problematizing of curricula and their own teaching in respect to theory they were introduced to about the nature of Science and scientific inquiry. In these studies the acts of problematizing teaching events, framing and reframing one's own practice, and engaging in inquiry were in themselves practice outcomes.

Considering teacher inquiry as practice also draws in a final pair of studies (Horn & Little, 2010; Levine & Marcus, 2010). Horn and Little's (2010) study looked at teachers describing and analyzing problems of practice. As teacher groups worked together they shared failures and successes, looked for reasons a problem arose using their conceptual resources, and planned ways to respond before going back into their classrooms. Levine and Marcus (2010) attended to teachers' use of language within small professional learning communities that were formed based on shared areas of practice. They looked at which group practices opened up or shut down group learning. They compared two groups' protocols to see which provided more transparency of practice. They noted that sharing examples of what was going on in the classroom related to a problem of practice helped to keep teachers' focus on specific aspects of practice that were challenging and to seek out and develop ideas and approaches that could spur the development of student learning and their own PCK. The design of this dissertation study offered participants opportunities to share examples of practice, collaboratively frame challenges as areas for further inquiry, and develop possible plans of pedagogical action.

Changes in teachers' disposition toward challenges (i.e., developing an inquiry stance) were conceptualized as a valued outcome.

In this dissertation, I position suspending judgment, calling upon conceptual resources and engaging in cycles of action and critical reflection as valued practice outcomes. I was looking to see if teachers' inquiry cycles could be conceptualized as a practice outcome in professional development studies and initiatives. As I suggested in my review above, it appears that teachers who experienced shifts in beliefs, attitudes, dispositions, and PCK made these changes with support of inquiry processes. In this dissertation research, teachers were engaged as inquirers who set goals; drew in resources from their previous experience and new ideas from readings and large group sharing; made plans; carried them out; and brought back examples and questions to fuel their next inquiry cycles. Part of this time together also involved opportunities to consider what they were learning, not just what they were doing.

Student learning.

Student learning is a valued, if not always measured, outcome in professional development studies. While all of the empirical studies referred to in this chapter offered evidence of shifts in teacher knowledge and/or practice, only nine provided a report on associated student outcomes. In studies like this dissertation study, where there was a detailed and multi-faceted attention to data related to teacher learning, there was an underlying intention that teachers are engaged in PD activities to develop understandings and practices to benefit their students (Ball, 2008; Borko, 2004; Brownell et al, 2006; Butler et al., 2004; Elster, 2009; Hilden & Pressley, 2007; Huziak-Clark et al., 2007; Mitchell, 2000; Sailors, 2009; Santamaria & Thousand, 2004; Snow-Gerono, 2005;

Timperley & Phillips, 2003). While the focus of most studies was on documenting shifts in teacher learning and practice, studies and initiatives reviewed here belong to constellations of studies and inquiries that value and link teacher learning and practice to student learning.

When the studies reviewed here did focus on student outcomes related to longitudinal, situated, inquiry-oriented and collaborative teacher professional development initiatives, they did find positive gains. This suggests that this approach to PD does have potential to support student learning. The nine studies that referred to student outcomes reported gains in: academic performance/achievement, cognitive strategies/skills, active learning, and generative thinking.

Increased academic performance was a theme in seven of the nine studies (Brownell et al., 2006; Hilden & Pressley, 2007; Huziak-Clark et al., 2007; Sailors, 2009; Santamaria & Thousand, 2004; Timperley & Phillips, 2003; Walther-Thomas, 1997), all of which reported improved academic performance for students. More specifically, in Sailors' (2009) study, participating teachers and researchers, acting as literacy coaches, used student data to plan and evaluate instruction, and observed positive outcomes in reading performance. Similarly in Timperley and Phillips' (2003) study, student data were used by teachers as they engaged in test, teach, and re-test cycles of reading instruction. Timplerley and Phillips saw significant gains for students of teachers who engaged in classroom-level action and reflection, compared to students of teachers who did not participate and of teachers who participated but did not try to change their practice.

Timperley and Phillips (2003), Sailors (2009), and Hilden and Pressley (2007) tracked and reported gains in students' use of cognitive strategies. Hilden and Pressley reported growth in students' reading comprehension behaviors. For example, they witnessed students making and sharing prior knowledge connections with one another. This focus on reading comprehension strategies could be seen in several observations that were made by the researchers and reinforced by what teachers noticed.

In the studies of Ball (2008), Butler et al. (2004) and others (Brownell et al., 2006; Huziak-Clark et al., 2007; Pressley & Hilden, 2007), cognitive strategy use and development were related to practice goals focused on students becoming more active and metacognitive learners. In Brownell et al.'s (2006) study students were introduced to a range of cognitive strategies for reading comprehension and study skills, but teachers also focused on active learning strategies such as reflecting and monitoring. It seems that a combination of metacognitive and cognitive strategies resulted in gains in both areas. In Butler et al.'s (2004) study there was a focus on teachers supporting students to be more self-regulated learners. When the researchers examined data to see if corresponding gains were made for students, they found that students had greater self-awareness, were more actively thinking about their learning, and felt they had greater control over their learning processes. These students also demonstrated improvements in their cognitive strategy use. Huziak-Clark et al. (2007) focused on using inquiry-based teaching to increase students' conceptual understanding of important concepts in Science and Mathematics. Professional development activities introduced teaching approaches focused on active learning and subsumed, but attended to, an increase in students' use of cognitive strategies to construct conceptual understandings.

In Ball's (2008) study, students were reported to demonstrate generative thinking and learning. Students in this study showed themselves to be problem-solvers who investigated and shared information about their culturally-influenced literacy practices, and integrated their cultural knowledge when completing academic assignments. Teachers helped students to be problem-solvers and demonstrate increased metacognitive awareness. Examples of students' generative thinking included writing social critiques, making plans for change, and developing a sense of voice and agency. Interestingly, studies that valued and sought active and generative thinking on the part of students (e.g., Ball, 2008; Butler et al., 2004) were also designed to nurture parallel kinds of thinking and action in teachers.

While I am not directly focusing on student outcomes in this dissertation study, increased students' access to and success with curriculum and active and generative approaches to learning were valued goals of myself and many of the teachers participating in this project. It is encouraging that other studies have moved to linking PD processes and student outcomes and found positive results in both. Through an examination of 20 PD studies, the kinds of activities teachers engaged in, the kinds of practices introduced, and the kinds of gains intended for students showed relationships between what is valued and what might be expected. It is worthwhile to look at process-oriented PD anticipating that positive student outcomes can be associated with teachers' knowledge and practice shifts.

Teacher collaboration as a valued outcome in process-focused professional development.

Another kind of positive outcome in professional development-related studies is teacher collaboration. Studies reviewed focused on collaboration processes and benefits too. Studies reported outcomes associated with how educators engaged in collaboration (processes) and positive benefits from engaging in that collaboration (benefits).

Collaboration as a process.

The emergence and development of different aspects of collaboration can be seen as positive outcomes in professional development studies. The ways educators interact together range from sharing ideas and practices to giving one another feedback to problem-solving in generative ways.

At one level teachers sharing ideas, methods and resources was a tangible outcome observed within most studies (e.g., Ball, 2008; Brownell et al., 2006; Butler et al., 2004; Elster, 2009; Fazio, 2009; Klein, 2008; Levine & Marcus, 2010; Robertson, 2000; Snow-Gerono, 2005; Wood & Lieberman, 2000). For example, Fazio's participants shared ideas, resources and materials. Levine and Marcus (2010) found that colleagues' work was more likely to be a resource for one another when depicted with clarity and concrete detail. By sharing plans and illustrative student work they provided colleagues with examples of how theories and ideas could be realized in action. Brownell et al.'s (2006) participants engaged in discussion of students' learning and areas of difficulty on which to focus. Educators reported learning many ideas from colleagues and researchers through informal sharing. Brownell et al.'s study developing similar yet situated goals and plans offered teachers opportunities to discuss common issues, offer each other

examples of how they addressed these issues, and take someone's else's idea or approach and make a strategy of their own.

Several studies illustrated constructive ways that teachers offered and received feedback from one another (e.g., Fazio, 2009; Horn & Little, 2010; Robertson, 2000; Wood & Lieberman, 2000). Fazio observed that when participants made their practice public, others were able to provide feedback. When their work was shared in a way that invited feedback teachers were able to critically reflect on the approaches and examples that were shared. The teachers that Wood and Lieberman (2000) observed began to seek one another out for counsel and critique. Teachers expressed that because they participated in NWP institutes they had had conversations and exchanged feedback with colleagues whom they would not normally discuss teaching with. These interactions offered teachers evaluative feedback that they used to reflect on and adapt their own writing, instructional plans, and understandings about student learning, writing, and instruction. In this dissertation study, teachers had opportunities to give one another feedback on ideas, approaches and examples that were shared. It was hoped that colleagues receiving others' perspectives on ideas, approaches and their work would support their learning and development of practice.

In some studies teachers collaboratively problem-solved in generative ways. Moving from sharing and offering feedback to problem-solving in generative ways involves another set of collaboration skills. In Levine and Marcus' (2010) study the structure of the collaboration was important: how teachers shared and discussed their teaching with colleagues either afforded or constrained the generativity of the conversations. More generative problem-solving involved what Snow-Gerono (2005)

calls "collaborative analysis". and Fazio (2009) refers to as "collaborative reflection and problematizing." In their study of teachers working together in a study group Horn and Little (2010) found that "linking work" happened in conversations between teachers when they collaboratively worked to construct a class of instances and derived a common teaching problem and set of principles to work from. These teachers positioned themselves as a group generating knowledge together. Mitchell (2000) found that over time reflective talk between teachers (with a shared inquiry focus that included cycles of action, data collection and reflection) moved from discussion of activities to discussion about types of practices/strategies and their purpose and potential. From Klein's teachers at the Big Picture School discussing and problem-solving cases together to Robertson's administrators who found that the more they worked together, the more they developed a range of ways to work with others, these studies saw educators collaboratively framing issues, posing questions, considering multiple options, and testing out new theories.

One other type of collaborative process enacted by teachers in four of the studies was collaborative teaching (Brownell et al., 2006; Huziak-Clark et al., 2007; Santamaria & Thousand, 2004; Walther-Thomas, 1997). Co-teaching offered colleagues opportunities to share, try out, offer one another feedback and problem-solve *in situ.* In these studies educators had the opportunity to work together in a classroom. Walther-Thomas (1997), Huziak-Clark et al. (2007), and Santamaria and Thousand's (2004) studies all involved teachers' sustained collaboration in classrooms which supported them to give one another feedback throughout cycles of co-planning, co-enacting and co-debriefing. Brownell et al.'s (2006) professional development process was driven more by collaborative problem-solving outside the classroom, focusing on what teachers felt

they needed to change in their teaching practice. With this dissertation research I explore how the processes of in-class collaborative teaching activities might support and be supported by out-of-class collaboration processes within a cross-school community of inquiry.

Benefits of collaboration.

As discussed in the previous sections of this chapter, professional development initiatives that have sustained, situated, inquiry-oriented, and collaborative components built into their design can have a positive impact on teacher dispositions/attitudes, content and pedagogical content knowledge, practice, and student learning. Here I highlight three additional collaboration-specific benefits for teachers: the creation of feelings of connectedness, the formation of a sense of community, and the desire to seek out and create more collaboration.

Fazio (2009) notes in his study that the action research community countered teachers' sense of isolation. Teachers reported that participating in the professional development project resulted in social benefits such as enhanced trust, support and collegiality. In this and several of the other studies feelings of connectedness emerged between educators in a way that offered personal and professional support (e.g., Fazio, 2009; Levine & Marcus, 2010; Walther-Thomas, 1997; Whitney, 2008). One of the hoped for outcomes in this study was that ongoing collaboration would lessen teachers' feelings of isolation by linking individuals to social networks and supports.

Across several of these studies, one benefit researchers reported was the formation of a sense of community. Robertson (2000) found that "the action research methodology permeated the culture of the way people worked together" (p. 1). For

example, Roberson describes the development of a shared critical awareness about school leadership between participants. Similarly, Fazio reported cohesiveness of community between the participants in his study. Teachers reported that the establishment of a trustworthy and supportive community of professionals supported them to take risks to construct, evaluate, and accept knowledge while dealing with the emotive components of belief reconstruction. In her study Whitney (2008) surmised that community formed through teachers' participation in collaborative activities; teachers felt like they had built a learning community and now belonged to the larger NWP community. This was identifiable through a shared commitment to student learning, a community-of-practice approach to writing instruction, and professional learning that engaged them as writers within a community of writers.

One additional benefit of collaboration in these studies was that participants came to value, seek out and even create more collaboration. In Brownell et al. (2006) all teachers expressed a desire to continue with the learning community. Even those who made fewer "gains" expressed that they felt learning collaboratively in a community-of-practice approach to professional development was valuable for them. In Butler et al.'s (2004) study, teachers were very positive about the opportunities they had to work collaboratively with other teachers. In the second year of the study, teachers took more ownership for the direction of the learning community and their own learning, relying less on the researcher as expert. The investment in and feeling of ownership of the learning community was a benefit seen across many of the studies, suggesting that teachers would maintain, find or create learning communities after the study was completed. In fact, Elster (2009) reported that participants' motives for taking part in the

professional learning community shifted from learning about concepts and experts'

knowledge (which was part of the design, activities and outcomes of the study) to

building a network of learning communities to continue and extend teacher to teacher

collaborative activities. Certainly a goal of this study was to determine if participants

would see the community-of-inquiry approach to professional development as positive

and worth sustaining.

There are two kinds of outcomes related to collaboration that surfaced in this

dissertation study: collaborative processes and collaboration-related benefits.

Collaborative interactions – teachers developing ways to work together - are valuable

outcomes in education. Collaboration can include working together to share ideas and

understandings rendering them trustworthy through critical dialogue and lived experience

(Wood & Lieberman, 2000). Benefits of collaboration span shifts in teachers'

attitudes/dispositions, knowledge and/or practice, and student outcomes; teacher

collaboration-specific benefits can also include feelings of connectedness, the forming of

community, and seeking out and creating more collaboration. Both of these types of

outcomes are of interest in this dissertation study; thus, I teased out and examined

outcomes related to collaboration as process (e.g., ways of working as valued) vs.

benefits of collaboration (e.g., building community, helping overcome a sense of

isolation).

Ideas Inquiry Community Members were Introduced to

While this dissertation examines the *qualities* and *impact* of a longitudinal,

situated, collaborative, inquiry-based approach to professional development, the ideas

and approaches introduced to teachers during our year together were also part of the

study's ecology and thus influenced community members' doing and learning. For the remainder of this chapter, I describe the key areas that participating educators considered and explored while working together over the course of a school year: writing instruction, writing instruction as inclusive practice, and collaborative teaching.

Writing instruction.

As briefly noted in chapter one, study participants (classroom teachers, learning resource teachers, district administrators) felt that they had engaged in a significant amount of professional development related to reading instruction in recent years, but did not feel "up-to-date" when it came to current thinking about the teaching of writing. Emphasis on reading instruction over writing instruction is not unique to this school district or region. In *Writing Next* (2007) Graham and Perin point out that improving writing instruction is a topic that has not received enough attention from researchers or educators even though "writing skill is a predictor of academic success and basic requirement for participation in civic life and the global economy" (p. 3). Writing provided a shared area of interest and inquiry in this study.

As part of the professional development approach used in this study, participants were provided with a professional resource related to writing. Participants chose one of two professional resources, Atwell's *Lessons That Change Writers* (2002) or Calkins' *Unit of Study for Primary Writing* (2003) to read, discuss and draw from during the study. Because these resources helped to shape teachers' thinking as part of their PD experience, it is important to provide some background information on these texts.

Atwell and Calkins are considered leaders in the teacher research and writing movement. Their previous, seminal works, both published in 1986 - Atwell's *In the*

Middle and Calkins' *The Art of Teaching Writing* – "took up" many ideas expressed in constructivist and socio-constructivist approaches to composition. These seminal texts are oft referenced in current research and professional texts (e.g., Graves, 2004; Ray & Laminack, 2001; Thomas, 2005; Wollman-Bonilla, 2004). In the early to mid-80s these two teacher-researchers were part of learning communities that spanned teachers, researchers and scholars. Their 1986 professional books demonstrated the ways that those learning communities had applied current thinking about the teaching of writing (i.e., theoretical principles) in their classrooms. These ideas included writing process, writing workshop, teachers as writers, and connections between reading and writing.

Atwell and Calkins drew in leading edge ideas from those they had worked with including Elbow (1981), Flowers and Hayes (1981), Graves (1983, 1984) and Hillocks (1986). Their books reflected a new praxis emphasis on links between writing process, the learner, and the text (Bereiter & Scardamalia, 1982; Flower & Hayes, 1981; Graves, 1984) that had been realized through sociolinguistic and ethnographic studies over the previous decade (e.g., Cazden & Hymes, 1972; Halliday, 1978; Heath, 1983). The research of Halliday, Heath, and their contemporaries paved the way for socio-cultural definitions of literacy that helped educators consider how students purposefully use and create context from and through writing. From this perspective the meanings of texts are generated through a transaction between writers and readers. These meanings are not static but rather are created through a comparison of shared and differing beliefs, experiences, and cultural reference points (Hillocks, 1995, 1999; Rogoff, 1990; Rosenblatt, 1938/1995; Vygotsky, 1934/1986, 1978; Wilhelm, 2001).

When Atwell and Calkins revised their texts in the 1990s (Atwell, 1998; Calkins, 1994), they modeled how teachers' thinking and practice can continue to evolve through ongoing inquiry and bi-directional, theory-practice learning. Their more recent and practical texts used as resources by the participants in this study (Atwell, 2002; Calkins, 2003) show how their thinking has continued to evolve and give explicit, concrete examples of the principles presented in their more narrative texts from the 1980s and 1990s. Atwell's *Lessons That Change Writers* (2002) and Calkins' *Unit of Study for Primary Writing* (2003) show how explicit teaching, process approaches to writing and writing workshop can work together. What these authors share is a belief that effective teaching is responsive teaching that attends to context, not a set of generalizable steps that can be applied universally. In her text, Atwell (2002) offers up her ideas and lessons as an example of a teacher thinking through her practice – she includes both what she says and does during a particular lesson as well as sharing her rationale. She also encourages her readers to be fellow inquirers, to read and adapt her ideas based on principles that she outlines.

These two texts informed our community of inquiry rather than guiding it. Taking up these texts within the context of inquiry allowed group members to (re)consider what these ideas might mean and look like in their practice. Introducing Atwell and Calkins as teacher-researchers who are continuing to revisit and revise their understandings, positions and practices over three decades helped nurture a reflective and reflexive tone in our inquiry community. Similarly, each participant was invited to (re)examine what they did and believed in terms of writing instruction.

During the cross-school learning community meetings, there were several jumping off points (foci of discussion). Two ideas taken up by Calkins and Atwell, *writing process* and *writing workshop,* were familiar terms to group members, but provoked much discussion and exploration as participating educators wondered what these really meant and how they applied to today's classrooms. Referencing Atwell's and Calkins' texts provided a background of ideas for us to draw from and explore. Then, as things unfolded dynamically, building from these texts, examples from my own teaching (Brownlie, Feniak & Schnellert, 2006; Schnellert & Widdess, 2005), and participants' sharing of their school- and classroom-based activities, we linked our explorations of writing process and writing workshop to ideas such as reading/writing connections, teacher as writer and model, mini-lessons, and formative assessment. Thus the group worked from more general to more specific ideas and practices, with teachers connecting them through reading, discussing, sharing, problem-solving, planning and teaching.

Writing process.

When it comes to writing, "writing process" is one of the most commonly used terms in education texts, curricula and classrooms. Writing process refers to the different kinds of activities or thinking strategies used to compose a piece of writing. These thinking strategies are often categorized as prewriting, drafting, revising and editing (NWP & Nagin, 2006). Dewey (1915) and others' calls for experiential student-centered education paved the way for writing-process research using methods and approaches from the fields of language and cognition. However, Graves (2004) and many others (e.g., Fisher & Frey, 2007, Thomas, 2005) point out that what started out as a progressive, constructivist concept has often been reduced to a linear process. When

Graves coined the term *writing process* he did "not mean for it to become a regularized process or set of steps" (2004, p. 90). Instead, "most research today support[s] the view that writing is recursive, it does not proceed linearly but instead cycles and recycles through subprocesses that can be described [as]… planning (generating ideas, setting goals and organizing), translating (turning plans into written language), [and] reviewing (evaluating and revising) (NWP & Nagin, 2006, p. 25).

For our community of inquiry, clarifying what the various aspects of a writing process might be (e.g., prewriting, drafting, sharing, editing, publishing) helped group members to see if and when their students had opportunities and/or were encouraged and supported to try these approaches. This was tempered by a discussion about how the writing process is also chaotic – "something that each writer must find for herself, not something that can be prescribed" (Thomas, 2005, p. 14). Fisher and Frey (2007) note that, "a lock step focus on the writing process is misguided," they would be more comfortable if the term were writing processes (p. 7). Perhaps, then, an important activity for any group of teachers exploring writing instruction is to examine, problematize and personalize what terms like *writing process* can and might mean.

Exploring writing process(es) holds a great deal of potential for teacher inquiry groups because, like professional development and inquiry, "writing is, after all, a medium for learning to think" (Graves, 2004, p. 90). Research and thinking around writing process focuses on writers developing personalized *and* interactive goal-directed inquiry-oriented cycles of planning, translating and reviewing. As mentioned earlier in this chapter, this study is grounded in a similar perspective on learning applied to teacher professional development. This study looked at how teachers developed ways of thinking

and teaching that involved generating ideas, setting goals, organizing, turning plans into actions, evaluating and revising. In many ways longitudinal, situated, inquiry-based and collaborative approaches to professional development can be seen as parallel to process approaches to writing.

Writing workshop.

A second idea we took up and that was teased out in the Atwell and Calkins resources is the *writing workshop* approach to teaching writing. Researchers and practitioners use *writing workshop* as a way to characterize a process approach to writing that takes into account the different kinds of activities that writers engage in, but also allows students (and teachers) to personalize and situate what this looks like. Thomas (2005) suggests that the best unifying metaphor for a writing program is the workshop, since it implies direct practice of the field and a certain level of structure combined with the open-ended nature of independent projects. Ray and Laminack (2001) contrast teaching that controls most aspects of a writer's process with writing workshop where the focus is on writers using the writing process in their own way based on decisions that they are making. They write "students in writing workshops utilize all the steps of the writing process – their teachers give them lots of instruction around the process so they can get pieces ready for publication – but it's not as though they really *do* the writing process. It's more like they *use* the writing process to get other things *done"* (p. 4).

Looking across Ray and Laminack (2001), Atwell (1998) and Calkins (1994) work, Thomas (2005) ascertained that the principles of *writing workshop* include:

> - students and teachers… are dedicated to daily writing with a purpose and to
> recreating as vividly as possible the writing life within the classroom…

- many, if not all, of the major writing assignments that students complete through all stages of the writing process are governed by writer choice in both content and form…

- large blocks of time for writing are provided in all stages of the writing process. The workshop also offers students time to work alone, with a peer, in groups, and with the teacher…

- a wide variety of authentic texts in the form of classic and contemporary writers, in all genres, are at the disposal of all students by choice and when guided...

- direct teaching…often refer[ed] to as the "mini-lesson" is provided regularly. This instructional approach usually grows from the needs revealed in students' own writing and from the expertise of the writing teacher. Mini-lessons are brief (maybe ten to fifteen minutes long) and deal with direct writing instruction, craft lessons, author studies, literature studies, or a wide variety of student needs or course assignments…

- authentic publishing goals are set whenever possible

- rigor and standards of the writing field are balanced with consideration of each students' individuality as a writer. Students must feel safe to experiment and to fail without fear of punishment, but they must also become aware of the criteria by which all writers are judged in the larger community (pp. 49-50).

Our inquiry group built on and delved into some of these areas in our times together. We talked about and explored Atwell's qualities of writing workshop, and considered when, how, and why they be might used.

In keeping with the principles of both teacher inquiry and writing workshop, at the first meeting of the learning community participants were offered a few ideas to consider as possible jumping off points for professional development. They could use these principles and related ideas or any others they chose to support their own goal setting, planning, teaching and collaborating. First, Atwell's (2002) "Expectations and Rules for Writing Workshop" and "Conditions of a Writing Workshop" were shared and discussed (pp. XX-XVIII). The next day four related approaches were shared for group members' consideration. These ideas can be described as: reading/writing connection, teacher as writer and model, mini-lessons, and formative assessment.

Reading/writing connection.

One concept that our inquiry community explored was the reading/writing connection. We discussed how students need models of writing from which to draw and develop their understandings of writing (Atwell, 1998; Calkins, 1994; Rief, 2006). Rief (2006) calls using others' writing to mentor one's own "*reading as a writer.*" Teachers in this study discussed ways to invite students to engage with a genre of writing to analyze and articulate its characteristics. This included using texts as "fuel" for student thinking about specific writing craft techniques (or "moves") and to develop knowledge about subjects they are writing about.

As identified by Thomas (2005), one of the qualities/characteristics of an effective writing workshop is a wide variety of authentic texts at the disposal of all students. Thus, teachers in this study were encouraged to think of all kinds of texts (fiction, non-fiction, images, oral texts, etc.) as supportive to students at any stage in their writing. When students have opportunities to look at texts to see how they are constructed and think

about what they can borrow or emulate in their own texts, they are joining a culture of writers. Participating educators were also encouraged to think about the benefits of students re-reading their own work. They discussed how re-reading offers potential for students to find and include new information, reinforce the knowledge and writing moves that they are working with, and become more metacognitive about their writing and learning. Ray and Laminack (2001) suggest that reading that happens during a writing workshop needs to be purposeful and intentional.

Our learning community discussed how attending to the reading-writing connection can help students and teachers to consider what should be valued in writing and why. Attention to the reading-writing connection helped to bridge the participants' recent multi-year professional development focus on reading to reading's relationship to writing.

Teacher as writer and model.

Educators in the inquiry community discussed, considered and explored how important it is for teachers themselves to write (Graves, 2004; Leggo, 2007; NWP & Nagin, 2006). With support from the Calkins and Atwell texts and my reading of research from National Writing Project (2006), Rief (1994, 2006, 2007) and Graves (2004), I focused with teachers on how "writing with and for students is one of the best uses of instructional time there is" (Graves, 2004, p. 89).

We read about and discussed how teachers engaging in and modeling writing helps students develop as writers. Teachers tried out sharing their own writing-in-progress with our learning community and their students. This was grounded in the idea of writer as generative learner. Teachers were encouraged to position themselves as

learners within their classrooms rereading and revising their work, soliciting advice from students (and co-teachers) about their writing, and making decisions about next steps. We also discussed how the teacher taking a stance as a developing writer can help to nurture a culture of risk-taking where each author is encouraged to develop personalized writing processes and products. In support of this perspective Thomas (2005) writes, "[e]ffective writing teachers live the writer's life; they are writers themselves, both by choice in their professional lives and as models within their classrooms" (p. 47). In our discussions I surfaced the notion that in classrooms where teachers are writers, there are opportunities for them to model their iterative, yet idiosyncratic writing processes and invite students to develop and refine their own processes. Supported by the texts we read and examples from each others' inquiry activities, teachers shared examples of how they solicited advice from students and offered students opportunities to think like writers and draw upon their knowledge of writing craft.

In this study, I modeled my own writing process and invited teachers to give me feedback as I revised my drafts. Teachers also engaged in writing narrative and poetic pieces and were encouraged to write with and for their students. Thus, an underlying concept explored by teachers in this study was how teachers engaging in and modeling their writing practice can help students learn about and develop their own writing practice within a community of writers.

Mini-lessons.

Another idea explored by the learning community was the "mini-lesson" and how it might fit within a constructivist approach to teaching. In the 1980s Lucy Calkins (1986) developed the concept of *mini-lessons* as a way for teachers to teach whole-class lessons

when students in a writing workshop classroom are at different stages writing pieces about a different topics (Ray & Laminack, 2001). We read and discussed how the *mini-lesson* is developed and offered in response to what appears would be most helpful to many students in the class.

Within our time in the cross-school inquiry community we discussed and considered examples of how mini-lessons involve teachers instructing students on specific techniques to be applied to writing, but in a way that supports a process writing (constructivist) approach. Supported by the text we read, we reflected on how in a workshop format, students are working on various pieces and may not need or want to use the technique modeled in a mini-lesson in the piece they are working on. From this perspective the mini-lesson involves *offering an approach as a tool* for writers to consider, try out and decide if and how they want to use it. In Atwell's text we read about encouraging students to try the mini-lesson technique on a piece of their own writing and keep a copy of the approach in a strategy book/binder that they return to as needed based on the craft questions that arise as they continue to write (Atwell, 1998). Taken from a constructivist perspective these techniques become part of an author's toolbox.

Most teachers in this study reported that prior to our work together they were rarely using a workshop model or mini-lessons. They were either guiding the entire process of students writing pieces or simply assigning writing tasks with little to no instruction. Conferencing was another aspect of instruction that became a point of shared interest. Graves (2004) notes that up until the mini-lesson a writing conference was the primary vehicle for writing process instruction. The mini-lesson along with writing

conferences became primary vehicles for inquiry community members' investigation of writing process instruction.

Formative assessment.

Another "jumping off point" offered to the group was the idea of using, and involving students in, formative assessment. Assessment – both formative and summative – has become a focus for research on student learning and achievement. Many researchers and professional development initiatives now highlight the importance of being clear about learning outcomes and using the same criteria for formative and summative assessment (Butler, Schnellert & Cartier, 2008; Carmichael, 2006; Marshall & Drummond, 2006; Wiliam, 2007).

While not explicitly stated in the Atwell or Calkin's texts, I drew current thinking about formative assessment into our inquiry community conversations. My decision to invite teachers to consider ideas and practices related to formative assessment was grounded in Hillocks' (2002) extensive research regarding writing standards and assessments and the NWP's (2006) position that "[f]or teachers and students, assessment should have an instructional purpose, not simply administrative or evaluative" (p. 76). I suggested to the group that by focusing more on formative assessment, we can identify areas to be addressed through instruction as students' needs are uncovered.

A second key idea I shared related to formative assessment was that while such approaches help teachers to focus and be responsive in their instruction, they do not necessarily help students to help themselves internalize and use standards and expectations. Current thinking suggests that if teachers want their students to be able to determine what thinking and language processes a writing activity requires of them, and

then to identify and use approaches that will help them successfully develop and communicate their ideas and understandings, then formative assessment approaches should focus on student thinking and ownership (Black, Harrison, Lee, Marshall, & Wiliam, 2003; Brownlie, 2009; Stiggins, 2002). We discussed how attention to student ownership and self-regulation of their learning and writing includes asking students to set goals and monitor their attempts to reach these goals (Butler & Schnellert, 2008).

One specific concept introduced to the teachers in this study was the potential of establishing reachable goals for student writing. The educators in this study discussed ways to help students to understand how they think about and can successfully approach tasks. I noted and modeled how published work, student exemplars, and existing criteria can be used to fuel discussions about task demands and requirements. Participants were also introduced to the idea that it can be beneficial for students to be involved in the development of criteria for tasks. I proposed that involving students in co-constructing criteria provides them an opportunity to think as writers by accessing what they have learned from models they have read and personalizing what this means through a process of negotiation with peers and teachers. It was suggested that by analyzing tasks and the strategies needed for success, students have opportunities to construct an understanding of what is needed to meet expectations.

Writing instruction as inclusive practice.

Writing instruction and teaching diverse learners were joint foci for learning community members in this study. Focusing on writing instruction provided a bridge for teachers to think about and try out approaches that had the potential to engage and support diverse learners in their inclusive classrooms. But in the Southern Arctic school

district where this study took place, the larger challenge for schools and teachers was to explore how they might reach and teach all of their students. Their territorial inclusion directive, supported by local indigenous ways of knowing, gives teachers the responsibility of including and teaching all students in their classrooms. The school district has had a long-standing commitment to inclusion; however, the district administrator responsible for inclusion recognized that "learning how to teach to diversity and truly include those with disabilities is not an overnight thing" (interview). District administration (associate superintendent, two district-level administrators) recognized that classroom communities are diverse and believed that all learners need support and opportunities to learn and develop learning-related practices. These factors helped to shape the focus of and discourse within this dissertation research.

There have been recent calls for teachers to explore and utilize various approaches to writing instruction in ways that better meet the needs of diverse learners in classrooms (National Commission on Writing, 2003, 2004, 2005; NWP, 2006). Of note, the Carnegie Corporation funded a comprehensive review of research, published in 2007, related to struggling writers and writing instruction. *Writing Next* is a meta-analysis that focuses on struggling student writers in grades 4-12; recommendations were made based on the strength and effects of instructional practices on student writing quality. The authors, Graham and Perin, highlight practices that hold the most promise. Interestingly the trends found and recommendations are the same for students with and without writing difficulties. *Writing Next* highlights specific teaching techniques for all settings including inclusive classrooms.

In order to meet the needs of diverse learners, *Writing Next* offers eleven recommendations. One of the eleven recommendations is that teachers use a *process writing approach* highlighted by:

- A workshop environment

- Extended writing opportunities

- Writing for authentic audiences

- Personalized instruction

- Cycles of writing

These ideas match up well with the ideas and resources explored and discussed in our learning community. In *Writing Next,* writing workshop is offered as an inclusive approach where all students are viewed as writers who make choices about their writing, tell their own stories, and belong to a community of writers. In this study writing workshop was selected and offered as an instructional approach in part because it values and encourages diversity and can offer teachers the space to individualize instruction (i.e., descriptive feedback, personalized learning goals).

Other recommendations in *Writing Next* that were explored include:

Writing strategies – teaching students strategies for planning, revising, and editing their compositions;

Collaborative writing – creating opportunities for students to work together to plan, draft, revise and edit their compositions;

Specific product goals – setting specific, reachable goals for student writing;

Word Processing – using word processing as a support for writing assignments;

Prewriting – planning activities and teaching strategies to help students generate or organize their ideas for compositions;

Inquiry activities – engaging students in analyzing information to help them develop ideas and content for writing tasks.

While approaches recommended in studies like *Writing Next* appear in many North American curricula and policy documents, they are not used frequently or consistently in inclusive classrooms to meet the learning needs of students. Loreman (2007) argues that:

The school curriculum in many Western countries presents significant challenges for educators trying to implement an inclusive approach to education. There is a tendency for curriculum in today's school jurisdictions to be linear, inflexible, divorced from context, overly specific, centralized, and unresponsive to the needs of minority groups (Goodman & Bond, 1993). This sort of prescriptive curriculum has led to much teacher-centered instruction, as teachers struggle to meet mandated 'outcomes' which students must demonstrate. Inclusion benefits from more child-centered modes of instruction, or even those which concentrate on relationships and the learning that occurs in small groups, known as de-centered learning (Loreman, 2007; Rinaldi, 2006). Clough (1988) calls for a reformed curriculum broad enough to suit the needs of students with a wide range of disabilities. Clough sees 'special education' as primarily a curriculum problem and argues "…that it is only through a greater understanding of the curriculum that we may hope to break through to an understanding of individual problems" (p. 327).

Open-ended approaches such as writing workshop and writing process were

introduced to participants in this dissertation study as inclusive structures that do not need to set a ceiling on what students can learn and do. Rather, teachers can use them to allow students to stretch as far as they can go in using language and pushing the edges of their current knowledge. At the same time, working with criteria as well as peer- and self-assessment can support all learners in thinking about their learning and contributing to the learning of others. Many aspects of writing workshop invite students to identify and share relevant background knowledge. This involves designing classroom activities that take into account the diverse strengths, challenges, and interests of all class members.

This professional development study encouraged teachers to explore how approaches like writing workshop and writing process can support diverse students' learning in their classrooms. This study offered educators an opportunity to rethink their instruction with diverse learners in mind. Connecting an attention to developing their writing instruction and increasing access to learning in their diverse classrooms, educators had opportunities to set goals, make plans, try our approaches, and reflect on actions taken.

Collaborative teaching.

A final focus in the learning community was deliberate and explicit discussion of different forms of collaborative teaching. As part of this study, I am examining collaboration as a central aspect of the PD model. In this context, it is important to surface and describe how attention to collaboration, and its role in supporting student learning, was deliberately and explicitly established and considered within the inquiry community through co-teaching partnerships.

One of the parameters for joining the learning community was that attendees participated as LRT and classroom teacher partners who would collaborate together during the school year. Co-teaching has been widely promoted as a method that can be used to maximize the potential of students within inclusive settings (e.g., Creasey & Walther-Thomas, 1996; Lenz & Deshler, 2004). Co-teaching literature focuses on partnerships between classroom teachers and special education (i.e., learning resource) teachers. Within co-teaching partnerships, a resource teacher's role might include:

- team teaching lessons in the class, where both teachers have interchangeable roles leading lesson sequences, checking in with small groups, creating adaptations and modifications within the sequences to scaffold specific students' learning;

- complementary instruction, where each teacher takes on specific aspects of the lesson, for example, one teacher prepares the strategy sequence and a graphic organizer, while the other finds a range of texts and adapts the sequence and organizer for various students;

- supplementary instruction, where one teacher takes the lead in large group instruction and the second teacher works with small groups to pre-teach, re-teach, or deepen understanding (Hourcade & Bauwens, 2002).

In our first session together participants in this study were introduced to these three kinds of co-enacting. I explained that co-teaching typically involves planning together with the diverse needs of all learners in mind. Building on co-teaching research (e.g., Santamaria & Thousand, 2004; Walther-Thomas, 1997), I proposed that classroom teachers and special educators working together in inclusive classrooms might support not only student learning, but participating teachers' professional learning. From this

perspective co-teaching offers an opportunity for teacher professional learning supported and spurred through collaboration.

Synthesis and Conclusion

With this dissertation study I attempt to connect the dots between how the design of professional development initiatives and the content explored within them can be related to different kinds of outcomes. In this chapter I have endeavored to illustrate how the design of this professional development study, including the kinds of activities that took place (e.g., how educators were positioned to explore and develop dispositions, knowledge and practice), the theoretical stance of the facilitator/researcher towards teaching and learning (contextualist and socio-constructivist), and the views undergirding PD content presented (e.g., writing workshop as an inclusive and constructivist instructional approach), were all related factors that made up the ecology of this study. Thus this study has several interconnected levels: a PD framework and how it was enacted and reflected in activity, substantive foci and goals (related to writing, inclusion and collaboration), and a particular focus on how teachers' knowledge and practices shifted through their participation. With this chapter I have located how the combining of these levels is related to the thinking of scholars/researchers and empirical research. With these levels and literature in mind, this study was designed to investigate how rich, layered outcomes can result for teachers taking part in longitudinal, situated, inquiry-oriented, collaborative approaches to professional development. This approach is in contrast to the wide-spread use of generic, top-down (i.e., neo-liberal) approaches to professional development that look for narrow, often decontextualized outcomes and that

position teachers as technicians and fail to recognize the tacit, responsive and generative nature of teacher learning and practice (and professional development).

In this chapter I have explained and demonstrated how many theorists and researchers view the development of teachers' knowledge as derived through practice, in particular through exploring relationships between context, practice and resources available to them (e.g., professional books, colleagues, approaches to instruction). Like several of the studies referred to in this chapter (e.g., Brownell et al., 2006; Fazio, 2009; Huziak-Clark et al., 2007; Timperley & Phillips, 2003; Wood & Lieberman, 2000), a hoped for outcome was to observe teachers develop CK and PCK by connecting context, theory and practice. As a result, in this study, I identified areas of teacher interest (writing, inclusion) and selected texts and used activities with teachers that surfaced their beliefs and current practices related to these topics and invited them to engage in practice-based inquiries that built from and took into account contextualist and socio-constructivist ideas and approaches related to writing instruction, inclusive classrooms and collaborative teaching.

Another "big idea" developed in this theoretical framework is that inquiry approaches to professional development have been shown to support the development of teachers' self-regulated learning and practice. Several studies referred to in this chapter were used to demonstrate how educators' PCK can be developed through reflection on problems of practice, developing possible actions and trying out and reflecting on these actions (Ball, 2008; Butler et al., 2004; Butler & Schnellert, 2008; Horn & Little, 2010; Mitchell, 2000; Snow-Gerono, 2005). In this study teachers were invited and encouraged to frame and draw on their ongoing learning in ways that allowed them to define what

they wanted to explore based on challenges or questions that they encountered in their teaching. They drew ideas, approaches, formative assessment information and peers' perspectives into their cycles of practice-oriented inquiry. In this study I examined how teachers' strategic engagement in cycles of action and reflection are both processes and outcomes. I looked for links showing how processes of inquiry and outcomes were connected. This study has the potential to contribute to professional development literature by showing how inquiry-oriented conceptions of and approaches to teacher PD can open up opportunities for teachers to become more self-regulated learners who use inquiry practices to engage in ongoing professional development. Thus in this study valued outcomes included what teachers learned through self-regulated inquiry and what inquiry practices they employed.

A final key attribute of this study's theoretical framework is the role of collaboration in teacher learning and professional development. In this study I examined outcomes related to collaboration as process (e.g., ways teachers worked together) and benefits of collaboration. As noted earlier collaboration can be a critical support to teachers as they attempt to take up and explore ideas and approaches related to teaching and learning. In this study, particular attention is paid to what inquiry looked like for these collaborating teachers as they worked together to make plans, enact approaches, and reflect on actions. I looked for evidence to see if teacher collaboration can be related to shifts in practice and knowledge. In the design of this study collaboration happened in two ways: through participation in a cross-school community of inquiry and teachers working in special educator/classroom teacher partnerships. Both aspects of collaboration

are attended to through the researcher question: what supports and benefits did collaboration offer to teachers?

In this chapter I have attempted to link what various empirical studies were trying to do and the kinds of outcomes they achieved. The research questions for this study take up and extend professional development research and practice. This study asks and answers timely questions. Borko (2004) and others call for studies that demonstrate what outcomes PD initiatives achieve and how these outcomes have been achieved. This study focused on both process (e.g., how did teachers work together? what supported them to learn?), and product (e.g., what understandings and practices did teachers develop?). The research questions for this study were directly connected to how this study was designed and the interests, activities and contexts of participants. In so doing I hoped to answer an overarching question: how can a longitudinal, situated, inquiry-oriented, collaborative approach to professional development support teachers' professional development?

Chapter 3: Methodology

In this chapter I provide a description and rationale for my selection of a case study design (Creswell, 2007; Merriam, 1998; Stake, 2005; Yin, 2003) which is the primary methodology used in this dissertation research. I begin by articulating how my methodology and theoretical stances link together. Next, I explain my choice of case study; then I define the type of case and outline the research design; and finally, I describe my data collection and analysis methods. I conclude by restating my inquiry questions.

The Big Picture: Theories and Goals

Malhotra-Bentz and Shapiro (1998) note that, "choosing a research method[ology] necessarily requires one to make conscious choices about assumptions underlying the inquiry. One must, in other words, take responsibility for one's approach and its consequences" (p. 5). I undertook the selection of a methodology with a critical eye. In particular, I was careful to choose a methodological framework consistent with the theoretical perspectives from which I was working.

The assumptions underlying this inquiry are grounded in theories related both to teaching and learning and related professional development research. In chapter two I demonstrated that combining several qualities within the design of a professional development initiative may result in positive outcomes related to teachers' attitudes/dispositions, knowledge, practice, collaboration, as well as their students' learning. Undergirding this hypothesis are several ideas, including the value of sustained, situated, inquiry-oriented, collaborative approaches to professional development (e.g., Butler et al., 2004; Cochran-Smith & Lytle 2009; Schnellert et al., 2008; Van Horn,

2006); socio-constructivist theories of self- and co-regulated learning (Butler, 1998, 2004; Paris, Byrnes & Paris, 2001; Zimmerman & Schunk, 2001); process-oriented and inclusive approaches to writing instruction (Atwell, 1986, 1998, 2002; Calkins, 1986, 1994, 2003; Graves, 2003, 2004); and models of collaborative teaching as related to addressing the needs of diverse learners in inclusive classrooms (Friend, 2005; Hourcade & Bauwens, 2002; Walther-Thomas, 1997). The case study methodology applied here is consonant with the theoretical perspectives inherent in this combination of ideas.

In particular, across the sections of this study I cited literature to show how I take up these key themes from a socio-constructivist perspective. By socio-constructivist, I mean an epistemological conception of teaching, knowing, learning, and doing that sees knowledge and practice as co-emerging with and because of individual and social factors. For example, Borko (2004) has noted that teacher learning involves both enculturation and construction. Consistent with this socio-constructivist lens on teacher learning and practice-focused professional development, I selected case study as a methodological approach that could accommodate and account for situated readings of teacher learning and practice as befits inquiry communities and social theories of learning (e.g., Radnor, 2002; Wenger, 1998). Thus I positioned this research as an opportunity to learn with and from individuals within a situated community of inquiry. The case study methodology applied here aligns philosophy, methods and goals.

Case Study as a Methodology: Why Case Study

Case study is a suitable methodological choice for this sustained, situated, inquiry-oriented, collaborative, practice-focused research because it is often used to study and explore situated practices that involve many complex and combined factors (Butler,

2004; Creswell, 1998; Merriam, 1998; Yin, 2003). With this dissertation research, I sought to study how several qualities within a PD model might be a good match to the contextual and generative nature of teacher knowledge, practice and professional development. Given this research goal, case study methodology is a good fit. In case study research, it is recognized that factors are not easily separated; thus a strength of case studies is their potential to account for complex inter-relationships within a bounded system (Tellis, 1997; Yin, 2003). I used case study to explore teachers' development of practices and understandings as these were inextricably connected to their varying prior knowledge, past experiences and beliefs as well as social practice and discursive factors. Case study analysis methods allowed me to consider relationships between factors such as teachers' goals, beliefs, instructional practices, previous knowledge and training, roles, ways of working together, and jurisdictional policies and practices, within a combined whole.

This study was designed with socio-constructivist readings of practice, learning and inquiry in mind; in particular, I investigated teachers' contextualized practice-based inquiries as they engaged in ongoing collaborative activities, examined what they did and learned, and analyzed how the design and approach of professional development activities supported or constrained participants' learning. Building on my previous research with Butler (Butler et al., 2005, 2007, 2008a, 2008b; Butler & Schnellert, 2008; Schnellert et al., 2006, 2008), I used situated and relational theories of self-regulated learning to investigate the individual and shared ways in which teachers engaged in goal setting, planning, enacting, monitoring, and adjusting their practice and learning within layers of context (Butler et al., 2004). Thus case study methodology proved to be an ideal

fit for my examination of a particular group of teachers' sustained, situated, collaborative, practice-based learning.

According to Freebody (2003), a researcher can use case study methodology to explore a complex, embedded phenomenon and communicate what is learned in a coherent way without losing the diversity of participants' experiences (also see Creswell, 2007). In this respect, a case study design also proved to be useful in helping me attend to participants' co/constructed realities (rather than seeking "objective" or static outcomes). Within this case study of an inquiry community, I attended to particular contextual factors and their relationship to a variety of individual and collaborative decisions and actions.

Most centrally, case study methodology lends itself to *interpretation in context* (Merriam, 1998). One of the key concepts found across the various literatures in my theoretical framework is that learning and practice are developed through context-specific inquiry. Using case study methodology helped me attend to the questions and issues of members of this specific learning community, considering relationships between contextual factors and what teachers focused on, the actions they took, and their reflections on emerging understandings and practices. By concentrating on teachers' practice-based learning within an inquiry community, I could work to uncover and investigate "the interaction of significant factors" characteristic of this, and perhaps other, inquiry communities (Merriam, 1998, p. 29). Looking at the complexity and inter-relatedness of these factors enabled me to derive implications in the discussion section of this dissertation.

There is much to learn about teacher professional learning through the study of an inquiry community as a single, complex case (Stake, 2005). In the end, three key factors helped me to confirm case study as my methodological approach: (1) my longitudinal but intermittent presence at the remote research site; (2) the need to describe and analyze how teachers' individual and shared understandings and practices were inextricable from contextual factors and the design of professional development activities; and (3) the ability to trace the convergent and divergent ways participating teachers' goals, plans, activities and reflections played out over the course of a school year.

Case Study Design

Recognizing the importance of contextual factors combined with the interplay of teachers' individual and shared issues, questions, and practices, a single case study design was selected. I selected single case design as it was a means to (1) examine the uniqueness of a particular case; (2) extend understandings of the *emergent and generative potential* of a community-of-inquiry approach to professional development; (3) test previously generated theories about teacher learning within a community of inquiry; and (4) examine change over time (Yin, 2003).

Consonant with a socio-constructivist perspective, each community of inquiry is unique due to the specific, situated questions and issues that teachers raise and choose to explore. In this study, teachers' practice-based learning related to writing instruction, inclusion, and collaborative teaching contributed to a complex and unique situation for professional development research. In addition to the topics being explored by participants, local policies, practices and discourses played a role in how teachers engaged in their inquiries (e.g., government and school district policies and curricula).

These teachers and communities were also inscribed in more global educational discourses. Cochran-Smith and Fries (2005) have shown how the historical and global discourses of training, learning, and policy are constantly at play within teaching and the life of schools. Thus, a single case study allowed me to consider, describe and illustrate (at least partially) the unique and complex phenomena of inquiry community members' situated professional development in relation to one another and in relation to contextual factors, both local and global.

According to Yin (2003), a single case study design is well suited when theory is involved in the design of the research. In addition to others' substantive theories related to teaching and learning introduced in chapter two, this study furthers Butler and my previous investigations of teachers' collaborative inquiry learning (e.g., Butler, Schnellert & Cartier, 2005, 2008a; Butler & Schnellert, 2008; Schnellert et al., 2008). A single-case approach allowed me to further uncover aspects of relational learning (e.g., co-regulation of practice) within the context of the whole. A single case study design allowed me to examine the multiple ways that participation in an inquiry community (including co-teaching) supported participating teachers in developing their practice and understandings and addressing factors they previously perceived as being outside their sphere of influence or control.

Another reason for using single case study design was its good fit with single longitudinal cases (Merriam, 1998; Yin, 2003). As I used constructivist, socio-constructivist and social theories to consider changes in teachers' practice, understanding(s) and agency, I collected data at several points in time. A longitudinal single case study design helped me to consider multiple factors and relationships within a

complex whole—a community of inquiry. The longitudinal nature of this study allowed for multiple opportunities to collect data related to change and to collect these data in a variety of ways. By analyzing data as part of the whole case I was able to look for patterns in the data and consider multiple meanings and relationships that might have otherwise been lost.

An embedded case.

Within single case design, Yin (2003) distinguishes between holistic and embedded designs. Recognizing the importance of contextual factors combined with the interplay of teachers' individual and shared backgrounds, questions, and practices helped me to settle on a single, *embedded* case study design. In an embedded design attention is paid to groups or patterns within the larger entity. In this case, the larger, single case was a community of inquiry located within the Southern Arctic. Embedded in that were individual teachers and partners working together to improve their writing instruction and access to learning for all students in inclusive classrooms.

Within this case study's embedded design I recognized individuals as active agents in the exploration and construction of their teaching identities and practice(s) and who, when inquiring together, became partners in research and theorizing. Participants in this study attended meetings and worked together as special education and classroom partners. These partners constituted sub-units within the case and thus cross-unit analysis occurred at both the dyad and individual teacher level (see Figure 3.1). In this study, participants were invited to sit for interviews, share documents, correspond with me by email and share their ideas, activities and questions with the larger inquiry community. All participants' data were analyzed for community-wide patterns and practices. In

addition, purposive sampling of the subunits—embedded cases for in-depth analysis—involved selecting dyads for which I had the most (and most varied) data. These cases were used to describe and compare common qualities as well as unique characteristics.

Figure 3.1   Case study with embedded units of analysis

Context:
Local Factors

- Accountability plans
- Literacy related goals, PD and resources
- Professional learning community approach to PD
- Inclusion directive
- Learning Resource Teacher role
- First Nations' ecological knowing related curricula

Case:
Inquiry Community

Embedded unit of analysis 1:
Individual teachers

Embedded unit of analysis 2:
School-based implementation partners

Case study methodology allowed me to move between inductive and deductive logic, noting patterns that emerged and using them to confirm and disconfirm my questions and hypotheses, leading to new questions and hypotheses during the data analysis and interpretation process. At a descriptive level, I was able to describe what was unique and common about individual teacher's and dyad's actions and learning.

In sum, a single, embedded case study design is consonant with my interest in how social realities (i.e., practice) are constituted by local realities. In this study I took a situated and hermeneutic approach by attending to interactions between individuals and various contextual factors. Thus my theoretical perspective and choice of methodology were well matched to the phenomena I studied. That is to say that inquiry communities themselves involve members' social construction of meaning and practice. A key strength of the design of this study is the relativist, contextualist and hermeneutical similarities across ontology (situated, socio-constructivist beliefs about reality), epistemology (situated and socio-constructivist beliefs about knowledge) and methodology (situated, socio-constructivist methods for working with participants).

Position statement.

Within this situated and socio-constructivist paradigm, the background and role of the researcher is an aspect of context. My own biography is linked to and embedded in the foci, research literature, history and practices explored in this study. As the child of two blind parents, I gained experience in the practical, philosophical and political aspects of special education and disability studies. My undergraduate degree in Education included specializations in English language arts and special education. Within my English language arts methods courses, I was introduced to writing workshop, which

resonated with me as an inclusive practice. Twenty years later, this study was informed not only by my family history and pre-service teacher education, but also by the knowledge and experience I gained during my teaching career and Master's degree. I was a school and district-based learning resource teacher (LRT) during a time when districts were attempting to desegregate special education classrooms in middle and secondary schools. As a school-based LRT, I engaged with peers in collaborative teaching where I was able to introduce inclusive practices in general education classrooms. I then became a district consultant with responsibilities for inclusion and literacy, which led to the forming of a district study group which preceded the pilot study (Schnellert, 2005; Schnellert et al., 2004). At the time of this study, I had extensive experience as a staff developer working with school districts around British Columbia and two territories in Canada. I had also worked in these regions leading graduate diploma programs focused on supporting diverse learners, thus I could have been perceived by some as an expert. Certainly I had expertise. As I worked with participants in the study, I was careful to articulate my co-constructivist epistemology and used methods that worked to decrease power differentials between myself and others. Within this study I positioned myself as a researcher and practitioner who moved between theory and practice, building from past experiences and research literature, but open to and striving for new learning through collaborative inquiry.

Pilot study.

I engaged in a pilot study to help focus my research questions, determine the design of the study and select and refine methods. From the pilot study I derived several aspects of the method for the research reported in this dissertation.

The pilot study took place in a different region of Canada. All members of this learning community belonged to the same small coastal school district. The teachers involved represented three middle schools and one secondary school. Some were considered instructional leaders who already attended many professional development activities, while others did not for a variety of reasons. Participation in the pilot was limited to those who taught grades 6-12 as this encompassed the middle and secondary school configuration of the school district. Limiting to this configuration, yet extending the invitation to all teachers in the district who taught at these grades levels, seemed to pique teachers' curiosity. Ultimately a total of 14 teachers participated in this pilot inquiry community, all of whom consented to participate in the study, and 12 of whom sat for interviews.

One way in which the pilot study was useful was that it informed my approach to recruiting members of a learning community. At an information meeting about the pilot study, several teachers came who were not certain whether or not they would participate. I did not want to lose the opportunity to learn from and with these teachers who were reluctant to commit to attending and, in some cases, addressing tensions related to their beliefs and/or practices. In the end, five of these individuals did attend all or most of the meetings. Three of them sat for interviews. From this experience, I learned that extending an invitation of participation to all teachers in a district might result in a more heterogeneous group of teachers (in terms of experience, beliefs/dispositions, knowledge and practices). However, this might also mean that there might be more variability in terms of teachers' comfort and willingness to participate as members of an inquiry community. Within the pilot study I recognized that this diversity in perspective

presented a challenge, but also an opportunity to explore how that diversity could be related to participants' engagement and learning.

Further, according to two of the teachers the opportunity to "feel out" how safe it was to share their ideas and practices, including queries and concerns, was key to their continued participation. Two of the teachers who had immediately given consent and enthusiastically committed to and participated in the group also reported feelings of vulnerability, insecurity and/or fear of being judged by members of the group. As I became aware of these factors I needed to adjust how we began group meetings, worked to reinforce the idea that all perspectives and questions were welcome, and I offered an example of how active listening with another teacher had helped me to see my students' learning differently. As a result, it seemed that a broader range of perspectives, personalities, practices and concerns was shared and accommodated, offering multiple entry points for participation and building a culture where diversity of experience, practice and opinions could be valued. These observations informed the design of the main study reported here.

The pilot study also informed the way in which the case study design was enacted for this dissertation project. The inquiry community in the pilot study met eight times over the course of a school year. I was able to observe how the longitudinal design of the study provided me with an opportunity to develop trust with participants. Further, from the data I collected, I determined that collecting data at more than one point in the study would provide me with richer, more contextual information that could later be examined in multiple ways. In the pilot study, for some teachers, I only had data from a single interview which was not as rich as having classroom artifacts and quotes from meetings in addition to interviews. In contrast, for those teachers who provided me with other

sources of data (lesson plans, student samples, e-mails, comments at cross-school meetings), I was able to construct richer representations of teachers' learning and changes to practice over time. In the dissertation study I decided to have two interviews with teachers (if possible), and to collect as many companion forms of data as possible. At the same time, recognizing that not all teachers did and would bring artifacts to or speak up in meetings, I decided to add a reflective writing component to meetings of the inquiry community for the dissertation study (e.g., exit slips, copies of plans made, reflective writing in response to prompts).

In addition, I found that the longitudinal nature of the pilot study also allowed group members to return to questions, readings and ideas several times and bring in examples of what they were trying and how this was going. This provided me with a more detailed picture of teachers' shifts in beliefs, practices and understandings. In particular, one sub-group of three middle school teachers (one full-time classroom teacher and two teachers who divided their time between classroom and special education assignments) worked together outside of our regular meetings to co-plan, co-enact, and debrief lessons, helping one another to develop and adapt literacy experiences for the diverse learners in their classrooms. These three teachers were able to sustain their inquiry and make significant changes to their practices based on the needs of their students. These three teachers also reported that they felt that they were making a difference for their students; they could each identify and articulate a sense of agency that emerged from their collaborative practice-based inquiry. These observations shaped both my research focus and methodology for this dissertation study. Specifically, I built on what proved to be a valuable approach within the pilot study to reveal links between collaborative inquiry, practice, and learning for these three teachers.

Finally, the pilot study provided me with an opportunity to develop and refine this dissertation's interview questions and semi-structured interview style. In their interviews, teachers reported that they benefited from hearing the perspectives and ideas of teachers from other schools. From this I learned the power of bringing together teachers from different schools within the same school district.

In sum, from this pilot study I gained valuable insight into several design factors as I planned my dissertation study. I learned that: (1) a longitudinal study could provide me with an opportunity to develop trust with participants and gather data over time; (2) collecting multiple sources of data could help me to construct representations of teachers' learning and changes to practice over time; and (3) that I should build on the insight that one trio of teachers had a richer learning experience by working in one another's classrooms to implement and reflect on inquiry plans (i.e., reflection *in and on action*), and employ the kinds of strategies I used in the pilot study to create rich portraits of teachers' collaborative practice and learning.

Selection of the case for the main study.

The main study was situated in a learning community situated within a school district in Canada's Southern Arctic, north of the 60th parallel north. In deciding upon this site, I drew from various literatures and from my pilot study experience to identify a region and school district wherein several key factors, when combined, lent themselves to the establishment of a community of inquiry. In academic and professional literature there is heightened parallel interest in the topics of literacy (see Cassidy & Cassidy, 2008), professional learning communities (see Little, 2003; Wiliam, 2007/2008) and teachers-as-researchers (see Clark & Erickson, 2004, 2006; Cochran-Smith & Lytle,

1993a; 2009; Hamilton, 2004). It was not difficult to find a district where these discourses were present (see local factors in Figure 3.1).

Almost all jurisdictions in North America and most English-speaking countries have accountability agendas where schools and school districts are required to set goals for student learning. Literacy-related goals are perhaps the most common. In the territory and in the participating school district, like many regions and districts, there was interest at the classroom-, school-, district- and ministry-levels in developing school literacy experiences for students that would lead to increased student learning and performance. In particular, there was curiosity and concern about student writing and the teaching of writing in inclusive classrooms.

It was also not difficult to find a district embracing a "learning community" discourse. Wiliam (2007/2008) describes learning communities as the most promising professional development approach for focusing teachers' learning on their actions. In the year prior to this study, the school district where this study took place had encouraged and funded the forming of various school and district-level learning communities (interview with Astrid, Lorna and Mike, June; documents from the previous year). Thus, this study's collaborative practice-based inquiry approach fell within the new district-sanctioned, learning-community approach to professional development.

In addition, this site made for a particularly rich case study as the territory had an inclusion directive that clearly values inclusive schooling (Ministerial document, 2006; June interview with Astrid, Lorna and Mike; Astrid email, February). This site was ideal for this practice-focused collaborative inquiry study as the school district leadership had adopted the Ministry position that learning communities (of teachers and students) are diverse and that all learners—teachers and students—need support and opportunities to

100

develop learning and learning-related practices (June interview with Astrid, Lorna and Mike). The school district leadership recognized that to integrate and support the literacy needs of all students, all teachers needed opportunities to examine and develop their practice.

A final factor that made this region and district ideal for study was that the role of the "learning resource teacher" was structured so that classroom teachers and learning resource teachers (LRTs) could collaborate to support the diverse learners in classrooms (outer ring, Figure 3.1). Most LRTs have previously been classroom teachers, and many have special education qualifications and/or training. The role of the LRT involves supporting teachers to support all learners in their classroom. Classroom teachers in this Southern Arctic territory are responsible for teaching all students in their classrooms. In the participating district, collaborative teaching had already been introduced to LRTs as a way to scaffold learning for classroom teachers to support the inclusion of students with special needs. As Astrid, the district principal responsible for special education noted, "Opening up the conversation with a teacher about how he or she is meeting the needs of a particular student encourages the teacher to think explicitly about their practice [and] allows the [LRT] and teacher to collaboratively problem solve to find inclusive ways to accommodate that student and often others in the class" (interview, February).

At the time I was looking for a site for this dissertation research, I was presenting at an international literacy conference (Schnellert & Brownlie, 2005). I mentioned the pilot study during my presentation and the district's literacy principal, Lorna and a LRT, Kelly, approached me afterwards about facilitating a similar learning community in their Southern Arctic school district. In further meetings I shared what I had learned through my experience with the pilot inquiry community and together we developed criteria for

participant recruitment, deciding that a classroom teacher and LRT attend the inquiry community as partners, with the intention of collaborating together to support the learning of the classroom teacher's students.

Recruitment and ethics.

With university and district ethics approval in place (see Preface), I met with three district-level administrators in June, prior to the study beginning, to plan how the study would be advertised. All LRTs in the school district's 7 schools were e-mailed by the district literacy principal, inviting those interested in participating in the study to contact her. Interested LRTs invited a classroom teacher to attend the inquiry community as his or her implementation partner. No one who met the aforementioned criteria was turned away from the study. If at some point during the study one teaching partner declined to take part in all aspects of the research, they were welcomed to do so. This occurred for two teachers (Krystal & Seline).

This study was advertised as a longitudinal professional development opportunity to be co-constructed with myself, a teacher-researcher. It was described as a learning community opportunity similar to those that the district had initiated and/or funded over the previous year. In our first meeting together (in September), I shared my experience participating in and facilitating similar learning communities both with the pilot site and in the role of a curriculum consultant for a school board (Schnellert, 2005; Schnellert, Campbell, Loat, Rollo & Widdess, 2004).

At the initial and subsequent meetings, I described the approaches I planned to use for data collection, and participants were invited to sit for interviews, share documents, correspond with me by e-mail and share their ideas and activities with the larger inquiry community. All participants were provided with the opportunity to provide consent to

participate in the research, following university and district ethical protocols, and most did so at the outset of the study (see Preface). Participants were not denied the opportunity to participate in the inquiry community, if they did not choose to participate in the research. All individuals had joined the inquiry community with the intent to take part in a research study; yet, allowing people to determine how and when they would participate in the study seemed more consonant within a socio-constructivist perspective on ethics. As it turned out four of the teachers wanted to attend but decide later if they would participate in the study after they got a sense of the experience (and built trust in and with me). They were welcomed to and did attend as inquiry community members. All remained in the group, but only two of the four sat for interviews. Data from the others were not collected for research purposes or reported.

I carefully followed The University of British Columbia's ethical review protocol when carrying out the research. Within that frame, from the recruitment to the introduction of the study to participants' to the co-construction inquiry activities, I was careful to be sensitive to issues of power and privilege. This was particularly important in this study which embodies a situated and socio-constructivist perspective. Because the boundaries of the case (the inquiry community) could not be entirely separated from the schools and district where the study was located (in a community small enough for all teachers to be somewhat familiar with each other), it was particularly important for teachers to be aware of consent, risks and ethical guidelines. Thus, I endeavored to sensitively build potential participants' understanding of any risks, what informed consent meant in the context of this study and why and how they might withdraw. Over the course of the study I surfaced these ideas in large group meetings and one-on-one interviews. For example, in these conversations, teachers were informed and assured that

they could leave the study at any time without any consequence. This careful attention to delineating both risks and benefits may have been why some teachers took a long time to decide if they would formally take part in the study and sit for interviews. In sum, I was very careful to work within the university's ethical guidelines and protocols as approved for this study, and within that I paid particular attention to issues of power and privilege. In the end, all participants for whom data are reported here provided informed consent for data they provided to be collected, interpreted and reported for the purposes of this research.

Defining the case: The inquiry community.

As described above, the largest unit in this bounded case was the inquiry community itself (Figure 3.1), which was, in and of itself, defined by a social process (i.e., learning together through inquiry) as it was enacted within a particular school district in the Southern Arctic of Canada. In this study, the inquiry community participants had committed to engaging in a year-long learning community supported by a researcher-facilitator, myself, who was also considered a member of the learning community.

I participated in the learning community as the facilitator of cross-school meetings where all community members came together. Epistemologically, I positioned myself as a co-learner, who over time became more and more of an insider, but also wore the hat of "researcher." The longitudinal, iterative, and situated nature of case study methodology and my iterative and recursive approach to data collection, analysis and representation mirrored the same processes that I was studying and engaging in as a facilitator of professional development activities. It is important to note that in my role as a facilitator I was consciously supporting teachers to engage in inquiry and explore and develop

methods and practices that were situated and tailored to contextual factors, rather than just asking them to learn and apply particular theories and approaches.

LRT-classroom teacher partners constituted sub-units within the case and thus cross-unit analysis occurred at the dyad and individual teacher level (see center of Figure 3.1). There were 19 participants in this study. School-based participants represented two grade K-5 schools, two grade K-8 schools and one grade 6-8 school. Two schools in the school district were not represented as the LRTs from these schools did not elect to participate. Across sites, participants were seven learning resource teachers (LRTs), ten classroom teachers and two district administrators and myself (see Table 3.1). Three of the LRTs had two classroom partners. There were four male teachers (all classroom teachers) and thirteen female teachers participating. Both district administrators were women.

Participants' teaching experience ranged from three years to twenty-seven years. Most of the teachers had taught in this district for many years. Some had taught in more than one Arctic district. For instance Cory had taught in a more remote community further north prior to coming to this district the previous year. David grew up in the Northern Arctic and completed his education degree in the Southern Arctic as part of a satellite program designed to develop capacity in the North. He was the only teacher in the inquiry community who identified himself as having indigenous ancestry. One other teacher in the group hinted at having Metis heritage, but did not confirm this when asked. This ratio of indigenous Canadian (Inuit, First Nations, Metis) educators to non-indigenous Canadian educators was similar to that of the teaching force in this district. Many of the teachers had not been to the region before graduating with their teaching degrees. However, all of the teachers had taught at least one year in the Southern Arctic. Two teachers were new to the LRT role (Sally and Jill). Sally had been a classroom

teacher in the same school for several years, while Jill was temporarily replacing a LRT on maternity leave.

Table 3.1 Research participants grouped by school and collaboration partner(s)*

Name	Gender	Years teaching	Grade level	Role	How long in current role	School: grades	Co-teaching experience	With partner
Laura	F	20	6	CT	20 yrs	1: 6-8	Very little	Very little
Alice	F	20	6-8	LRT	10 yrs	1: 6-8	Some	
Chad	M	4	7/8	CT	1 yr	2: K-8	Very little	Very little
Candice	F	18	K-7	LRT	8 yrs	2: K-8	Experienced	
Cory	M	4	6/7	CT	1 yr	2: K-8	Some	Some
Kelly	F	25	K-7	LRT	10 yrs	2: K-8	Experienced	
Barb	F	20	3/4	CT	2 yrs	2: K-8	Some	A lot
Kelly	F	25	K-7	LRT	10 yrs	2: K-8	Experienced	
Seline	F	22	K-8	LRT	20 yrs	3: K-8	Some	None
David	M	3	6-8	CT	2 yrs	3: K-8	Very little	
Seline	F	22	K-8	LRT	20 yrs	3: K-8	Some	Very little
Carole	F	21	3/4	CT	10 yrs	3: K-8	Very little	
Ray	M	21	4/5	CT	20 yrs	4: K-5	Very little	None
Krystal	F	8	K-8	LRT	3 yrs	4: K-5	Some	
Margaret	F	24	2/3	CT	20 + yrs	4: K-5	Some	None
Jill	F	4	K-7	LRT	New to role	4: K-5	None	
Susan	F	17	1	CT	10+ yrs	5: K-5	None	None
Sally	F	16	K-7	LRT	New to role	5: K-5	Some	
Cecile	F	15	1	CT	2 yrs	5: K-5	None	None
Sally	F	16	K-7	LRT	New to role	5: K-5	Some	
Lorna	F	27	K-12	DA	8 yrs	District	Experienced	N/A
Astrid	F	28	K-12	DA	10 yrs	District	Some	N/A

**Note.* Teachers appear more than once in the table if they had more than one collaboration partner.

Note that two LRTs, Seline and Krystal, elected to participate in the study and learning community, but at "arm's length." They did attend all learning community meetings, but they did not hand in their written reflections or sit for interviews.

Overview of the Project Structure

This dissertation is based on field research that took place over one school year. In Figure 3.2, I represent and summarize when the inquiry community met, the co – teaching partners' school based activities and the data collected.

The entire inquiry community met nine times over the course of the year. To make travel affordable we met for two consecutive days at four different times during the year (September, October, January, April) and then one final time in June. At those meetings, school-based partners (or triads) identified goals (for themselves and/or their students), discussed and explored related ideas and approaches and developed action plans. Participants carried out their plans between our large group meetings.

Over time, the inquiry community explored common professional readings; introduced one another to concepts and approaches specifically related to community members' questions and goals; and shared plans, actions, successes and challenges. Based on literature related to co-teaching (Cook & Friend, 1995; Friend, 2005; Hourcade & Bauwens, 2002) participating teachers were introduced to a variety of ways that they might want to collaborate as school-based classroom teacher and learning resource teacher (i.e., special education) partners.

Figure 3.2   Overview of the project structure
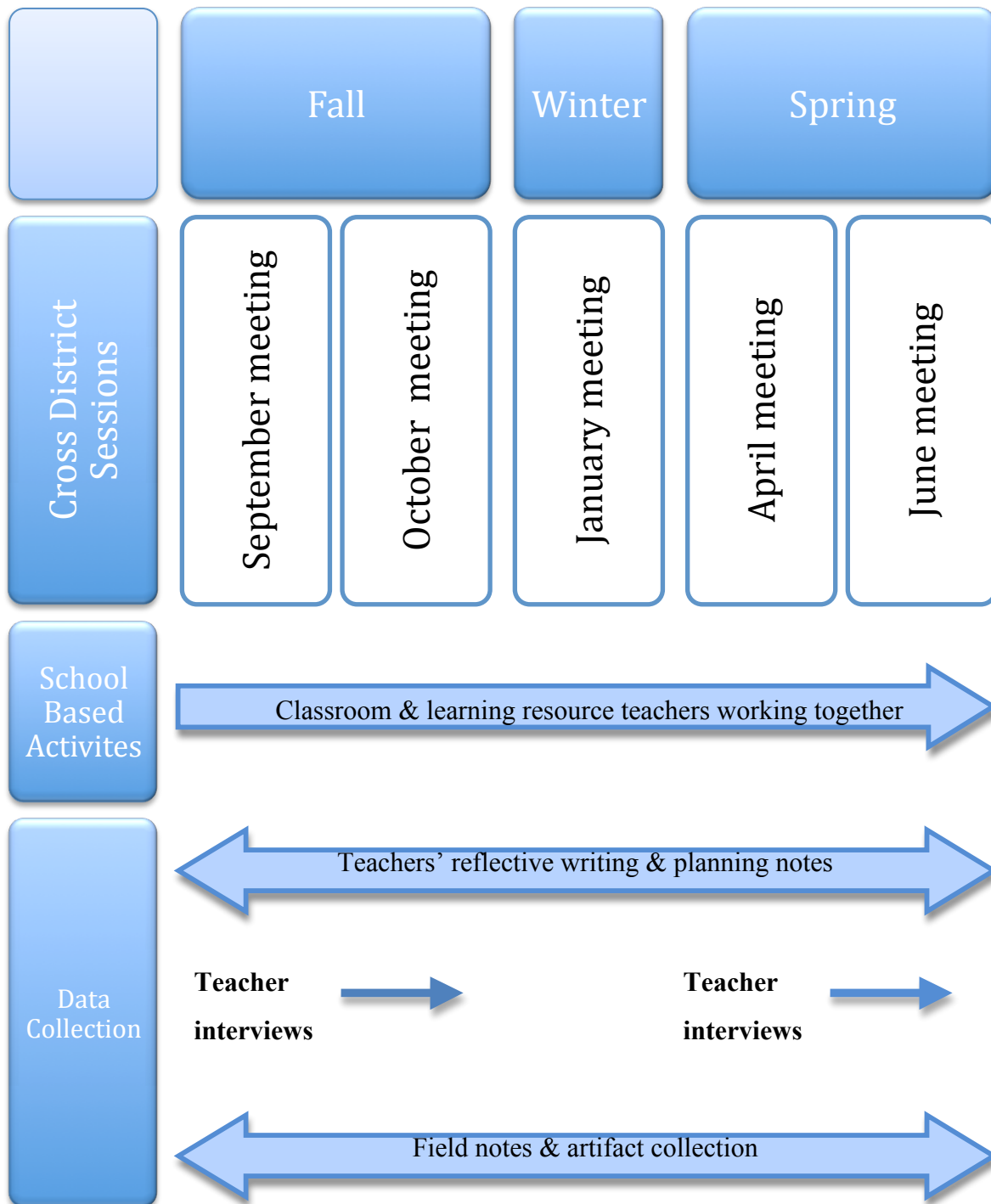
Our large group meetings followed a parallel inquiry cycle to that of the teacher partners. At the beginning of the first day of our consecutive two-day, large-group meetings, teachers reflected on what they had focused on, how it went and questions they still or now had. Then teachers shared what they had been working on – using three prompts: What were you focusing on?; What did you try?; and How did it go? As the group became more comfortable with the format and sharing their work, this sharing time evolved into more explicit descriptions of what was done. As each individual or partnership shared examples of their work, the rest of the group asked questions and took notes.

In many cases the "presenter/s" would surface an issue and the group would problem-solve together. Then we discussed related readings and on two occasions I explained and/or modeled an approach related to questions that arose from the group sharing and/or our readings. The readings had been selected and agreed upon ahead of time based on the questions and interests of the group. Concepts and learning theories were often related to possible instructional approaches. If members of the group were familiar with these ideas or approaches they would share examples.

On the second of our two days together we started by reflecting on what was explored the previous day and discussed or clarified questions and issues that arose. Then partners planned together. This involved co-teachers reflecting on what they had done and were learning, determining next steps, planning activities and determining each of their roles. This was a more formalized version of what occurred at their schools between meetings. In parallel, we ended the second day of our cross-school meetings by reflecting on our two days together and planning our next sessions together.

In planning for the next set of two days, the community members engaged in an inquiry cycle. We used formative assessment information about what partners were working on and wondering to set goals, plan activities and find resources. At the meetings, we made time to monitor how things were progressing and adapt plans and timelines. Based on this information, I would often introduce and model an approach while community members observed and/or participated in writing activities within our times together. Thus the agenda for each of the two-day meeting sets was determined through discussion and written feedback at the end of our community-wide times together.

Members of the community were also invited and encouraged to send further feedback, co-plan and co-facilitate with me. Several of the teachers took me up on this, in addition to participating in large group sharing and problem-solving. One LRT (Kelly) e-mailed me with her concern that the co-teaching and inclusion parts of the discussion seemed to be missing the mark. So I shared this with the group and adjusted the plan for the next sessions so that partners presented together. We also revisited approaches to co-teaching and built in a job-alike discussion time so that LRTs could ask each other questions and clarify their roles.

In general, sessions were characterized by a give and take on all of our parts. We allowed ourselves to slow down or speed up our agenda in relation to our goals for the day and checked in before and after every break to situate what and how we should continue with or adjust our plans. This is not to say that I did not play a leadership role. However, responsibility for planning, enacting and reflecting was shared with and distributed across the group. To ensure this, each large-group meeting included reflection

and planning time. At our final meeting/celebration of our year together, the group pressed for a continuation of our learning community. The district administrator secured funding for a second year. However, this dissertation reports what was learned in and from our first year working together as a learning community. Data from the second year will be analyzed and reported as part of future research activities.

Content discussed in our meetings.

As part of our first two days and subsequent sessions together, information about collaborative teaching was introduced and community members were given dedicated time to discuss how they would work as partners. Participants were not required to use particular methods in particular ways as the spirit and process of inquiry were valued and highlighted. In addition to introducing ways the learning community might work together, we also used large-group meeting time to discuss, simulate and draw from various constructivist and socio-constructivist theories and approaches to literacy learning. The major concepts and approaches that the group explored and drew from included: writing process, writing workshop, the reading/writing connection, teachers as writers and models, mini-lessons, formative assessment, and writing workshop as an inclusive approach to teaching and collaborative teaching. It is also important to note that the district and some of the schools had literacy-related learning communities as well. So teachers were supported to build and develop their pedagogical knowledge and practice in many ways. Inquiry community members were encouraged to link ideas, readings and experiences across settings.

Data Sources and Collection

Case studies typically include several modes of inquiry associated with many social science research traditions (Creswell, 1998; Stake, 2005; Yin, 2003). Within this case study, I sought methods that would examine participating teachers' changes to practice and learning processes, including how they thought about and addressed students' writing instruction; how they worked together to address the literacy needs of diverse students; how they perceived their efforts to tailor their teaching; how their actions related to what they set out to do; and finally, how social factors supported and/or shaped what these teachers learned and did. In line with the studies of Moje (1996, 2000), Villa and Thousand (2004) and Butler et al. (2004), I determined contextualized data collection sources and methods that took into account both individual and social features.

Kinds of data.

A variety of data were collected across the year of the study (see Table 3.2). Primary data sources included teacher interviews and teachers' written reflections made during learning-community meetings. Classroom artifacts (e.g., lesson plans), e-mails and field notes from team and planning meetings were used a supplementary data sources.

Interviews.

Interviews with participants took place at the start and end of the year (where possible). Some participants did not sit for interviews until the end of the year while others chose to participate in the community but not sit for interviews at all. Interviews were conducted in a conversational format (Tuhiwai-Smith, 2001). I arrived with questions, but was open to whatever direction(s) a participant wanted to take within the interview. In the interviews, I asked nine broad questions to ascertain teachers'

perceptions about and practices related to writing, the teaching of writing, supporting diverse learners, and professional development (Appendix A). While Spring questions were parallel to the Fall questions, they also focused attention on what teachers had done and learned over the course of our year together. Across the two sets of questions teachers were also asked how professional development activities during the study were impacting their teaching and learning, collaboration, and professional development. Interviews were recorded and transcribed.

Because the interviews were semi-structured, exact questions varied from person to person (they did not function as a strict script). For example, I did not always ask a question, if it had been addressed previously. At times I asked for elaboration, rephrased questions to match the participants' ways of describing things, or asked follow-up questions. By approaching the interviews in this way, I tried to build from what an interviewee shared and to maintain a conversational tone. During the interview I often asked, "Is there anything else that you would like to add?" I remained aware that the questions I asked teachers would shape and delimit what I could learn. To at least partially account for this, I asked open-ended questions and tried to remain open to new elements that related to my overall research questions (i.e., confirming or disconfirming interpretations).

Table 3.2   Data collected

Data Collected		Interview September or October	Field Notes, Reflections, Artifacts & Plans October	Field Notes, Reflections, Artifacts & Plans January	Field Notes, Reflections, Artifacts & Plans April	Interview & Artifacts June
	Laura	√ + old plans	√ GO	√	√	√ + r
	Chad	√	√	√	√	√ + r
	Cory	√	√	√	a	√ + r
	David		Field Notes only	√	√	√ + r
	Ray	√	√	√	√	√ + r
	Barb	√	√	√	√ + plans, SS	√ + r
	Carole	√	Field Notes only	√	√	√ + r
	Margaret	√	√	√	√	√ + SS, r
	Susan		√	√	√	r
CT	Cecile		a	a	a	
	Alice	√	Field Notes only	a	√	√
	Candice	√	√	√	√	√ + r
	Kelly	√	√ + email x 2	√	√ + email May x 2, plans, SS	√ + email, r
	Krystal		Field Notes only	Field Notes only	Field Notes only	
	Jill		√	√	√	√ + r
LRT	Sally		√	√	√	√ + r
	Seline		Field Notes only	Field Notes only	Field Notes only	
	Lorna	√	√ + email, article	√	√	√ + r
DA	Astrid		a	√	√ + a	√ + r

Written reflections generated at inquiry group meetings.

Another important source of data was the reflections teachers generated during our time in cross-school meetings. This involved reflective writing at group meetings in response to open-ended prompts about their collaborative activities and learning. Reflective writing activities helped to surface participants' actions, thoughts, ideas and learning. They provided me with a " . . . window into (their) mind(s)" (Lichtman, 2006) at various points during the school year. Collecting and looking at teachers' reflective writing meant that I was not limited to pre/post interviews which were more time consuming and spread out. I was able to reflect on and adapt my practices in the learning community in response to what teachers were sharing through this writing. Participants understood that I would read their reflections, plans and "exit slips" (Hobson, 2003) in order to help me understand the activities they engaged in and what they believed they were learning to provide me with information to adjust content explored in and facilitation of the learning community based on their needs.

Classroom artifacts/documents/e-mails.

Teachers brought classroom artifacts to the interviews and group meetings to assist them in telling their stories of practice and learning (Clandinin & Connelly, 2000; Schnellert et al., 2008). I asked them to make copies for me or I made copies myself between the first and second days of our cross-school meetings. These data were collected and analyzed to complement information teachers provided in their interviews and cross-school meetings. Additional documents that were solicited and collected included teachers' plans, procedural facilitators and e-mails reflecting on cross-school and/or school-based activities.

In addition, field notes were taken in inquiry community meetings, informal meetings and interactions between participants and myself, and meetings between myself and district administrators. These field notes were taken either *in situ* or made immediately after meetings occurred. There was considerable variance in amount of supplementary data for each teacher, as I was leading the group or in conversation at the same time as taking notes. Yet these data were helpful to me in the cases that were acquired. These kinds of information were used to clarify and/or confirm what was learned in interviews and teachers' reflective writing.

The above case study data were also useful in understanding how our learning community was shaped by socio-political trends unfolding in the region and school district. For example, in interviews, large group meetings and e-mails, teachers spoke about how they were drawing from activities and/or readings to have an impact not only in shaping classroom instruction, but also in their conversations about teaching and learning at the school-, district- and territorial-levels. Thus, I also extended data collection to include district- and Ministry-level documents, and interviewed district leadership with attention to territorial policies, the host district's overall accountability contract, other professional development activities and plans developed by the district, and activities such as school-level learning communities at the five schools represented in our cross-school inquiry community. I used these additional sources of data to assist me in interpreting participants' interviews and written accounts.

Data Analysis

Sensitive to my socio-constructivist, interpretivist and contexualist theoretical perspectives, I engaged in cycles of data analysis and interpretation. As this research was

informed by these theoretical perspectives and previous research, I began my analysis *a priori,* looking for teachers' goals, the practices they used, what they reported learning and what they felt supported them in their learning. Thus I was attending to the practices, understandings and supports that developed throughout teachers' inquiries and collaboration. Later, I attended to the ways that teachers worked together to see what patterns emerged and how these related to what teachers did and learned and factors they found supportive to their learning. I was particularly interested in finding both the commonalities and variations that arose between teachers and dyads within the learning community. Evidence was examined from interviews, field notes, group sharing, collaborative plans, and classroom artifacts to look at ways that teacher collaboration mediated their learning and practice. A socio-constructivist reading of data reinforced my attention to questions about collaboration as a key factor related to teacher learning.

Chunking data and coding.

As I began my initial steps of analysis, I grouped my data two ways: (1) in files by individual teachers and (2) in relation to my research questions (e.g., Figure 3.3). Another type of chunking related to coding data. Chunking data for coding purposes involved determining the most relevant "unit." Rather than have an arbitrary unit of language, I coded based on what was relevant to a theme that was emerging in response to a research question. This was often a phrase, sometimes a sentence or two, and on occasion one or more paragraphs.

Figure 3.3   Data related to research question one

Data related to research question one	Data sources
• What practices did educators engage in as co-teachers within a CoI to consider, explore and construct more inclusive writing instruction?	• fall/spring interviews • written plans • written reflections • classroom artifacts • procedural supports • student samples • email • field notes
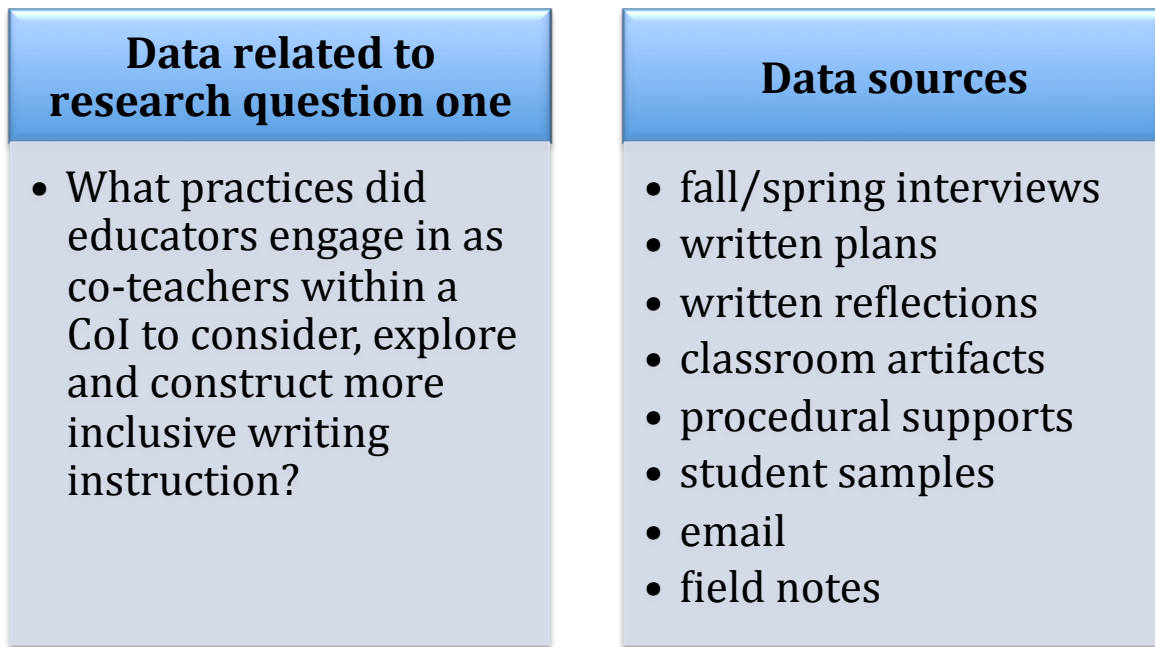
Interviews were transcribed and analyzed in an iterative and recursive process to construct, test, revise, and coordinate codes (Lincoln & Guba, 1990; Merriam, 1998) related to theoretical constructs (i.e., socio-constructivist understandings of self-regulated learning, self-regulated practice, co-regulated practice). I started by systematically reading and rereading interview transcripts, field notes and teachers' reflections to induce and deduce information related to my questions and copied and pasted information into display charts. As I read through the documents and transcripts I looked for additional patterns and trends. These were articulated to define a set of codes and themes that were refined and applied through an ongoing iterative process. Thus, I moved between *a priori* theory-informed analyses (which was deductive) and open coding (which was inductive) to determine what I was learning about my research questions (Figure 3.4).

Figure 3.4   Iterative analysis process

```
┌─────────────────┐       ┌─────────────────┐   ┌─────────────────┐
│    Research     │       │ Displayed codes │   │ Added additional│
│  question 1:    │       │ and sub-codes by│───│ data sources e.g.,│
│                 │       │   participant   │   │ reflective writing│
└────────┬────────┘       └────────┬────────┘   │  and exit slips │
         │                         │            └────────┬────────┘
┌────────┴────────┐       ┌────────┴────────┐   ┌────────┴────────┐
│                 │       │                 │   │   Refined and   │
│                 │       │   Grouped by    │   │ collapsed codes │
│ What practices  │       │     theme       │   │  and sub-codes  │
│ did educators   │       └────────┬────────┘   └────────┬────────┘
│ engage in as co-│                │                     │
│ teachers within a│      ┌────────┴────────┐   ┌────────┴────────┐
│ CoI to consider,│       │  Summary list of│   │ Tallies and scores│
│ explore and     │       │    all codes    │   │ were calculated │
│ construct more  │       └────────┬────────┘   └────────┬────────┘
│ inclusive writing│               │                     │
│  instruction?   │       ┌────────┴────────┐   ┌────────┴────────┐
│                 │───────│  Open coded with│   │ Iterativly adjusted│
│                 │       │ research question│   │ representations  │
│                 │       │    in mind      │   │ and scores as new│
└─────────────────┘       └─────────────────┘   │ information was  │
                                                 │     found       │
                                                 └─────────────────┘
```

All coding for this study involved two coders: myself and a research assistant. When coding data, I had past research and experience that informed my coding, however the research assistant did not. This helped me to be open to and curious about codes and qualities that were not the same as those I had read about or developed for other studies. Codes and themes were developed as we read through data with inquiry questions in mind. When the research assistant and I were uncertain or disagreed about codes or the application of codes, we worked to refine our articulation and/or reconcile any possible

issues. We became more consistent as we shared our readings of data and possible interpretations. Questions regarding coding were resolved through discussion and comparing interpretations to codes and patterns.

Once codes (i.e., themes and patterns) were identified, ways in which themes and patterns interrelated were considered. Informed by research done with Butler (see Butler & Schnellert, 2008), the research assistant and I read through transcripts to build categories and theoretical models from codes that could be related to the research questions. Reading with an eye to additional factors and patterns led me to ask questions and identify relationships between teachers' actions, learning and social factors including co-teaching and the cross-school inquiry community. Cross-referencing what was observed in this study with findings from research conducted with Butler (i.e., Butler et al., 2005, 2007, 2008a; Schnellert et al., 2006, 2008) helped me to create representations supported by and distinguished by coding factors and sub-factors found within interview transcripts and other sources.

In sum, in this study I engaged in a process of inductive and deductive coding to ascertain themes supported by hypotheses related to previous studies and theoretical models generated therein (i.e., Butler et al., 2005, 2007, 2008; Schnellert et al., 2006, 2008). New patterns emerged (became distinguishable) from iterative reading of data.

Agar (1996) has called this moving back and forth between a *priori* and bottom-up coding abductive coding, which supports iterative cycling between inductive and deductive analysis. With this in mind, I worked to consider and record all possible codes even if they did not seem relevant at the time. Coding of data in this study was theory informed, as I was informed by and inscribed within various theoretical frames that I bring to any reading of text; however, I worked to remain vigilant for and open to challenging theoretical propositions and discovering new codes.

Using displays.

The process of moving between inductive and deductive analyses was supported though a range of data displays and constant comparison and analytic deduction to identify and test domains and their boundaries (Lecompte & Schensul, 1999). Data related to research questions and sub-questions were displayed in charts and diagrams to represent and determine relationships between groups of information. I drew ideas from Lecompte and Schensul (1999) and Miles and Huberman (1994) to display data in a variety of ways to "tidy it up" and build formative theories (Schensul, Schensul & Lecompte, 1999) about how and why information and ideas relate to one another.

Lecompte and Schensul (1999) highlight the importance of being systematic in these analyses. Doing so helped me to make the process of finding patterns and moving to more abstract categories more defensible. Throughout the analytic process, data were represented in a variety of displays to reveal patterns for interpretation and test for conceptual coherence (Miles & Huberman, 1994). For example, the quality of collaborative relationships between teachers was judged as falling into one of five categories ranging from disconnected or surface-level interactions to sustained, deep

collaboration through complete inquiry cycles. While these codes had been developed through an iterative analysis of data in a previous study (Butler, Schnellert & Higginson, 2007), they were also tested out and revised with this study's data. Another example of a use of displays was that, as the codebook and codes were reworked to match the levels of collaboration between teachers, charts and maps were created. As I grouped and displayed the data, new relationships appeared. I combined data to show these new relationships, and new hypotheses that emerged were then further tested. My goal was to create the richest set of descriptions, relationships and hypotheses that I could back up with a range of evidence. In the results chapter, graphic representations (e.g., charts) are provided that illustrate how displays were used to support analysis in this study. They present findings in ways that also reveal the evidence undergirding the relationships depicted.

Deducing meaning.

All of the aforementioned analytic strategies led to and supported an ongoing process of interpretation. As codes, themes, and patterns were defined they were linked in order to develop theoretical representations that were used to explain what teachers came to understand, act upon, integrate into their beliefs and practice, and what practices and/or collaborative activities made a difference. I used what Lecompte and Schensul (1999) call analytic induction, to test out relationships and hypotheses; this involved "the identification of negative or disconfirming cases" (p. 77). Such negative cases helped to challenge and strengthen claims made (based on relationships between patterns) and why some individuals and/or dyads came to develop particular understandings or practices. They also helped to show variance and nuances within the case.

In our study of six teachers' professional development (Schnellert, Butler &

Higginson, 2008), we found that by including data that appeared as first to be "outlying

data," we could find and define patterns that held up for all six teachers as well as

distinguish which factors seemed to most positively (and negatively) relate to other

factors (i.e., teachers' engagement of students as co-inquirers). Similarly, within data

coding for this dissertation study, I created category names that stood in temporarily for

what later became a defining relationship.

In this study, attending to the diversity of educators' engagement and participation

within the learning community and co-teaching partnerships enriched analyses and

interpretations. For example, Seline had the option to leave the learning community but

continued to attend. Her "non collaboration" with her co-teaching partners not only

offered a discrepant case, but also led to the forming of level two partnerships between

Lorna and both David and Carole. Looking at discrepant cases was a method of analysis

that enriched descriptions of patterns, relationships, findings and conclusions.

The more abstract the code, the more risk there was that a claim was assumptive

and/or ungrounded. However, by moving back and forth across codes, patterns were

found within items and could be related to codes like "responsivity," "agency,"

"reflection" and other highly inferential codes that could be related to actions, intentions,

discourses and beliefs. Many of these were renamed and regrouped as relationships were

confirmed, revised and/or disconfirmed. For instance, in Figure 3.3, I showed which data

related to my first research question. Then I identified sub-questions related to teacher

partners' goal setting and collaborative inquiry cycles. These analyses were derived *a*

priori as I worked from my research questions and interview data. Using charts with

columns (similar to analyses methods used in Butler and my research together), I collected relevant data in relation to a question so that I could see to what degree interview excerpts (i.e., units of analysis) related to most community members, those in particular roles and specific co-teaching partnerships. This approach allowed me to gather data related to a given research question from across a full transcript (not just in response to a particular research question). "Level one" charts were created that involved finding and grouping information from interviews and artifacts by topic or theme. Then "level two" charts were created by diagramming and regrouping data based on emerging relationships and hypotheses. Similar work was done for the other research questions using a series of level one and two charts.

Another aspect that brings coherence to the cycles of analysis, interpretation and representation is that theme-based color coding was developed and used as conceptual categories were arrived at, validated, collapsed and refined. This assisted in both arriving at and rethinking themes and patterns from "bottom up" analysis (e.g., color coding a group of ideas that seemed to go together and proposing a category name) and "top down coding" (e.g., looking at literature from the theoretical framework and my past research with Butler and wondering how this related to color codes). This was extremely helpful in iterative cycles of analysis as the research assistant and I could consult about what we were seeing by tallies and line numbers in charts, by color highlighting in transcripts, and looking at these across level one and two charts. The conceptual categories/color coding in the figures and tables was arrived at through months of deliberation between the research assistant and myself, my senior supervisor and myself, and presenting drafts of the work in progress at refereed national and international research conferences that

124

spanned disciplines: special/inclusive education (Schnellert & Butler, 2009b), constructivist research, theory and practice (Schnellert & Butler, 2009c), English language arts (Schnellert & Butler, 2009a), teaching and teacher education (Schnellert & Butler, 2010a), and literacy (Schnellert & Butler, 2010b). Thus, the conceptual categories in Appendix B became increasingly robust and trustworthy (Guba, 1981).

Lecompte and Schensul (1999) call the most abstract and theoretical level of interpretation constitutive analysis. From a deductive perspective, I came to this study with possible models and hypotheses. In Butler's and my concurrent research, carried out with a different community with some factors that are similar but many that are different from those studied here, we theorized a cycle of teacher inquiry and how the kinds of goals teachers set and the depth of their engagement variously impacted what they learned and supported changes in their practice. We also looked at the ways that teachers collaborated and how this related to their learning (Butler, Schnellert & Higginson, 2007). I brought these models and related understandings to this study. Looking at the data from the Southern Arctic site, I used some aspects from our collaborative research and analyses (e.g., what teachers focused on and how they addressed their goals), but also added a focus on how collaborative teaching and inclusive approaches to writing instruction confounded or strengthened teachers' professional development.

Summary

I conducted a single, embedded case study of one inquiry community in the Southern Arctic, which valued a sustained, situated, collaborative, inquiry-oriented approach to PD to support teachers' development of writing instruction and inclusive education practices. I gathered data using multiple methods to understand how teachers'

collaborative engagement in inquiry, particularly in partnerships between classroom teachers and LRTs could be related to the practices they developed and their learning. I took an "abductive" (cycles of deduction/induction) approach to identify themes, patterns, and relationships in the data, so as to build from but also extend prior theory and research. In the next chapter, I report findings in relation to my research questions.

Chapter 4 – Results

In this chapter I report empirical patterns from this professional development study by focusing on how teachers worked together and the kinds of outcomes that were achieved. The results include both process outcomes (e.g., how did teachers collaborate? what supported them to learn?) and product outcomes (e.g., what understandings and practices did teachers develop?). At the heart of this dissertation is an exploration of how participation in learning communities and collaborative teaching can spur and support teachers' professional development. Because partnerships and learning communities are made up of individuals and their intentions, perceptions and actions, I begin this chapter by looking across individuals to describe their goals and actions (as they reported them) and then move to an examination of how collaboration played a role in teachers' practice-oriented learning. To describe and explain the patterns that emerged I focus sequentially on: (1) the kinds of goals teachers set during the study; (2) practices teachers engaged in over the course of the study; (3) how teachers collaborated; (4) how collaboration related to the practices teachers tried and what they learned; and (5) conditions and qualities within professional development activities that supported teacher learning and development of practice. A legend for the color coded conceptual categories used in this chapter's table and figures can be found in Appendix B).

What Kinds of Goals did Teachers Set During the Study?

To identify the goals participants held during the study, teachers, school-based administrators and district administrators were invited to sit for interviews early in the study, then again near the end of the study in May or June. In the Fall, nine of the fourteen participating teachers agreed - seven classroom teachers (Laura, Chad, Cory, Ray, Carole, Barb, Margaret), two LRTs (Candice & Kelly) - and one of the two district

127

administrators (Lorna). To surface individuals' professional learning goals at the start of the study, I asked two questions: (1) how do you hope to benefit through your participation in this professional study group? and (2) what do you want to refine or change in your program? What follows is a report of my findings.

Table 4.1   Goals participants set

	Student learning					Own practice					Teacher Collaboration			Supporting teacher learning			Own learning			
	Writing	Student ownership	Affect	Including/ supporting diverse learners	Ways to teach writing (i.e. genres, workshop)	Using/ developing organizational supports	Formative assessment	Explicit/ strategic teaching	Curricular Integration	Building/ developing student ownership	Using/ integrating professional resources	Supportive interactions/ idea sharing	Collaborative teaching	Influencing others	Teaching others	Developing/ facilitating learning communities	Understand self as learner	Become a better writer	Become more reflective	Become more strategic
Laura					√			√	√		√				√					√
Chad	√	√		√	√	√		√			√		√							
Cory	√		√	√	√	√	√	√	√		√	√	√							
Ray	√	√	√	√	√	√		√		√							√	√		
Barb	√			√	√	√	√	√	√		√		√							
Carole		√	√					√			√	√	√	√						√
Margaret					√							√						√		√
Candice	√	√	√	√	√	√						√	√		√			√		
Kelly	√	√	√		√					√	√	√	√	√	√				√	
Lorna			√	√								√	√	√	√	√				
Total	6	5	6	6	8	5	2	6	3	2	6	6	7	3	4	1	1	3	1	3
Out of	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

Student learning	Own practice	Collaboration	Supporting teacher learning	Own learning
9/10	9/10	9/10	4/10	6/10

128

Overview of goals set by participants who sat for interviews in the Fall.

Despite diversity in educators' responses, common themes and codes were derived related to the goals they set (see Table 4.1). These 10 educators most commonly focused on student learning (9/10). The other most common response related to developing or improving some aspect of practice (9/10). About half of those interviewed in the Fall had goals focused on some aspect of enhancing their own learning and development (6/10). These goals mapped well onto the three layers of inquiry Butler and I framed in prior research (see Figure 2.3), with participants' attention focused on student learning (i.e., student-level inquiry), practice (i.e., practice-level inquiry), and their own learning (i.e., teacher learning/development level inquiry). Teachers also set goals related to collaboration.

Student learning goals.

As represented in Table 4.2, teachers' "student level" goals could be grouped into four categories: writing (gray*), affect/self-perception (red), including and supporting diverse learners (green), and student ownership (aquamarine). Chad, Cory, Ray, Barb, Candice and Kelly all had three or four goals in these sub-categories. When teachers spoke about writing they wanted students to have a better understanding of writing and increased success and achievement as writers (6/10). Teachers were also sensitive to the role of affect and self-perception when it comes to learning and writing (6/10). Early in her interview Barb explained that students' affect and perception of themselves as writers would be a key goal area for her "this year since they seem to be not really comfortable with it…[I want them to]... see themselves as writers." Similarly, Kelly stated, "I want it to be spontaneous for them to write…to see themselves, to think of themselves as can-do writers, can-do readers. They are can-do people. And to see themselves as writers."

Table 4.2   Student level goals

		Writing	Affect	Including and supporting diverse learners	Student ownership
CT	Laura				
	Chad	√		√	√
	Cory	√	√	√	
	Ray	√		√	√
	Barb	√	√	√	
	Carole		√		√
	Margaret				
LRT	Candice	√	√	√	√
	Kelly	√	√		√
DA	Lorna		√	√	
	Total	6	6	6	5
	Out of	10	10	10	10

A trend that became clear early in the analysis process was that teachers were setting goals related to including and supporting the learning of all the diverse learners in their care (6/10). Later on, looking over the other sources of data, including Spring interviews, teachers' reflective writing, and other artifacts and field notes, I began to see how this shared concern and effort regarding diverse learners evolved into participants developing practices that increased students' access to learning. Over time, this became a

shared goal for the group - yet one that we did not explicitly name or use a single term for. Seeds of this shared interest were evident in the goals teachers described in their initial interviews. While Lorna referred to terms common in professional literature – like "inclusion" – others used phrases with similar conceptual meaning. Cory wanted to "reach as many students as possible" and Barb hoped to see "every kid moving ahead and progressing." Rereading the interview transcripts helped me to see that there was indeed a shared goal in spite of the different ways it was expressed. Cory explained that "I want to service every child in my classroom and I know the range in there is quite a range going on from low level learners to higher functioning kids so this, to…have a kid feel comfortable with where they're at and move them along the continuum at their pace." Even Ray, who often looked to his LRT partner as the person responsible for addressing the needs of struggling learners, was in search of "ways of reaching [struggling] kids, bringing them along and bringing them up" (Fall interview).

Five of the educators set goals related to increasing students' ownership of their learning or students being able to self-regulate their work (5/10). Carole hoped to "give them a bit more involvement in the direction they want to go and how they can [get there] – you know, it's easy to tell them, well you didn't do a good story beginning." Instead she wanted to "put more onus on the student learning and self-evaluation." Chad's goal for getting students involved looked like, "Independence in choosing the form and what tools are going to help them get to where I'd like them to be, I have a goal for them and have them independently get there." In sum, at the start and during the study, all teachers set student-related learning goals. Early in the year these tended to focus more specifically on aspects of students' writing, but over time our attention converged to

consider how to support diverse learners within the regular classroom, which developed into a strong, collective focus within the learning community.

Practice-level goals.

The volume and intensity of goals related to student learning were also apparent in participants' practice-oriented goals (Table 4.3). Practice-related goals fell into six categories: ways to teach writing (8/10), developing and/or using organizational supports (i.e., procedural facilitators) (5/10), formative assessment (2/10), explicit and/or strategic teaching (6/10), curricular integration (3/10), and building student ownership (2/10).

For example, Barb reflected on her teaching the previous year to help to set her goal: "I wasn't really good on the sharing part at the end all the time and so that's something I need to work on" *(ways to teach writing)*. Chad wanted to have "a little bit more supportive beginning with topics…a lot of them have been trained to [say]. 'I don't get it,' 'I don't know,' like, so, just support them at that stage" (*student ownership*). To do this he was interested in finding and developing "the tools that we might use in prewriting - the organizers, the beginnings" *(developing/using organization supports)*. When asked, "What do you want to refine or change in your program?," Cory responded, "I am looking for approaches, strategies, things that work. So I can feel when I walk away, 'hey I tried my best with these guys.' You know cause, they deserve it, they're great kids"*(strategic teaching)*.

Table 4.3   Practice level goals

		Ways to teach writing (i.e. genres, workshop)	Using/ developing organizational supports	Formative assessment	Explicit/ strategic teaching	Curricular Integration	Building/ developing student ownership
CT	Laura	√			√	√	
	Chad	√	√		√		
	Cory	√	√	√	√		
	Ray	√	√		√		√
	Barb	√	√	√	√	√	
	Carole				√		√
	Margaret	√					
LRT	Candice	√	√				
	Kelly	√				√	
DA	Lorna						
	Total	8	5	2	6	3	2
	Out of	10	10	10	10	10	10

Each of the interviewees articulated one or more practices that they hoped to develop or refine over the course of our year together. This focus on learning ways to teach was evident early on in the inquiry community. Writing workshop was the most commonly identified approach. This focus seemed linked to the two professional resources that we read and discussed as part of our learning community meetings, Atwell's *Lessons That Change Writers* (2002) and Calkins' *Units of Study for Primary*

133

Writing (2003). The two subcategories with the greatest number of responses were "using and developing organizational supports" and "explicit teaching/scaffolding." These categories corresponded with the two professional resources' calls for demystifying writing and learning processes for students. These patterns demonstrate that participating educators had a significant degree of knowledge, supported by the readings we were engaging in, about what they wanted to focus and work on. As the facilitator of the learning community, there was much for me to draw and build on.

As in previous studies I have been involved in (e.g., Butler & Schnellert, 2008; Butler, Schnellert & Cartier, 2008a; Schnellert, Butler & Higginson 2006, 2008), teachers were most able to articulate goals related to a) student learning, and b) practices that they wanted to develop. Goals related to student learning did not necessarily map onto goals related to the development of practice. For instance, while five of the ten teachers wanted to develop student ownership of their learning, only two of them set goals that involved developing practices specifically related to this.

Own learning/development goals.

There was a third type of goal educators participating in this professional development initiative set. Deborah Butler and I have linked these kinds of goals to teachers' engagement in a third level of inquiry, focused on teachers' "own learning/development" (Butler & Schnellert, 2008; Schnellert, Butler & Higginson, 2008). Six of the ten educators (6/10) identified goals related to their own learning/development. Own learning/development goals (Table 4.4) are not just related to classroom teaching practices, they are goals that relate to teachers' ways of learning and being.

Table 4.4   Own learning/development goals

		Understand self as learner	Become a better writer	Become more reflective	Become more strategic
	Laura				√
	Chad				
	Cory				
	Ray	√	√		
	Barb				
CT	Carole				√
	Margaret		√		√
LRT	Candice		√		√
	Kelly			√	
DA	Lorna				
	Total	1	3	1	3
	Out of	10	10	10	10

Areas where teachers wanted to grow personally were quite different from teacher to teacher. Own learning/development goals fell into four areas: understanding self as learner (1/10); becoming a better writer (3/10); becoming more reflective (1/10); and becoming more strategic (3/10). For example, Ray expressed that he saw this professional

development initiative as an opportunity to learn about himself as a learner; similarly, Kelly stated that she wanted to become more reflective through this process. There was some convergence related to two goals: three teachers hoped to become better writers and three hoped to become more strategic in how they approached their work and lives. Laura's goal related to trying to interact differently with others, "maybe you can help me with this. Because I'm experienced and I've done this for a long time, I find sometimes that people become intimidated…. And I don't want to be the know-it-all, but I have done a lot of this stuff" (Fall interview). Laura wanted to use the learning community as a way to better understand and adapt how she interacts with others. Several researchers and theorists point out that teacher inquiry often involves learning about yourself through inquiry into practice (e.g., Loughran, 2006). While this was not the most common type of goal, several teachers did identify this as a goal for themselves.

Collaboration goals.

While the first three types of goals set by the teachers aligned with our (Butler, Higginson & Schnellert, 2007) categories of inquiry – student level, teaching practice and own learning/development – there was an additional category that stood out as a significant goal area. These goals all related to collaboration between educators (Table 4.5). Consistent with the positioning of collaboration as a form of "practice" in this study, collaboration was recognized by participating teachers as a practice – or complex set of practices – that they wanted to learn about and develop.

Nine out of ten Fall interviewees set goals around working with others. These ranged from drawing ideas from resources (6/10), to supportive interactions/idea sharing (6/10), to collaborative teaching (7/10). Each of these subcategories involved teachers actively drawing on the thinking and/or practice of others. When it came to drawing from

the resources of "distant thinkers" (Shagoury Hubbard & Miller Power, 2003), these teacher-inquirers set goals that involved learning about others' approaches and exploring how these fit into their own understandings and practice. For instance, Barb noted, "This year really taking resources, various writers' resources, reading them, trying to work it into [my thinking/teaching], I'm going to use this word - *vehicle* - that will get the most bang for my buck." Barb wanted to use this professional development opportunity to draw from and "collaborate" with the authors of the texts by drawing these authors and their ideas and practices into collaboration with Kelly.

The second goal area that involved collaboration was supportive interactions/idea sharing. Laura had a clear goal in this regard,

How I hope to benefit is just from being able to listen and talk to other teachers about what they're doing because we don't often get, as you know, time .... So I'm hoping this is going to give me the chance. Is there anybody else out there doing what I'm doing and if so are you finding the problems the same? And have you solved any, I solved this one this way.

Similarly, Cory explained,

It's collaborating, I want, I don't want just my … own perspective. I want that community so I can go back and I could say, 'Hey I tried this it failed miserably or it was great, I want to share it with you so you can [try it] if you want'. Or if it does fail miserably, 'Can you give me some ideas, what am I doing wrong, what can I look at?

Table 4.5   Collaboration goals

		Drawing ideas from resources	Supportive interactions/ idea sharing	Collaborative teaching
CT	Laura		√	
	Chad		√	√
	Cory	√	√	√
	Ray			
	Barb	√		√
	Carole	√	√	√
	Margaret			√
LRT	Candice	√		√
	Kelly	√	√	√
DA	Lorna	√	√	
	Total	6	6	7
	Out of	10	10	10

Both of these individuals hoped that the learning community would provide a

forum to make public and reflect on their ideas and practice.

Many of the group members set goals related to collaborative teaching (7/10).

For instance, Margaret, a classroom teacher, connected her goal to Jill, the LRT with whom she was attending the learning community: "My hope is to get out of this, maybe try and do some co-teaching or some lessons together, or start something she can follow-up, but to have another teacher in the room for a couple of days a week." Similarly, Chad was "curious to see how people change [ideas and approaches to co-teaching] to fit their classrooms and curious how Candice and I are going to change it to fit our team teaching."

Given the structure of this project, which deliberately sought to link LRTs and classroom teachers, it was not surprising that some teachers' goals for collaboration were focused specifically on these relationships. For example, when asked about her goals Carole said, "Taking some of it [ideas about co-teaching] and applying it with teachers in our schools, and personally as a teacher myself, to improve my program." Within the learning community meetings, information was shared about collaborative teaching. Participants were invited to consider, discuss and draw from related ideas and approaches, and they had some opportunities to plan together. However, community members were encouraged to develop ways to work together that were specific to them and their situations.

Three additional sub-categories became apparent through data analysis that related to educator-to-educator interaction, but involved less reciprocity and more of a power differential; they were less about collaboration, while still related to helping other teachers to learn. These involved getting better at influencing others (3/10), teaching other adults (4/10) and developing/facilitating learning communities (1/10). Most striking though (and quite unexpected) was how prominent the focus was on goals related to teacher collaboration, particularly around collaborative teaching. Teachers were not asked

if they had a collaboration goal, just "how do you hope to benefit through your participation in this professional study group?" It is heartening to see that teachers identified goals related to collaboration in a professional development initiative that had working together to developing writing practices in inclusive classrooms at the core of its design.

Summary.

In sum, findings from this study suggest that participants came to the study hoping to achieve a wide variety of specific goals that were subsumed within the shared priorities of community members (e.g., different aspects of writing instruction). But generally these disparate goals could be classified as focusing on student learning, teaching practice, participants' own learning/development, or processes of collaboration. Classroom teachers tended to focus most on developing practices related to writing while LRT teachers were more focused on developing practices related to inclusion and collaboration. The only administrator who was interviewed in the Fall focused on student learning and processes of collaboration.

What Practices did Educators Engage in and Explore During the Study?

Study participants attended cross-school learning community meetings in September, October, January, April and June. At these meetings participants shared what they were doing and learning, discussed professional readings, drew ideas from one another, and made plans regarding their work together. In my overlapping roles as researcher and learning community participant, I facilitated the large group meetings and, along with the other attendees, offered ideas and examples related to participants' queries. Between group meetings partners worked together in their schools.

Data related to what participants *did* during the course of the study came from

140

cross-school inquiry community meetings, not just in interviews. At these meetings the educators engaged in reflective writing (i.e., "entrance slips" and "exit slips") guided by prompts related to what they were doing and noticing in their schools and classrooms and our times together. I also took field notes at these meetings. Data related to teachers' practices were gathered for 16 participants, including five LRTs (Alice, Candice, Jill, Kelly, Sally), nine classroom teachers (Barb, Carole, Chad, Cory, David, Laura, Margaret, Ray, & Susan) and two district administrators (Astrid & Lorna). A rich source of data was teachers' descriptions of the practices they tried. They supported these elaborations by showing and referring to artifacts that they brought to cross-school meetings. Because they did not sit for interviews during the study, data on practices were available for Sally and Susan from their reflective writing and comments made in meetings (they did sit for interviews the following year). Seline did not share what she was trying in her practice during large group sharing though she did offer advice to others. Ray reported on behalf of Krystal and himself. As a result, Seline and Krystal are not included in analyses related to what individual teachers did and learned.

Through data analysis of Fall and Spring interviews, teachers' reflective writing, field notes from large group meetings, and other artifacts that were collected, six conceptual categories (Figure 4.1) were derived to describe the types of practices participants engaged in: (1) exploring approaches to teaching writing; (2) nurturing positive student affect and dispositions toward learning; (3) offering students multiple ways to access and engage with curriculum and learning; (4) scaffolding student learning/explicit teaching; (5) facilitating student self- and co-regulated learning; and (6) integrating approaches into other curriculum areas.

Approaches to writing instruction.

The most concrete of these conceptual categories were teachers' actions related to the teaching of writing. Codes could be grouped into three overarching approaches: writing workshop, writing process and types of writing (see Table 4.6).

Figure 4.1   Types of practices participants engaged in
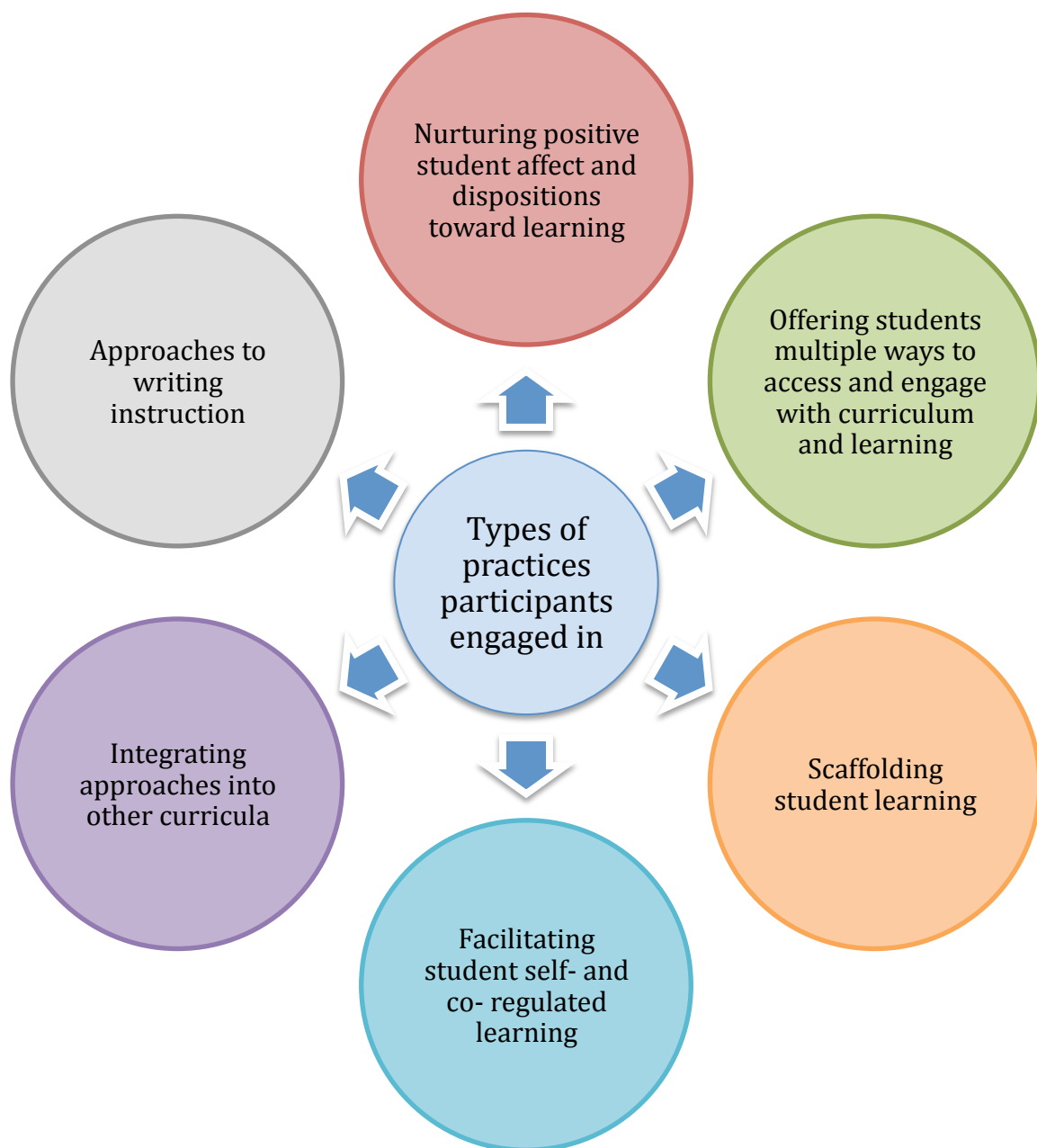
Writing workshop.

Fourteen of the sixteen (14/16) educators explored writing workshop in classrooms. There was a wide range of previous experience with writing workshop in the group. Two teachers had extensive experience with workshop, four had previously used aspects of writing workshop, three of the LRTs had experience with, but felt they had little opportunity to use and explore, writing workshop in their support roles, and five of the teachers felt they had little knowledge in this area.

Five sub-codes were derived that linked activities participants engaged in to aspects of writing workshop: setting up structures/organizing; mini-lessons/modeling; independent writing time; conferencing; and sharing. Four of the sixteen (4/16) participants worked on setting up structures within writing workshop. For example, Kelly (LRT) and her classroom partners Barb, who taught a grade 3/4 combined class and Cory, who taught a combined 6/7 class, worked to get writing folders and routines in place. Laura (CT) worked to revise the organization processes in her class. Carole (CT) restructured how she was teaching content writing to take on more of a workshop structure.

The most commonly used approach within writing workshop was the mini-lesson. Fourteen of the sixteen (14/16) learning community members discussed mini-lessons that they tried with their students. Group members took up Atwell and Calkins mini-lesson approach emphasizing explicit instruction of specific writing processes; in addition, I modeled the use of formative assessment as a way to guide the choice and development of mini-lessons. Even Susan (CT), for whom responsive teaching was a scary undertaking, developed mini-lessons based on what she learned about her students' writing through analyzing their work. The only individuals who did not try mini-lessons

were Alice (LRT) and Astrid (DA), non-enrolling educators, who did not co-teach.

There were three other approaches included in the writing workshop sub-category: independent writing time, conferencing, and sharing. Only Candice (LRT) talked about increasing students' independent writing time, but conferencing and sharing were taken up by several teachers over the course of our year together. Five of the sixteen participants (5/16) worked on building conferencing with students into their writing programs. Laura, who had been using writing workshop for almost 20 years, focused on conferencing with students as a way to provide them with personalized support. Similarly, Barb, Cory and Kelly saw conferencing as a critical next step in their writing instruction. They had spent the previous year working on writing instruction and wanted to engage more with individual students around their writing. Carole was very focused on formative assessment and student self-assessment; she used conferencing with students as a way to address these goals (Fall and Spring interviews).

Finally, 'sharing' was another part of the writing workshop model that resonated with four of the sixteen (4/16) educators participating in the learning community. Jill reported that she and Margaret built sharing time into their writing program (April exit slip). Barb and Kelly explained that sharing became a key way to give students ownership of their learning (April field notes, large group sharing). Susan and Sally found sharing to be an area of common interest that they could work on together.

Table 4.6   Practices tried related to the teaching of writing

Group	Name	Writers workshop					Writing processes						Writing genres						
		Setting up the structure	Mini lessons/ modeling	Independent writing time	Conferencing	Sharing	Brainstorming/ planning	Drafting	Revising	Editing	Sharing	Publishing	Heart Maps	Posters	Letters/ Postcards	Poetry	Non fiction	Memoirs	Short Stories
CT	Laura	√	√		√														
	Chad		√														√	√	
	Cory	√	√		√					√								√	√
	David		√															√	√
	Ray		√				√		√	√							√	√	
	Barb	√	√		√								√			√			
	Carole	√	√		√						√						√		
	Margaret		√							√				√	√		√		
	Susan		√			√	√				√	√							
LRT	Alice																		
	Candice		√	√	√					√	√						√	√	
	Kelly		√			√	√		√				√			√			
	Jill		√			√				√	√	√		√			√	√	
	Sally		√			√	√			√	√	√				√		√	
DA	Lorna		√													√			
	Astrid																		
	Total	4	14	1	5	4	4	0	2	5	4	5	2	2	3	3	6	7	1
	Out of	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16

Writing process.

In our discussions and with support from the books we read together, teachers examined the role of writing process in teaching and writing. Participants referred to actions they had taken related to five activities commonly associated with the writing

process/authoring cycle: brainstorming/planning, revising, editing, sharing and publishing. Ray (CT), Susan (CT), Kelly (LRT) and Sally (LRT) all worked on brainstorming, while Ray, Barb and Kelly also worked on revising. Perhaps due to its presence in conversations related to both writing workshop and writing process, as noted earlier 'sharing' was a focus of four of the participants. Finally, five of the sixteen participants focused on publishing (Carole, Susan, Candice, Jill and Sally).

   Types of writing.

   A final set of codes that emerged from the data connected to the teaching of writing was the types of writing teachers engaged in with their students. In our first two sessions together, the teachers and I read about, discussed and tried out various mini-lessons related to poetry and memoir writing. Atwell's resource highlights poetry, memoir and expository writing and served as a scaffold for many of the teachers and their inquiries. Consistent with the attention to different kinds of writing in these resources, a majority of the teachers talked about how they were addressing their goals and/or ideas/approaches that we read about within two or more types of writing.

   For example, Sally (LRT) worked on memoirs, letters and postcards with two of her school's classroom teachers and their classes. Chad (CT) and Candice (LRT) worked on memoirs and non-fiction with their grade 7/8s as did Ray and his LRT partner, Krystal. Barb (CT) and Kelly (LRT) worked on poetry and reading responses together with their students. Chad (CT) and David (CT) both worked on short stories and memoirs. Margaret and Jill talked about how they were exploring non-fiction writing genres such as letters, postcards, posters and report writing. Jill, who was a LRT in the morning and taught her own class in the afternoon, also wrote memoirs with her grade 4/5 class. Carole (CT) only discussed one type or genre of writing in her interviews -

information/report writing, but she did work with Lorna (AO), who discussed another type of writing – poetry. Susan (CT) and Alice (LRT) did not connect what they were doing with a particular genre. Alice was not working in a classroom within a unit of study, rather she was assisting students with assignments in the resource room. Susan was engaging her grade one students in personal writing, but did not describe it as such.

Positive student affect/classroom tone.

When looking at the data, one of the trends that emerged through "bottom up coding" was related to teachers' actions that focused on positive student affect and classroom tone. While this was not one of the "big ideas" related to writing instruction that was explicitly identified at the beginning of our learning community meetings, it was a value embedded in the examples I shared and professional books that were read. Within their interviews and/or reflective writing, five of the nine (5/9) classroom teachers and four of the five (4/5) LRTs identified this as an area of practice that they were developing. The examples that teachers gave could best be described as encouraging, celebrating/ validating, and looking at student samples for strengths (Table 4.7).

Cory taught a class of students with a range of learning challenges and complex home lives. In reflecting on what he was noticing in his grade 6/7 classroom, Cory noted that, "Celebrating what we wrote was huge…. Kids … love to be heard, they love to add and contribute and clap for one another, build a little community…I really enjoyed it."

During his year with the group, Ray shifted from assigning writing and being disappointed with and overwhelmed with students' results to trying out and reflecting on instructional approaches that were more student-centered. Related to this, Ray observed a shift in his practice related to encouraging and validating students by: "drawing upon their experiences and then building upon that and going on with it… giving them

encouragement and then seeing how they're doing… creating lots of positive instruction, and then monitoring." Ray, who had been a classroom teacher for more than 20 years, was surprised and excited by how this change was better meeting his students' needs. In his April exit slip he reiterated that he felt that "encouraging [in] mini conferences and saying something positive about their work" was a way that he was effectively supporting his diverse learners.

For many of the teachers a more affirming approach to students and their writing was a shift in practice that yielded tangible dividends. On one of Susan's exit slips she noted, "[I have tried] encourag[ing], support[ing,] [and] celebrat[ing]. We're getting there as a class; attitudes are positive; writing is happening. I'm excited and so are the kids." This shift to looking for strengths and opportunities in students' writing helped her to realize that "as much as I need to be ready to go, I am flexible, relaxed, accepting and supportive with the kids." This was a significant shift for Susan.

All four of the LRTs who worked with implementation partners in their classrooms gave examples of celebrating and focusing on positive aspects within students' work. When reflecting on what was working with Barb's grade 3/4s and Cory's 6/7s, Kelly noted that "validating what the kids are saying too, it's that discussion and building their understanding of writing, and celebrations … it's just such a natural part now." Kelly, our most experienced and well-read group member, was seeing how validating and celebrating were integral components of writing instruction in her co-teaching.

Table 4.7   Practices tried: Positive affect and classroom climate

		Encouraging	Celebrating/ validating	Looking at student samples for strengths
CT	Laura			
	Chad			
	Cory	√	√	
	David			
	Ray	√	√	
	Barb	√	√	√
	Carole			
	Margaret	√		
	Susan	√	√	
		5/9	4/9	1/9
LRT	Alice			
	Candice	√	√	
	Kelly	√	√	√
	Jill	√	√	
	Sally	√	√	
		4/5	4/5	1/5
DA	Lorna			
	Astrid			
		0/2	0/2	0/2
	Total	9	8	2
	Out of	16	16	16

When reflecting on what was working and why, Jill, who was new to the LRT role and had less than five years of teaching experience, noted in her Spring interview that, "I like to do that [validating ideas given], I like to see that come around and they start to feel good about their writing and it being worthwhile." In her April exit slip, she noted that "Kids were excited, even the weakest students felt success/pride." In the same

exit slip, when Jill reflected on "validating ideas given," she found that over time "all kids were eager to put pencil to paper- even the struggling children. Most mornings the kids were asking me, 'Mrs. C., are we working with you today?"

For participating teachers who were more reluctant or uncertain about how to shift their practice to include and support diverse learners (e.g., Ray and Susan), one of the first practices they reported was a shift to celebrating and validating their learners' efforts. They saw results in terms of student engagement and began to approach writing instruction as an enabling activity for all students. Jill, the new LRT, and Cory, a newer classroom teacher, had similar realizations. Kelly and Barb, who were already using and aware of this aspect of their practice, took up and adapted an example I gave in our cross-school meeting. They began to have students share examples of their work and then invited the other students in the class to offer only specific, positive feedback.

Offering multiple ways to access and engage with curriculum and learning.

One of the practice-based themes that emerged through coding was that participating teachers were offering students multiple ways to access and engage with curriculum and learning. In fact, *all* teachers reported developing practices within this theme (Table 4.8). This is noteworthy as no particular resource or framework related to access was offered to teachers. Yet teachers developed approaches that fit well within Universal Design for Learning's (UDL) three primary principles of providing multiple means of representation, engagement, and expression (Hall, Strangman & Meyer, 2003; Hitchcock, Meyer, Rose & Jackson, 2002).

Table 4.8   Practices tried: Offering student multiple ways to access curriculum

and learning

	Differentiated representation	Differentiated engagement	Differentiated expression
Laura	√	√	√
Chad	√	√	√
Cory	√	√	√
David	√	√	√
Ray	√	√	√
Barb	√	√	√
Carole	√		
Margaret		√	√
Susan	√	√	√
	8/9	8/9	8/9
Alice	√		
Candice	√	√	√
Kelly	√	√	√
Jill	√	√	√
Sally	√	√	
	5/5	4/5	3/5
Total teachers	14/15		

CT (rows Laura through Susan); LRT (rows Alice through Sally)

Representation.

Eight of the nine (8/9) classroom teachers and all five LRTs described using

practices that represented information/ideas/strategies in ways that provided students with

multiple ways to process them. One common approach was using a conversational format

with students to help them engage in and try out a writing approach. Many teachers built

more conferencing with individuals and/small groups into their teaching as a way to reach

more students. This is similar to several of the studies referred to in chapter two (Ball,

2008; Brownell et al., 2006; Santamaria & Thousand, 2004; Walther-Thomas, 1997). It

might be suggested then that sustained, situated, inquiry-oriented, collaborative professional development activities increase opportunities for participating teachers to develop and offer multiple pathways to learning in this regard. Like the teachers in the Huziak-Clark et al. (2007) study, Candice, Kelly, Cory and Sally planned for and engaged students through a variety of modalities (showing examples, conferencing, student-student collaboration, read and think alouds), while Kelly, Barb and Cory used a variety of texts (i.e., literature circles, information circles and mentor texts).

Engagement.

Eight of the nine (8/9) classroom teachers and four of the five (4/5) LRTs reported using practices that allowed for differentiation in terms of how and with what students were engaged in learning. One common idea was offering students choice. This idea was referred to often in the texts we were reading together and discussed in the cross-school learning community. For example, Kelly, Barb and Susan found that offering choices about where to write and what to write with engaged their students. While many of the grades 4-8 teachers offered choice but within a form (e.g., a memoir), Margaret and Jill also explored letting students choose their genre for writing.

David, Ray, Kelly, Barb, Cory, Chad, Cory and Sally reported encouraging students to share more of their personal experiences and shifted to inviting, welcoming and including varying interpretations of ideas and events. Chad and Candice found that more students participated in group brainstorming and discussion when they explained to students that they were looking for a variety of ideas versus one "right" idea. Similar to teachers in Marshall and Drummond's (2006) study, these teachers used choice and

differentiation in that they welcomed a variety of student interpretations and opened up what students could write about and the genres they could chose to write in.

Other approaches that teachers in this study used to increase ways for students to engage with ideas and new learning included giving students multiple opportunities for success (also see Mitchell, 2000) and personalizing support (also see Hilden & Pressley, 2007; Thousand & Santamaria, 2004). In this study, classroom teachers and LRTs shifted to giving all students opportunities to brainstorm topics to write on and welcoming personal experiences, examples and divergent responses in discussions and conferences rather than only offering these adaptations to students eligible for specialized accommodations. Developing and offering multiple pathways to engage students in their learning became a key area of growth for many of the teachers in this study.

Expression.

Eight of the nine (8/9) classroom teachers and three of the five (3/5) LRTs described using practices that allowed for differentiation in terms of how and what students produced. What began in the Fall as a point the group agreed to disagree on developed into a shared area of practice by the Spring. Interestingly a common trend across all of the teachers, except Carole, was that at various points in the year they differentiated their expectations of what could/should be produced. For example, Margaret shifted her practice from all students producing the same product to seeing value in students creating different products of different lengths in response to shared criteria. In her April exit slip she wrote: "[the students with diverse needs] did the same content as everybody else, they just had less pages."

By offering all students different output/product options (not just to those with modified outcomes in their IEPs), almost all teachers in this study implemented some degree of increased differentiation in their expectations. While offering students choice in terms of product was initially a contentious area for the group, thirteen of the fourteen (13/14) teachers planned and offered students options in terms of how to produce and show their ideas and skills they were learning. Like Huziak-Clark et al. (2007), some teachers found ways to offer students a choice of genre, while many gave students choice in terms of topic within a genre (i.e., using writing territories within memoir). Overall, teachers reported an increased ability to plan and look for a spectrum of success.

It seems that attention to writing instruction and co-teaching in inclusive classrooms did indeed foster teachers' development of practices that increased students' access to learning and curriculum. One of the most striking trends in data analyzed for this dissertation is that all of the teachers used practices that increased students' access to learning and curriculum by creating multiple ways to engage students, for students to access and process information, and/or for students to express what they knew and had learned (see final total, Table 4.8). Most teachers offered examples of all three. In most cases alternatives were *built into* the design of their instruction materials, due in part to co-planning with a co-teacher. Through co-planning, co-enacting and co-debriefing, participants developed and used curricular materials and activities that provided multiple paths for students with differing strengths, interests, and abilities.

Scaffolding student learning.

There were several practices that related to scaffolding students' learning (Table 4.9). The ideas of explicit and responsive teaching were surfaced in the professional texts we read, in our dialogues together, and in the examples that were shared in cross-school meetings. Related practices teachers used and developed were grouped into four categories: organizational supports, formative assessment, mini-lessons, and modeling.

Organizational supports.

All but two of the teachers (Alice and David) described setting up and implementing class-wide structures meant to support learners in developing as writers. The twelve teachers who identified this as an area engaged in, worked with their classes to develop process approaches to writing, including writing workshop. Laura noted: "I have set up the [writers' workshop] structure, [including] binders, posters, [and] teaching the process." Seven of the twelve (7/12) teachers talked specifically about instituting writing folders and/or notebooks. Ray noted that instituting class-wide structures had allowed for more student ownership and variety of ways for students to engage, process ideas and demonstrate their learning (exit slip).

Graphic organizers, visuals and anchor charts are often cited in professional and research-based literature (e.g., MacArthur, Graham & Fitzgerald, 2008) as ways to help students access content and learning; two teachers set goals about using graphic organizers and several identified this as a practice they were now using. Chad reported using frames and organizers to help support students with diverse needs and Carole differentiated worksheets. The development and use of graphic organizers and visuals seemed to be specific to the task they were working with.

Table 4.9   Practices tried: Scaffolding student learning

		Organizational supports	Formative assessment and goal setting	Modeling	Mini-lessons
CT	Laura	√	√		√
	Chad	√	√	√	√
	Cory	√	√	√	√
	David				√
	Ray	√	√	√	√
	Barb	√	√	√	√
	Carole	√			√
	Margaret	√	√	√	√
	Susan	√	√	√	√
		8/9	7/9	6/9	9/9
LRT	Alice	√			
	Candice	√	√	√	√
	Kelly	√	√	√	√
	Jill	√	√	√	√
	Sally	√		√	√
		5/5	3/5	4/5	4/5
DA	Lorna		√	√	√
	Astrid				
		0/2	1/2	1/2	1/2
	Total	13	11	11	14
	Out of	16	16	16	16

Several participants tried constructed anchor charts to scaffold student learning.

Kelly wrote "[we have tried] anchor charts [in] Barb's and Cory's classes. [V]isual cues

and anchor charts [helped support the students with diverse needs]. [We are now]

allowing for pictures and… that it doesn't have to be neat and tidy." Her co-teacher,

Barb, wrote "[we tried developing and introducing] anchor charts [as a way to say to students] 'anyone can do it'." Barb and Kelly created an anchor chart with their grade 3/4 class that identified qualities of good writing. This and examples shared by Margaret, Chad and Jill show how teachers moved to *creating* class-wide visuals, structures and routines *with* students. They were beginning to draw students into approaches that connected the use of class-wide supports and formative assessment.

Formative assessment.

Ten of the fourteen (10/14) teachers and Lorna (DA) reported using formative assessment practices. Participants reported and/or demonstrated that they paid more attention to their students' strengths, challenges, and/or interests. Kelly, Barb, Cory, Margaret, Lorna, Laura and Candice collected data in their classes and set intentions and objectives based on this information. Perhaps not surprisingly, many of the professional development studies reviewed in chapter two reported that teachers in their studies became more intentional in and strategic with their practice and, in particular, instruction (Fazio, 2009; Kaplan, 2008; Sailors, 2009; Timperley & Phillips, 2003;Whitney, 2008; Wood & Lieberman, 2000). In this study, it appears that teachers' involvement in professional development activities supported them to increase their use and development of formative assessment practices and that many participants used formative assessment data on student learning to determine what "mini-lesson" they would teach. In an upcoming section, I elaborate on how many participants helped students to gain a better understanding of criteria and use it to self-regulate their writing.

Mini-lessons.

The most common of all practices that teachers reported using was the mini-lesson (13/14 teachers and Lorna). It should be noted that neither the resources nor the examples I offered positioned explicit instruction and/or particular approaches like mini-lessons as "the only way," but rather as "a way" to approach teaching. Teachers used mini-lessons in a variety of ways (full class, small group, individual conferences) depending on goals they had for themselves and their students.

In her October exit slip Barb wrote "[we tried] revising group poems/ cracking open lines. The mini lessons are purposeful and unscripted." In her Spring interview she talked about how she adjusted the whole class mini-lesson, "I was kind of doing one mini-lesson for all … but I'm learning to take a small group of kids, it doesn't have to be [for] long, it's just informal." Kelly her co-teaching partner explained that she and Barb used mini-lessons to "build on what they've learned but not too many…it's constantly reviewing what they're doing and expanding that."

Not everyone took up the mini-lesson in a way that offered it as a resource that could be drawn upon at the writer's leisure. Carole noted that "I do some power writing…expanding the details and good story beginnings and endings." While this made expectations explicit for students, it did not necessarily position them as writers who make choices about the strategies they use in their writing.

Modeling.

A related area that ten of the fourteen (10/14) teachers and Lorna took up was modeling writing approaches as writers themselves. This was another of the "jumping off points" discussed and modeled within the cross-school learning community. The Atwell

and Calkins resources offered examples of how a teacher might model brainstorming, drafting, rereading and revising their writing, including soliciting advice from others about their writing and making decisions about next steps. I modeled this for the group in our first two sessions together as they wrote personal narratives and poems alongside me.

One early success Cory reported was when he found that modeling and thinking aloud helped students to see that writing is messy and recursive. Sally, Carole, Ray, Lorna and Chad modeled using think alouds as part of mini-lessons. Sally wrote, "The [classroom] teachers and myself wrote and shared. This was the best part. The collaboration and shared teaching is really covering more students."

Several of the other teachers (Candice, Jill, Barb, Susan) spoke of how writing in front of the class made them feel vulnerable, something that they shared with their students and that many students identified with. Reflecting on how this was when she saw some of the more reluctant students begin to engage, Candice (LRT) shared that this would be a key practice to use in the future. "I think you do need the modeling where you write in front of your class."

As part of her modeling and think alouds, Kelly gave students opportunities to ask questions and clarify expectations (exit slip, October). This example showed how Kelly combined modeling with a focus on getting students to think about Kelly's process and refer to expectations for their own writing at the same time. In instances like this there was a sharing of ownership for writing and conscious effort on teachers' part to co-regulate expectations for, and the development of, compositions in relation to those expectations.

Overall there was a shift in educators' practice in that they became more strategic – they made pedagogical decisions based on what they were learning about their students. Like the teachers in Huziak-Clark et al.'s study (2007), many described how they engaged in responsive goal setting and planning. Study participants used the information they had obtained to develop and offer mini-lessons to support student learning. These lessons were designed to build on students' prior knowledge gleaned from formative assessment information. These findings link well to what Butler and I (2008) have referred to as teachers' cycles of self-regulation regarding their practice. Across the studies reviewed in chapter two, many teachers developed some degree of intentionality in their teaching and this was often linked to student learning. While student data were not collected and analyzed as part of this study, the practices teachers used and developed are of the kinds that have made a difference in student learning in other studies (e.g., Brownell et al. 2006; Hilden & Pressley, 2007; Huziak-Clark et al., 2007; Sailors, 2009; Santamaria & Thousand, 2004; Timperley & Phillips, 2003; Walther-Thomas, 1997).

Building students' self-regulated learning and independence.

One idea that I introduced to the cross-school learning community was that by helping students identify, work with and/or create expectations, teachers can help them more successfully develop and communicate their ideas (see also Black, Harrison, Lee, Marshall, & Wiliam, 2003; Stiggins, 2002; Wiliam, 2007/2008; Graham & Perin, 2007). While these ideas were not explicitly identified in the texts we read, they complemented Atwell and Calkin's ideas about creating a community of writers and conferencing. Compared to other themes that were identified through data analysis, such as increasing students' access to learning and responsive instruction, fewer teachers used practices that

focused on building students' self-regulated learning and independence. Nonetheless, there were trends across teachers in this area. Sub-categories derived through analysis included: examining criteria and samples/exemplars, breaking down and/or building criteria, conferencing, and collaborative composing and revising (Table 4.10).

Referring to criteria and samples/exemplars.

Several of the teachers in this study worked with students to examine and refer to goals for student writing. Six of the nine (6/9) classroom teachers and four of the five (4/5) LRTs reported sharing and examining criteria with students. At one level, several teachers described how sharing criteria helped students to understand what they were working toward. Alice explained that her students were confused by the marks they received in their classes and explained, "[Not just what] good writing [is] but why and here are the rubrics" (Spring interview). On another level, Laura used a more metacognitive approach by combining criteria, a think aloud, student writing samples, and discussion. In her interview, she described how she used a think aloud to pose the question, "If I'm going to mark this, what kinds of things am I going to be looking for?" so that students could suggest possible criteria for a piece of writing before they started to write. She also offered samples of past students' work to help students make sense of criteria (Spring interview). At a third level, Kelly combined "criteria, class discussion, referring to examples, going to resources, [and] looking at students' writing." She linked formative assessment - using student writing to determine what to focus on instructionally - with involving students in discussions about expectations.

Thus, participating teachers' use of criteria helped their students know where they were going, and using sample texts helped to illustrate what a product might look like

(e.g., Chad & Candice, Barb & Kelly, Cory & Kelly, Ray, Laura, Alice). Five of the nine (5/9) classroom teachers and two of the five (2/5) LRTs reported examining samples/exemplars as a class.

Table 4.10   Practices tried: Building student self regulated learning and independence

		Examining criteria and samples/exemplars	Building or breaking down criteria (teacher-student)	Conferencing	Collaborative composing/revising
CT	Laura	√	√		√
	Chad	√	√	√	√
	Cory	√	√	√	√
	David				
	Ray	√		√	√
	Barb	√	√	√	√
	Carole				
	Margaret	√	√	√	
	Susan				
		6/9	5/9	5/9	5/9
LRT	Alice	√	√		
	Candice	√	√	√	√
	Kelly	√	√	√	√
	Jill	√	√	√	
	Sally	√			
		5/5	4/5	3/5	2/5
DA	Lorna				
	Astrid				
		0/2	0/2	0/2	0/2
	Total	11	9	8	7
	Out of	16	16	16	16

Some teachers invited students to use examples of the students' work to co-construct criteria, providing them an opportunity to think as writers, accessing what they had learned from models they had read and personalizing what this meant through a process of negotiation with peers and teachers.

Breaking down and building criteria.

Some teachers engaged their students in actively deconstructing and/or creating criteria. Deconstructing and co-constructing criteria was reported by four of the nine (4/9) classroom teachers and 5/5 LRTs. In his Spring interview Cory explained that,

> We looked at 3 different levels of writing. One that was deemed very, very good and one that wasn't so great, and [one in] the middle. So we picked them apart [and discussed] what was good about [them] and built anchor charts around [these criteria]…I think that really gave them a sense of confidence and direction as young writers.

Though both Candice and Chad reported that it was hard to let go of control and their own assumptions about what should go into the criteria, Candice reported that she and Chad's class, "Did our brainstorming and our anchor charts … on 'what kind of things make this a good piece of writing?' by including the kind of things [students] saw in others' and sample texts" (Spring interview). Barb also created anchor charts with students based on what they thought was important to have in their writing. Alice invited students to "tweak the rubrics" with her. On an exit slip Kelly reported "giving [students] opportunities for clarification of expectations and using their work as models for writing within the classroom, using students work as enabling examples: 'Look at what's happening here, what do you see that's good kids?'" These kinds of activities extended

participation in and responsibility for assessment to students. Collaboratively deconstructing and constructing criteria invited student thinking and contributed to student ownership related to expectations.

Conferencing.

Through data analysis it became clear that the talking and listening that occurred in the format of a conference helped teachers to have more personalized and metacognitive conversations with students with potential to nurture their self-regulation and independence as writers. Five of the nine (5/9) classroom teachers and three of the five (3/5) LRTs described how they began and/or refined their use of conferencing. In conferences Candice asked students, "What are you trying to convey," which offered students the opportunity to think as writers and refer to ideas and approaches discussed as a class in relation to their own writing. For example, in her January exit slip Candice noted that one-on-one conferencing helped her to focus on specific strategies for individuals. Candice's example shows how teachers and students can refer to mini-lessons as a resource for specific things that come up in their writing.

In Margaret's class, conferencing time happened during independent or partner writing time. Like Ray, Cory, Barb and Kelly, more and more of Margaret and Jill's "instruction" was happening through individual and small group conferences so as not to disrupt the flow of students' engagement in writing. For these teachers (and Sally and Laura), to varying degrees, offering more non-teacher-led writing/working time combined with conferencing gave them an opportunity to observe and find out where students were at in their writing and for students to self-regulate their practice. There was also quite a range in terms of how much of a role the student had in identifying the area

of discussion and/or setting goals, making plans, carrying out a plan and reflecting on it. Despite this, all eight of these teachers shared examples of conferencing that nurtured students' enthusiasm for writing, helped students become more critical readers of their own texts, and supported students to see that they were responsible for their writing and success. These examples highlight the potential for increased student ownership and self-regulation of writing through teachers' use of the practice of conferencing.

Collaborative composing and revising.

Another kind of activity teachers used that allowed students to more actively and metacognitively think about and engage in writing was collaborative composing and revising. Five of the nine classroom teachers (5/9) and two of the five (2/5) LRTs described practices that involved collaborative composing and/or revision (final column, Table 4.10).

One of Chad's big "a ha's" was that, when he invited the students to compose and make revisions with him, they participated more and seemed to better understand the approaches he was trying to help them learn. Cory combined the idea of the conference with collaborative writing and revision. In his Spring interview, he noted that he was able to better work with a small collaborative writing group around an area they identified and wanted help with "rather than a big group share process."

Giving students opportunities for student-to-student collaboration often required students to co-plan, co-compose, co-reflect on, and/or co-revise pieces. Both Ray and Barb invited students to craft and revise their writing together. Candice also engaged students in composing together before they crafted their own pieces. Working collaboratively offered them opportunities to share ideas, refer to criteria, develop and try

out writing "moves" and co-regulate their learning with a peer. This potentially gave them more ownership over the writing process than guided composing led by a teacher or teacher-student conferencing, which while more personalized, involved the dynamic of expert-novice.

In sum, most of the teachers who participated in this study used and/or developed practices that built student ownership for learning and increased, to some degree, students' self-regulation of their learning. These practices included working with criteria and samples/exemplars, breaking down and/or building criteria, collaborative composing/revision, and conferencing - examples of practices that Mitchell (2000) calls "sharing intellectual control with students" (p 6).

Cross-curricular application/integration

One final area where teachers built practices that were not the focus of our texts or the examples shared was cross-curricular application and/or integration. Four of the nine (4/9) classroom teachers and one out of five (1/5) LRTs reported examples of cross-curricular use of approaches.

Chad took the idea of using something students were familiar with, memoir writing and revised his Science unit. He noted that:

> We'd been going through some environmental material for quite some time …we've got this jewel of a place called Nahanni…[with] not a lot of awareness … of even what Nahanni is or where it is. And so we started to…talk about it, write a few stories … then [explore] some websites about it.

He took something the students had background knowledge in, asked them what they knew, and then engaged them in cycles of writing and research similar to the cycles of

brainstorming, planning, drafting, sharing and revising they were using in Language Arts.

Ray took what he was learning related to narrative writing, including making lessons and activities more accessible to learners, and applied this to Science and Social Studies. He began to use what he had learned to help students learn and better communicate concepts in these content areas. He noted:

> It's kind of an epiphany in my approach to, not just [creative and personal] writing, but also report writing. I use it in Social Studies, in Science fairs. I'm much more flexible to get the kids interested and then I steer to a scientific process, or historical roles, but still letting them choose and so that's a major change.

Ray also found that he was able to use the mini-lesson structure to encourage students to use more content language in Science discussions and expository writing.

Kelly and Barb encouraged students to take what they learned about poetry and use it in various content areas to help them process and represent what they were learning. Poetry became a form of differentiation where students had another way to engage with content. Butler and I observed a similar trend in one of our studies (Butler & Schnellert, 2008). We found that teachers who integrated approaches into more than one content area offered students a chance to generalize the approach, which seemed to positively influence students' and teachers' understanding and use of the approach.

Summary: Practices Teachers Developed

Findings from this study were that many positive shifts in educators' practice could be related to their participation in this project. Educators in this study became more strategic – they made pedagogical decisions based on what they were learning about their

students. These findings link well to what Butler and Schnellert (2008) refer to as teachers' cycles of self-regulation of practice. As demonstrated by the practices teachers engaged in, most participants reported increased intentionality and responsiveness in their teaching and this was often linked to student learning.

Another key trend was that many teachers used and/or developed practices that built student ownership for learning and increased, to some degree, students' self-regulation of their learning. This trend towards teachers sharing ownership of teaching and learning with their students is considered a powerful and important move away from less effective transmission approaches to teaching (Cochran-Smith & Lytle, 2009). In this study, those teachers who focused on building and sharing ownership for teaching and learning with students created opportunities to both personalize and co-regulate cycles of assessment, planning and instruction for and with their students. Such practices helped teachers develop more equitable classrooms that honored the diversity of learners (Cochran-Smith & Lytle, 2009). Participants' practices described here as nurturing student self- and co-regulation were taken up in relation to the other goals they set and actions they undertook. Thus teacher and student self- and co-regulation of practice were supported and fueled by their inquiry into exploring and developing various approaches to writing, developing positive student affect and dispositions toward learning, offering students multiple ways to access and engage with curriculum and learning, scaffolding student learning, and integrating approaches into other curriculum areas.

How Teachers Collaborated

As I argued in chapter two, collaboration can be viewed as a practice that educators want to develop and the way that they develop other practices (e.g., writing

instruction, inclusive practices, student self-regulated learning). Thus collaboration is both a process of WHAT as well as a HOW. In this section I start to connect teachers' goals related to writing instruction and inclusive practices, how they worked together to achieve their goals, and what they reported learning by describing the practices teachers tried as they pertain to collaboration. I also explain how collaboration evidenced in this study could be conceptualized as a form of inquiry.

As noted earlier in this chapter, 9/10 of the community members who were interviewed at the beginning of this study set goals related to teacher collaboration. Not surprisingly, all sixteen of the educators for whom data was available, reported activities that were coded in relation to teacher collaboration. Four sub-categories were derived to describe teacher collaboration: sharing ideas/resources (15/16); co-planning (15/16); co-enacting (12/16); and co-reflecting/problem solving (9/16).

Sharing ideas and resources.

When looking at community members' actions related to collaboration, the most common activity was the sharing of ideas and resources. Fifteen of the sixteen participants (15/16) reported sharing ideas and resources with colleagues. Early on in our tenure together, it was often LRTs offering and sharing ideas with classroom teachers (e.g., Kelly to Cory; Sally to Susan; Candice to Chad; Seline to David), or Astrid and Lorna (DAs) sharing resources with teachers. Over the course of the Fall, two of the classroom teachers (Chad, Barb) engaged in more reciprocal sharing with their LRT partners. They were working with LRTs who engaged with them in a form of co-planning, where both the LRT and classroom teacher brought goals, ideas and resources to planning meetings. By the end of the year together, Cory, Ray, and Margaret also

described how they offered ideas to their LRT partners. Carole, David, Laura (along with Cory, Chad, Margaret, Ray and Barb) spoke of how they shared ideas and approaches with others in the cross-school learning community. All three also reported sharing what they learned with others back at school. Findings also suggested that the learning community provided participating teachers opportunities to work with and support others despite some of the obstacles that they encountered. For instance, David and Carole found ways to share ideas even though their partnerships with their LRT partner had stalled. Only Susan did not report sharing ideas and approaches with others.

Collaborative planning.

Twelve of the educators reported co-planning with a partner outside of our learning community meetings. This included Chad and Candice, Kelly and her partners Cory and Barb, and Margaret and Jill who engaged in co-planning throughout the year. Chad mentioned co-planning in his written reflections and interviews. In his Spring interview he noted:

> The neat part of that was planning and learning to plan with another person with Candice. When we were planning together she's the one that kept me organized often times and we're both able to bring something: her, a lot more years of experience, I was able to bring maybe some newer ideas. Molding all that into something that we thought the kids would like and the kids would use was interesting. Planning, co-planning…I like the thought that we can both tag team - idea here, idea there.

Susan and Sally engaged in more and more co-planning over the course of the year. By the end of the year Susan saw co-planning with Sally as something that

supported her learning (exit ship, April). Once Carole and Lorna decided to work together they arranged some co-planning time related to the lessons they co-enacted together. Meanwhile, Ray, David, Laura and Astrid did not report engaging in co-planning outside our group meetings. However, Alice (LRT) reported co-planning with teachers who were not her classroom partner (Laura).

Much of the conversation around co-planning involved how the partners worked with professional resources and information about students in ways that built their content knowledge. For example, Barb noted that, "[The LR]T provides materials and resources ... [helping] to weed through [all the] material. Obviously I've learned more…I've got way more background knowledge, Kelly's really good at supporting me in that way."

Kelly's reflective writing showed how she saw an impact at the planning, instruction and school culture level: "I don't do anything without the collaboration part now because that's my goal. [I have tried] co-planning and co-teaching poetry [in Barb's class]; co-planning, and co-teaching [with] cracking open sentences/words [in] Cory's class." When asked on an exit slip to reflect on what was working regarding collaboration she reported "accessing other resources. [I am] a resource provider, sifting through info, providing appropriate material for specific groups of students/classes." Finally she noted that, "Co-planning with teachers was [creating] a common language throughout the school as a result."

The partners who co-planned outside our cross-school learning community meetings reported more reciprocal sharing a change from earlier instances where the LRT or district administrator did most of the planning. For example, Margaret explained that:

I would get together with [Jill] and we would say, 'Okay, what do we want to do this month?' We kind of looked at a whole month at a time, do we want to do fiction or non-fiction? And so she'd say, 'Well let's do non-fiction,' and I'd say, 'Well, we'll study (inaudible 0:06:18) theme on the (inaudible 00:06:15). What do you think?' and she'd say 'Oh yes, let's go with that.' …we finished that and then she said, 'What do you want to do now?'

In her Spring interview Margaret's LRT partner, Jill, highlighted how their co-planning was emergent as they used formative assessment to adjust and make new plans:

Probably for me the biggest thing was…doing this collaboratively… you know we'll come up with the ideas, 'Let's do this, let's do this.' 'Yeah, okay,' and then you kind of get rolling with it. Taking a look at where kids were, where it leads you, maybe it was different than what it initially started out at, and then of course with the co-planning with that, doing that with your partner and saying, 'Okay, how does this sound? How does this look?' …making sure we're both on track.

Collaborative enacting.

Levine and Marcus (2010), Little (2002, 2003) and others have noted that collaborating teachers usually meet in a time and place apart from their engagement in actual teaching practices. While co-planning offers teachers situated opportunities with potential to develop their knowledge and practice, it is still difficult to develop, refine and/or change one's practice in the absence of colleagues. In this study, teachers were able to work together in classrooms to observe, reflect on and adapt their thinking and practice. While not everyone who engaged in collaborative planning also co-enacted their plans, twelve of the community members reported and gave examples of how they co-

enacted goals and approaches. While 12 participants co-planned and co-enacted together (Chad:Candice; Kelly:Cory; Kelly:Barb; Carole:Lorna; David: Lorna; Margaret:Jill; Ray:Krystal; Susan:Sally), Sally and Carole reported co-enacting with partners who were not part of the learning community. In her April exit slip Barb noted that "[we have tried] co-planning, co-teaching and conferencing. [There is] enthusiasm from students [and] me [towards] team teaching." In her interview when I asked her why she and the students felt this way she replied:

> I think it's just more, a deeper relationship with Kelly in terms with her coming in and helping. Kelly in our class…made me go back and look at my kids again. The modified plans, I think next year, it's helped… to write better modified plans for the kids I need to.

> Even though her LRT partner declined to co-plan and co-enact approaches, Carole

spoke of how co-planning and co-enacting with Lorna (DA) helped her to see what this might look like and how it might support her learning and instruction. In November she noted that with co-planning:

> I focused more, not so much on the different kinds [of poetry], but on the common themes of poetry and how to kind of put them together, and I found that was really good because that stretched the kids more than doing it the other way...Lorna came in and co-taught, so I have a little bit of an idea about what it's like to do some co-teaching.

In her April exit slip, and later her Spring interview, Carole reported how she took these ideas and co-planned a science unit with her primary colleagues and team taught with one of them. She found that together they were able to better differentiate tasks for students.

She wrote that team teaching "works fairly well, it turns [the class] into a 15:1 ratio" (April exit slip).

Sally co-planned and co-enacted more with other teachers in her school than with Susan. She used what she was learning in our learning community to work with these other colleagues in new ways. In her exit slip and reflective writing she reported:

> [We have tried] co-teaching/ co-planning [and] sharing ideas…[it's going] great. [E]ven the kids who were not "strong" writers felt successful. [B]oth the teachers and myself wrote and shared. This was the best part. The collaboration and shared teaching is really covering more students. [H]aving two people to work with the kids has helped support students with diverse needs.

David applied what he learned in the learning community and with Lorna by seeking out and co-enacting with the computer teacher in his school. Ray did not report co-planning with his LRT partner beyond our learning community time together, but they did co-enact using the plans they generated together during meetings. There was a difference between partners' occasional versus ongoing co-planning and co-enacting. For instance, Margaret and Jill started out with sporadic planning, but over time developed a way of planning and teaching together that spanned across units and types of writing.

Collaborative reflecting.

Another part of collaboration for many of the teachers was what Hourcade and Bauwens (2002) call collaborative reflecting. Several of the participants (9/16) also reported engaging in co-reflecting that involved problem-solving where they identified challenges and brainstormed ways to adapt their plans and practice. Besides Susan, only teachers who engaged in co-planning and co-enacting with a partner reported problem-

solving that was reflective and adaptive outside of cross-school learning community meetings. In an exit slip, Chad noted that he and Candice "debrief[ed] the lesson and us[ed] it to plan the next lesson…those conversations make you better." He found it helpful to "Ha[ve] somebody else to prod you." Candice explained how they scheduled their writing workshop time and a debriefing/ planning meeting in a practical and integrated way: "We did writers workshop for a couple of periods and then the next day he would give me a prep in the cycle so that the planning came very close…We always started with what we called our plus/minus plan…so we really tried to plan the next step based on how this lesson went and on what kind of things we were noticing and where we really needed to go" (reflective writing, January). The co-debriefing aspect of the collaboration seemed to help the LRTs take up a learning orientation regarding their practice.

Susan was the most reluctant of the co-reflectors because she was worried about being judged as less competent by others. Nonetheless, Susan found that "Brainstorming and discussing issues with [a] co-teacher helped [her to] support students with diverse needs." When reflecting on co-reflecting, Sally (LRT) felt that being "Flexible [and] ready to switch gears at a moments notice" was important. She found it easier to work with teachers who she perceived as "flexible too." Partners who co-reflected were not always equally satisfied with the process. Sally expressed that she was frustrated by how she spent less time planning, teaching and debriefing with Susan compared to the other teachers in her school, yet Susan reported that co-reflecting with Sally helped her to identify areas of learning for her students and herself.

Barb and Cory appreciated having Kelly's perspective. In Kelly's exit slip she

wrote, "[We have tried co-]reflecting [to help] move students forward with their writing. Extending and building on each other's knowledge of what's being taught." Some of her efforts involved what she called "boosting" teachers, by which she meant supporting teachers to see "what they are getting from students," or looking for the growth and potential in students' writing and learning rather than deficits.

Collaboration as inquiry.

In a previous study, Butler and I examined how the kinds of collaborations teachers described could be characterized as reflective cycles of practice-based inquiry (see Butler & Schnellert, 2008; Butler, Schnellert, & Higginson, 2007). Data analysis in this study suggested that what educators said they did in terms of collaborative activities (i.e., sharing resources, co-planning, co-enacting, co-reflecting, co-adapting) could be characterized as collaborative inquiry that supported and spurred their development of practice.

In the next section of this chapter collaborative partnerships are described, compared and analyzed to afford examining how the types and qualities of collaboration could be associated with what kinds of practices were focused on, the extent to which they were engaged in these practices, and if and how individuals' foci impacted what their partner did. Drawing from the coding of interviews and teachers' written plans and reflections, complemented by evidence from field notes, e-mails and documents, I created visual displays of collaboration between partners. To further characterize the collaboration evidenced in these data and diagrams, I adapted criteria developed in the Butler, Schnellert and Higginson (2007) study to categorize the activities, qualities and depth of collaboration based on the ways and the degree to which pairs collaboratively

engaged in inquiry cycles, from zero (no collaboration) to four (iterative, shared inquiry into practice that bridged to teachers' own learning) (see Figure 4.2).

Figure 4.2   Qualities of teachers' collaborations

Level zero: No collaboration

- No collaboration: explicitly stated that there was no collaboration

Level one: Little collaboration

- Did not set goals together
- Little to no co-planning, rarely refered to goals in interactions
- No co-enacting
- Minimal collaborative reflection (i.e., debriefing, feedback)
- Partners did not develop shared understandings or practices
- Partners were often disconnected

Level two: Episodic shared inquiry into practice

- Set shared short term goals in learning community meeting
- Some co-planning around goals
- Shared resources or ideas, but no integrative co-planning (surface level planning)
- Co-enacting, involved modeling (one partner in lead)
- Some co-debriefing
- Partners had little to no sustained conversation about goals and related actions over time

Level three: Intermittent shared inquiry into practice

- Set shared goals, usually in learning community meeting
- Some co-planning, typically refered to goals when planning
- Shared resources or ideas, some sense of addressing shared goals over time
- If co-enacting, there were shared goals in mind
- Checked in regarding implementation, shared implementation stories or examples
- Intermittent shared attention to progress regarding goals over time

Level four: Iterative shared inquiry into practice and own learning

- Set shared goals for students
- Set and shared (some of) own goals for professional learning
- Ongoing co-planning with sustained conversation about goals as related to practices
- Collaborative development of strategies and approaches
- In reports of co-enacting, there was a sense of working together to implement, adapt and refine practices related to goals
- Ongoing co-reflection, problem-solving and adaptation of approaches with own and student-learning goals in mind
- Longitudinal collaborative work within an inquiry cycle
- Partners had or developed shared inquiry stance to practice and own learning

Findings were two partnerships at level zero (David:Seline, Carole:Seline), one partnership at level one (Laura:Alice), two pairs at level two (Carole:Lorna, David:Lorna), two pairs at level three (Ray:Krystal, Susan:Sally) and four partnerships at level four (Margaret:Jill, Chad:Candice, Cory:Kelly, Barb:Kelly). At one point in the analysis process the four partnerships at level four were divided to make a sixth category; however, the intensity and activities of all four of these partners was significantly different from the other levels, and so much more similar to each other than different, that they were grouped together as level four (iterative, shared inquiry into practice that bridged to teachers' own learning). While levels have been given numbers as names (level zero, level one) to show that there is an increasing intensity in collaborative inquiry, they are not meant to suggest equal distance on a scale (i.e., intervals). For example, the difference between level 3 and 4 was much greater than between level 2 and 3. Also note that, because all of these educators participated in cross-school meetings during which there was time set aside for partners to work together (with some optional guiding prompts), some degree of collaborative planning was evident for most, but not all (i.e., Carole:Seline, David:Seline) pairs. That said, clear differences emerged in terms of how often and how they worked together, the goals that were pursued by teachers, and the extent to which an educator's goals and activities related to the practices of their partner.

When looking at how teachers worked together, there were several activities that cut across most partnerships (sharing resources, co-planning). Those deemed to be at higher practice-related collaboration levels tended to also engage in iterative cycles of co-enacting and co-reflecting. At higher levels there was also a difference in terms of the

kinds of goals participants set and how one's goals and actions related to what their partner did and learned. Descriptions of these differences are provided in the upcoming section.

How Did Collaboration Relate to the Practices Teachers Tried and What They Learned?

In this section, I provide rich descriptions of three partnerships (sub-cases) to illustrate the dimensions of difference in the ways teachers collaborated and how this could be related to changes in their practice and learning. For each partnership I describe who they were and their initial relationship, the goals they set individually and together, the practices they developed in relation to these goals, how their relationship unfolded and what they learned alone and together.

Iterative shared inquiry into practice and own learning (level four).

Partners collaborating at level four set individual and shared goals. They engaged in co-planning with goals in mind and sustained conversation about goals as related to practices. Such partnerships involved ongoing reflection about implementation of strategies/ approaches and student access to curriculum and/or learning. They adapted their efforts based on feedback from each other and formative assessment of student learning. Thus, these partnerships could be described as collaborative, longitudinal work within practice-based inquiry cycles.

The partnership between Chad (CT) and Candice (LRT) exemplifies patterns observed across level four partnerships, the "deepest" relationships. Chad was in his fourth year of teaching when the study began. This was his second year at his Southern Arctic community school – teaching grade 8 during the study and grades 7/8 the year

before. He began his career in a small Canadian Prairie town, teaching grade 5/6 for two years in a K-12 school with a population of less than 100 students. The school was in a rural community with students with similar Western and Central European roots. The school where he now taught had students from a range of cultural backgrounds including several First Nations and Inuit heritage. During this study, Chad was very active in his school and school community – coaching, taking his students on field trips, hosting school/community events, and participating in professional development activities (e.g., Project CRISS training related to reading instruction) in addition to our inquiry group.

Candice had been a LRT in this multicultural, K-8 school for almost eight years and was a classroom teacher in this and another school in the district for 10 years prior. Over the previous three years she had begun to offer more in-class support as an option for students and teachers. This was due in part to her support room having been moved to a large furnace room in their school while school reconstruction took place. This shift to offering more in-class support was also encouraged and supported by Astrid (in her role as district administrator), who had introduced the district's LRTs to a variety of models of special education services, and Kelly, the school's other LRT, who was in the same space and service delivery predicament. In addition to rethinking how she delivered support to students and teachers, over the past two years, Candice had been working with Kelly and several classroom teachers in the school while reading about reading comprehension, to develop their instruction. While both Chad (CT) and Candice (LRT) worked at the same school, Kelly was the LRT who supported Chad and his students the previous year.

Even though their working relationship was new, during the year of this study

Chad and Candice established an inquiry partnership that involved co-planning, co-enacting, and co-reflecting. In fact, they created a weekly cycle that included each of these "phases" by meeting as soon as possible after they co-enacted a lesson so that they could reflect and plan. In their interviews, Chad and Candice both reported some frustration with each other, mostly around not always being on the "same page" and how one another seemed to direct and/or limit their discussions. However, both described the other as encouraging and supportive of their efforts.

They had two goals in common: writing instruction and teacher collaboration. Field notes relaying what they said at cross-school meetings reinforced that Candice and Chad sustained their joint attention to writing instruction over the course of the school year. In addition to these shared practice goals, Chad and Candice each described personal practice goals (Fall interviews). Chad set goals related to increasing students' access to learning, developing and using organizational supports, and explicit teaching, while Candice set goals related to using and integrating professional resources into her practice and nurturing positive student affect and classroom climate.

Mapping the practices that Chad and Candice each reported engaging in revealed some interesting relationships (see Figure 4.3). While Candice and Chad engaged in co-planning with writing instruction in mind, Chad's sub-goal to use and develop organizational supports became a significant joint focus early on. Both reported setting up writing folders and introducing routines related to writing workshop in September/October and November/December. Candice's personal goals, experience, and efforts to draw in professional resources similarly supported their ongoing planning, teaching, and problem-solving.

Candice's goal related to student affect and classroom climate seemed to impact both her and Chad's practice over the year. Chad noticed and described Candice's affect-related activities in October. Both Chad and Candice noted how Candice was celebrating and validating students' efforts. It seems that observing and discussing the positive benefits of Candice engaging in these practices helped Chad decide to do the same. From January onwards Chad reported and shared evidence of celebrating and validating students' efforts. From January to March both Chad and Candice focused on sharing and examining criteria with students. Chad's goal to be more explicit about expectations and criteria tied in well with Candice's goals to celebrate and validate students' learning as students received positive feedback in relation to these criteria.

Another example of how Candice and Chad reciprocally impacted one another's practice involved student access to curriculum/learning. One of Chad's goals was to develop and use graphic organizers to make instruction more accessible for his most struggling students, though he did not have specific plans about how to go about this. At the same time part of Candice's role as LRT was to help make learning more accessible for students. In October Chad reported noticing how Candice made graphic organizers based on their co-planning and in reference to different learning needs of students in their class. By January he began making graphic organizers himself.

Interestingly, even as Chad began to find success in making graphic organizers (an action he believed would help him to increase students' access to learning), he and Candice's cycles of action and reflection helped them notice that student-to-student collaboration was also helping students to access ideas and approaches (which was not an area either had planned to focus on or develop). In his Spring interview, Chad explained

182

that based on this observation he and Candice adapted their plans by integrating writing instruction within

> a group project [that] turned into [the students offering each other] varying models of success. There were some really valuable things that I learned from doing it that way. I did lots of group stuff [in other subject areas] but group writing was really interesting.

Figure 4.3 Activities of Chad and Candice, level four (iterative shared inquiry into practice)
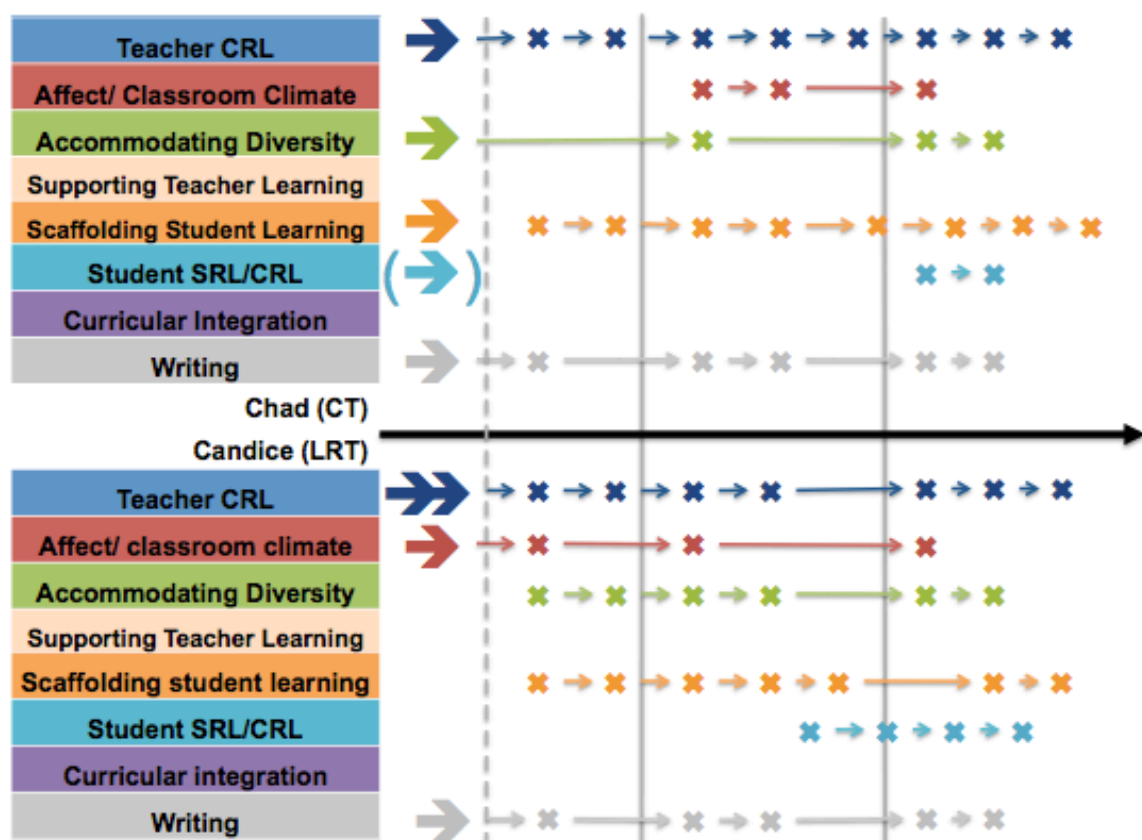
Even though Chad's focus on developing graphic organizers to help scaffold student learning inadvertently made writing workshop more teacher centered, Chad and Candice countered this by noticing how well students worked together when they offered them the option to create their own approaches and contribute to collaborative writing pieces in personalized and specialized ways. At this point Candice and Chad moved from co-planning, co-enacting and co-reflecting on a single lesson per week, to developing and implementing approaches and activities that students could use and access all week. Their initial attention to planning and introducing an organizational approach or weekly mini-lessons had, for the most part, limited the focus of their collaboration to those single weekly co-taught lessons. At different points in the Fall each expressed how their work together did not seem to have momentum. Candice wanted Chad to re-teach the weekly mini-lesson or develop his own mini-lessons without her and Chad felt like he needed more co-planning to time to figure out what to do between lessons. However, there was a shift in the amount and kind of activities they engaged in when they collaboratively focused on having students write together and offered them choices in how they could engage in writing. When they shifted their attention to these kinds of foci, they found that students made choices and tried out processes and options all week long (April exit slip, Candice; Spring interview, Chad) and relied less on Chad and/or Candice to deliver the next "step" (e.g., organizational approach or mini-lesson) on a teacher controlled schedule.

The example of Candice and Chad's collaboration points out a trend across many collaborative interactions of the four partnerships at level four. In these more iterative bi-directional collaborations where partners co-planned, co-enacted and co-reflected, the

184

practices they tried were influenced by the goals and actions of their partners. Their personal goals, combined with the parity and mutually accommodating approach they took to their partnership, enabled the development of unexpected and layered (i.e., interrelated and complementary) practices that fed into their iterative, shared inquiry into writing instruction. In maintaining their planning, enacting and debriefing together, the sustained iterative nature of their efforts helped them to draw from one another's ideas and experience while also using formative assessment to inform their decisions.

Like Jill and Margaret (also level four), Candice and Chad's collaboration was emergent. It seems that the cycles of co-planning, co-enacting and co-reflecting helped them to become more responsive to a variety of ways to engage with and share ownership for their own and student learning. As Candice and Chad reflected on what they were doing together, what they were reading and discussing in the cross-school learning community, and what activities increased student engagement and success, they moved from concentrating their efforts on their weekly co-taught lessons to developing opportunities that let students access, use and share ownership of practices between co-taught lessons.

Interestingly, level four partners reported particular kinds of learning. For collaborations at level four, teachers reported learning about writing instruction, student learning and/or engagement, accommodating diverse learners, teacher collaboration, professional learning communities and themselves as learners (see Table 4.11).

Both Chad and Candice described new or more refined understandings related to writing, writing process and writing workshop. When asked what she learned about writing, Candice explained that she found that when students had a purpose and audience

for their writing, they had more voice. She also described how she learned about the value of having time for students to share their writing (an aspect supported by the literature read for cross-school inquiry meetings). Candice and Chad reported that their learning was spurred and supported by Atwell's text. Like Atwell, Candice found the quality of engagement, ownership and learning on the part of the students was significantly higher when she included a sharing stage. Candice explained that, while they were initially worried that the grade 8s would not be willing to sit in a circle, she learned that once the ritual of sharing work with one another was established, the students began to acknowledge the strengths of one another's writing and referred to shared criteria in describing it. This insight tied together many of the practices that Candice and Chad worked on together.

One of the things that Chad learned was linked to formative assessment. In his Spring interview he noted, "I am learning that it is realistic to change plans to fit kids" (April exit slip). Chad explained that allowing one of his students to scribe for another (who had a significant writing output challenge) mostly required a shift in his expectation of how kids could engage in the writing process – as having a peer willing to scribe for him was an "Accommodation that was already there." He and Candice found that allowing students to write together (e.g., in one activity each member of the group had to write a different part of the same story) helped students to talk about the different aspects of their shared composition, what they were trying to achieve in relation to criteria, and offered each student a chance to focus on a smaller piece of a bigger whole.

Table 4.11   What collaboration partners learned

	Collaboration Level	Writing process/ writing as communication	Student affect/ classroom climate	Accommodating diverse learners; Ways to increase access to learning	Scaffolding teacher learning	Scaffolding Student Learning	Self regulated learning	Co regulated learning	Curricular integration	Teacher collaboration	Self as a learner
Cory	4	√	√	√	√	√	√	√	√	√	√
Kelly		√	√	√	√	√				√	√
Barb	4	√	√	√	√	√	√	√	√	√	√
Kelly		√	√	√	√	√				√	√
Chad	4	√	√	√	√	√		√	√	√	√
Candice		√	√	√	√	√		√	√	√	√
Margaret	4	√	√	√	√		√		√	√	√
Jill		√	√	√	√					√	√
Ray	3	√	√	√	√	√	√	√	√		
Krystal		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Susan	3	√	√	√		√					√
Sally		√	√	√		√		√	√		√
Carole	2		√		√	√	√		√	√	
Lorna						√		√		√	√
Laura	1				√	√					
Alice					√						
David	0		√	√	√	√			√		√
Seline		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

187

Chad realized that when he offered more than one way for students to participate – being able to choose which section they would write, having access to a scribe, a computer to draft and revise text with, or a range of peers' examples - helped students to feel valued and productive. In his Spring interview he said, "Showing this one [student] he was valuable to this group [supported by] accommodations that are there for you anyways…of this whole [inquiry it] might be the one that sticks with me the most. I'm going to hang onto that piece and know that it is possible."

Partners at level four described what they learned about and through teacher collaboration. Both Chad and Candice felt that they learned how to contribute to the learning of their partner. Chad felt that he learned to share ideas in ways that he and Candice could mold "Something that all the students would like and finding interesting" (Fall interview). Candice and Kelly (both LRTs) had mentioned how in the past they had been seen as experts who would give and/or model approaches in classrooms, but that classroom teachers did not feel comfortable or knowledgeable enough to continue on with these approaches. Both felt that this made it difficult for teachers to feel like they could develop and/or maintain such practices without them. Interestingly, the four partnerships at level four seemed to move past this challenge. In the Fall Candice was very concerned that the ideas that she and Chad co-planned were only reflected in Chad's classroom in the lessons that they co-enacted. When asked why this changed over the course of the study, she noted, "I could tell him specifically what I liked or he could do the same for me." In the Spring, Candice excitedly explained that "Towards the end he was giving [ideas about how to continue with approaches introduced in the co-enacted lessons that occurred once a week]...something where it didn't depend on me to be there before it went forward." In her April exit slip, Candice wrote, "I am learning that

collaboration has many faces." When looking back on the year, Candice noted that compared to the other classroom teachers she worked with in the school, Chad wanted more descriptive feedback which helped him to plan what would happen between co-enacted lessons. One thing she learned was that different teachers want and are open to different kinds of interactions with their LRTs. Chad was able to be generative on his own when he got the kind of support he wanted and needed from Candice.

Partners at level four described what they had learned about themselves as learners. Candice and Chad both identified what they had learned about themselves through collaborative inquiry. In fact, they had two areas in common: realizing that they needed to slow down and seeing others' ways of doing things as important for them and their learning. In May, Candice wrote, "I am learning that as a teacher I usually move too fast in steps that are too big." Candice also found working together with Chad in his classroom "pushed" what she knew. She found that working together moved her past thinking about an approach to trying the approach; she also felt that being in the classroom together allowed her to see what Chad did which was different than what she thought these things meant and would look like after reading and planning together. She reported that seeing what Chad did meant that she "Actually had to think about" an idea over and over again when they planned, after they planned, while they co-enacted approaches and when reflecting afterwards. Similarly, in Chad's Spring interview he explained how collaboration with Candice was central to the development of his practice and understandings about teaching.

To sum up, teachers at level four - shared, iterative inquiry into practice that they bridged to their own learning/development - engaged in collaborative planning, enacting and reflecting; developed their practice in the areas of writing process/writing workshop;

worked to develop a positive and supportive classroom; increased access to learning for diverse learners; scaffolded students' learning; and used approaches to increase students' self- and/or co-regulation of their writing and learning. Across both classroom and learning resource teachers at this level, a support to using/developing a practice was the opportunity to collaboratively plan, try out, observe and debrief what this would look like. A key factor for classroom teachers' application of an approach more independently over time was that they and the students developed a sense of authorship and ownership of the approaches.

Level four partnerships reported learning about student learning and/or engagement (e.g., what worked for various students, where they saw increased student learning and/or engagement), instructional practices (e.g., scaffolding, creating access), teacher collaboration, professional learning communities, and themselves as learners. Partnerships at level four also distinguished themselves in that both teachers in a partnership identified learnings at all of these levels.

Intermittent shared inquiry into practice (level three).

Participants working in level three partnerships engaged in some co-planning with goals in mind often relating goals to practices. Unlike level four, partnerships at level three displayed much less ongoing, shared, iterative inquiry. Activities together could be characterized as intermittent shared inquiry into practice. There was also less frequent reflection regarding implementation where one or both partners discussed examples.

The partnership between Susan and Sally exemplifies patterns observed in level three partnerships. Susan began teaching 24 years prior to the study. She grew up and completed her teaching degree in Eastern Canada, but jobs were scarce and like many new teachers from her region of Canada she found a job in one of the Territories. During

her career, Susan had taken several years off to raise her children and had been back in the classroom for five years when the study began. Susan had been teaching at the same school at the same grade level since her return. Even though the original constituent group of the study was to be grades 4-10 teachers, the principal of her school had noticed that Susan was asking a lot of questions about teaching and diverse learners. He asked myself, Lorna and Astrid if we would extend the grade range for participants and then encouraged Sally (LRT) to invite Susan (classroom teacher in the English stream) and the grade one French Immersion teacher (Cecile) to participate in the learning community. When asked about how she taught before joining the learning community she replied,

I was educated a lot of years ago and I pretty much taught by what I remember, because the university courses were not, to me, they didn't teach the nuts and bolts of teaching a lot of stuff. So getting into a classroom you're thrown into it. There was no such thing as a mentor then or anything like that, you went, you did, you flew by the seat of your pants and I took a lot of years off, and coming back I still was in that mind-set, that's what I knew, that's how I taught. I knew there was change I just didn't know how to go about the change or what it was, so that's what I was hoping to learn and that I think I did learn [by participating in the learning community] (interview, six months after study was completed).

Sally had been teaching for 10 years when she joined the learning community. A lifelong northerner, she taught in a small community for a few years before settling in the region where the study took place. She had previously taught grades three and four for five years at her K-5 school and was now in her second year as the LRT. While her teaching had been restricted to a few grades and she did not have much special education

training, Sally drew from related experience with individuals with special needs to inform her work as a LRT.

Moving into the role of LRT had offered Sally access to monthly meetings with Astrid and the district's other LRTs. Part of Sally's role was to support colleagues in their learning; Sally found this exciting, and was constantly looking for resources and strategies to share with the teachers in her school. As a classroom teacher she had collaborated with colleagues who were similarly motivated and engaged in professional development, but now as a LRT she was expected to engage with all teachers in her school.

While Sally and Susan both agreed to participate in the learning community and study, their partnership was not as sustained (true for level zero through three partnerships) as level four partnerships (i.e., Kelly:Barb, Candice:Chad, Kelly:Cory, Jill:Margaret). During the study Sally and Susan taught together only once. Susan was not accustomed to having another teacher in her classroom. However, she collaboratively planned, debriefed and problem solved with Sally (and others in the learning community).

One way they described working together was that Sally would plan a lesson based on what Susan was interested in, teach it in a grade two or three classroom and then share the lesson and implementation story with Susan. Susan would take what she found useful from the lesson and use it with her grade ones. Sally shared that it was hard for her to be patient and work with Susan when she had other teachers at her school who were more open-minded and willing to co-teach with her (interview after study completed). Despite Sally's perception that Susan did not want to participate in the study/ learning community, Susan chose to continue to participate as Sally's partner even when Cecile,

the third member of their team, stopped attending after the first two sessions. Overall, Susan met with Sally infrequently, considered the ideas and approaches that Sally and the Calkins text suggested and implemented what she found doable.

Both partnerships at level three (Susan:Sally and Ray:Krystal) seemed to have one partner who had well defined goals and one partner who had less defined goals. Sally was clear about her goals, and tended to dominate conversations and planning with Susan and Cecile. This may have limited Susan and Cecile's opportunities to set or share their own goals. Ray (CT) dominated his partnership with LRT Krystal; his contributions often involved sharing his frustrations while Krystal gently worked to help him address his concerns by shaping them into goals and actions.

While Sally did not sit for a Fall interview, she did share her goals during cross-school learning community meetings. She expressed that she was committed to learning more about and taking action related to writing workshop, student affect/classroom climate, collaborative teaching, developing adult learning communities, and scaffolding student learning/explicit teaching. These goals were fueled by her passion for writing, her role as a LRT and the resources we were reading. They were also influenced and reinforced by the larger learning community. Her goals in the areas of collaborative teaching, writing instruction and student affect/classroom climate were common goals amongst the LRTs. Compared to the LRTs, Sally had two less common goals: developing/facilitating learning communities and scaffolding student learning/explicit teaching. Sally was a fairly new LRT (beginning her second year in the role), but an experienced and confident classroom teacher. For her, part of the lure of the LRT role was to support positive change to happen in more classrooms in the school (field notes, September; interview, January after study completed). Jill and Krystal, the other newer

LRTs, were not as focused on supporting colleagues' learning as part of their role, while Alice, Kelly and Candice often referred to and shared examples of this aspect of the role.

Susan was new to writing workshop *and* participating in professional development activities beyond those that were attended by all staff at her school. In September, Susan's goal was to learn about and get better at teaching writing. At our November cross-school meeting, Susan's focus and related actions were more clearly articulated during (and, in part, due to) her planning with Sally, reading the Calkins resource, and engaging with other members of the cross-school learning community. Her professional learning goals became clearer as she engaged with Sally in collaborative planning and reflection; Sally as a partner was a scaffold for Susan's learning.

Sally was the only LRT who set a goal related to explicit teaching. This benefited Susan as Sally shared the lessons that she developed and/or adapted from resources (professional books, examples shared in the learning community). While Susan often did not use the lessons that Sally had developed for and with their school's grades K and 2-5 teachers, discussing them with Sally helped Susan feel that the ideas and approaches Sally was sharing with her were not (necessarily) to remediate Susan's teaching (a concern she had) (November exit slip). She noted that most of the teachers in the school were collaborating with Sally to try and learn about similar approaches at various grade levels (field notes, November). Sally's collaborations with other teachers and decision to try out approaches and co-teach with other teachers in the school also seemed to benefit Susan, Sally and the Susan:Sally partnership in that Susan did not have to read, plan and work to change her practice at Sally's pace which was very fast. Sally was able to work on her many goals with teachers in addition to Susan.

Mapping the practices that Susan and Sally each reported engaging in helped to

show relationships between their goals and actions (see Figure 4.4). While Susan and Sally engaged in co-planning with writing instruction in mind, Sally's more specific writing goals related to scaffolding student writing, developing positive affect around student writing, and trying specific genres offered Susan some places to start. All of the practices related to the goals that Sally set for herself became approaches that Susan reported trying during the year. Thinking back to the Fall, Susan wrote,

> I have tried modeling expected processes and procedures, encouraged, supported, celebrated students and co-planning with [Sally]. I'm excited and so are the kids! We're getting there, as a class, attitudes are positive, writing is happening. I feel the program/ writing process is beginning to flow more smoothly and not be disjointed as in previous years (reflective writing, January).

> Both Sally and Susan reported setting up writing folders and introducing routines

related to writing workshop in September/October and November/December and January/March. Without a collaborative partner, it is very possible that this would have been the only goal-related action that took place in Susan's classroom as it took her the better part of four months to get writing workshop started. However, Sally and the other members of the cross-school learning community supported and scaffolded Susan's plans and practice with their examples and suggestions.

The nature of relationships at level three (and two), was that they were episodic. The co-teachers did not engage in ongoing, iterative cycles of planning, teaching and/or reflecting/debriefing together. In Ray and Krystal's case they co-enacted together (when Krystal could make this work in her schedule) but their planning and debriefing happened almost exclusively at the learning community meetings (8 times over the course of a school year). Unlike the co-teachers at level four, level three partners

did not create or sustain cycles of planning, enacting and debriefing back at school. Though Susan and Sally occasionally met to co-plan between cross-school meetings, Sally did not feel welcome in Susan's classroom and Susan took a long time (compared to Sally and other classroom teachers she worked with) to ponder and commit to a plan even when she and Sally had made the plan together. This is not to say that individual partners at level three (and two) did not engage in cycles of action and reflection, however, partners at level three rarely completed cycles that included co-planning, co-enacting, co-reflecting and co-problem-solving.

Susan and Ray were both experienced classroom teachers who willingly participated in the learning community and study. Interestingly though, both wondered if I should be focusing on them versus other members of the group who more regularly participated in professional development activities. Ray did not want me to waste my time interviewing him. In his September interview he said, "I'm surprised you want to see older teachers, that you're willing to work with [us] older teachers. I thought that you'd be looking for young, new teachers that are able to change what they do." For Susan and Ray the ideas and approaches explored in the LC challenged much of what they did and believed related to writing instruction and diverse learners at that time. Yet, both found and reported new practices and learning connected to collaboration with their LRT.

At level three, classroom teachers implemented practices related to writing workshop/writing process, mini-lessons/modeling, working to encourage and validate all students and, by the end of the year, offering students choice/increasing access to learning. Judging by the look on many community members' faces, they were surprised when at our April learning community meeting Susan explained how she was learning

how choice was applicable for young writers. She reiterated this in her exit slip when she
noted that,

> As a whole class activity we brainstormed a list of possible writing territories to
> be posted in the classroom as a reference tool. We talked about what may be
> included in some of the more common territories (i.e., birthdays, camping, a trip
> etc.) with who, when, where and why prompts.

Figure 4.4   Activities of Susan and Sally, level 3 (intermittent shared inquiry into practice)
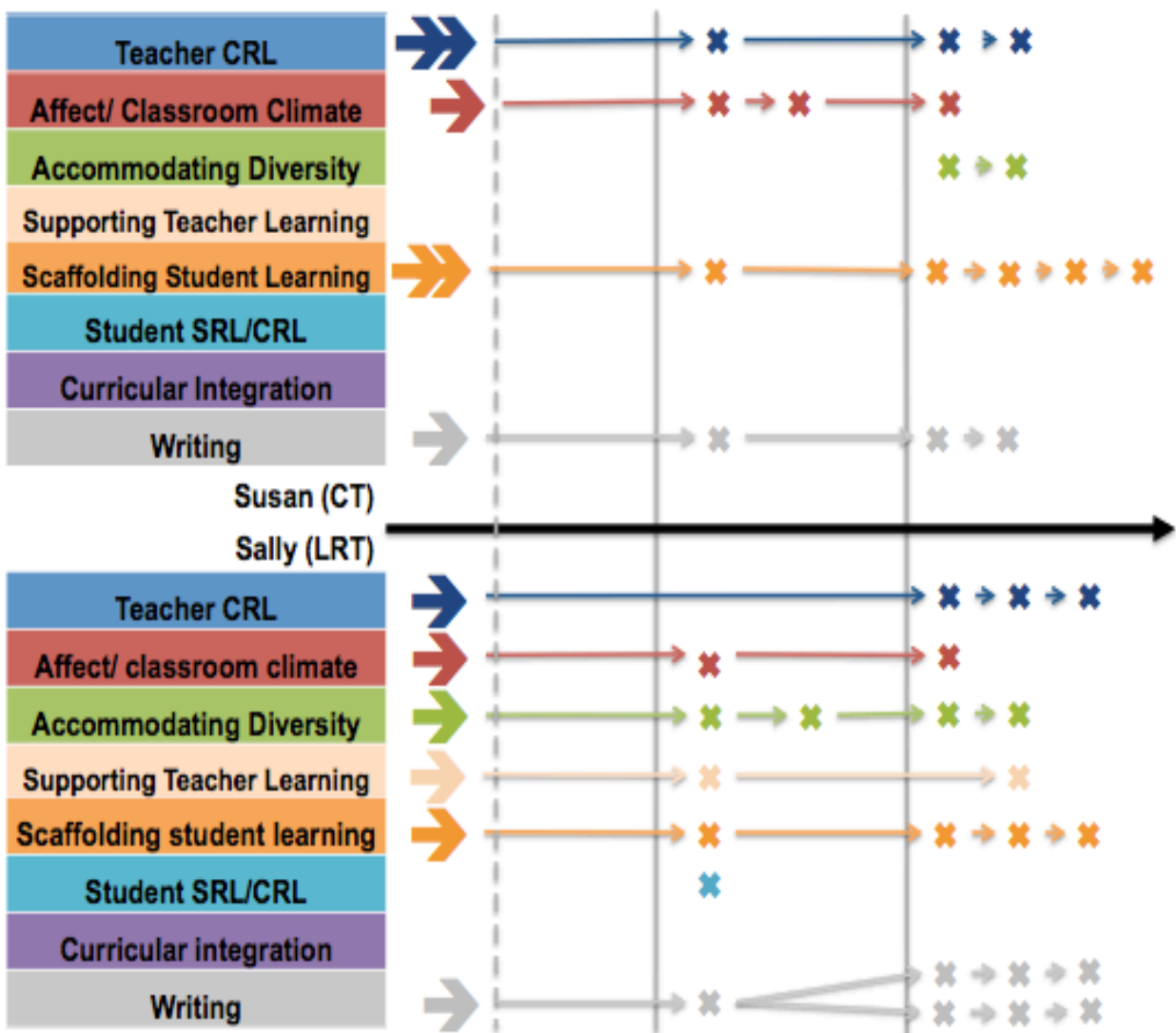
All of the teachers at levels three through five engaged in practices that provided more access to learning for students. In January, Sally reported that, "Even our students who struggle have choice and support in the form of another teacher or group work or alternative." This was occurring with the other classroom teachers that she was collaborating with. She continued to share what she was doing and learning with Susan, pointing out how she had engaged several of the students with learning challenges in other classes when she allowed them to choose which piece they wanted to write. Susan personalized this idea and, in April she shared that she was building in ways for students to make choices when they wrote and that, "They love the choices available to them." This was a significant shift for Susan who did not attend the learning community with an intent or willingness to focus on offering her students multiple pathways to learning. In fact, when asked her about how the approaches introduced in the learning community might help in addressing the diversity of learners in her class, she was not able to express a connection; for her it was a sticking point for most of the year. Yet in the Spring she wrote, "I am trying to not be such a control freak!! and allowing myself to believe in a child's ability to do the necessary jobs." Ray made a similar shift during his collaboration with Krystal. In April he wrote in his exit slip that "[W]e have revamped writing by using binder portfolios, writing with territories, publishing one work of their choice and redrafting stories." In both cases, they began the Fall feeling like they might not make much progress with their struggling learners, but did in fact, try out and develop a range of practices that increased students' engagement in and access to learning and writing.

The kinds of things Susan and Sally focused on and the ways that they worked together resulted not only in the development of their practice, but in particular kinds of learning. Collaboration partners at level three (Krystal:Ray and Sally:Susan) reported

learning about writing instruction; student learning, affect and/or engagement; accommodating diverse learners; and to a lesser degree compared with the level four partners, themselves as learners. Partnerships at level three distinguished themselves because both teachers reported little learning about teacher collaboration and learning communities.

Both Sally and Susan described new or more refined understandings related to writing, writing process and writing workshop. In June, when asked what she learned about writing, Sally wrote, "I felt the most success came from the collaborative nature of [writing workshop]. I'm using way more strategies I've read about, getting folks started." For Sally a shift was to get students more involved; Susan's learning was grounded in what might be considered fundamental principles and practices of writing workshop: choice, mini-lessons and opportunities for students to apply approaches on their own writing. In January Susan wrote, "I have refined my literacy teaching practices by [using] writers workshop, modeled writing [mini-lessons], given kids the time to practice the lessons taught on their own pieces." This was different from her previous practice of students copying teacher writing and all students creating the same product.

When asked what she had learned about supporting diverse learners through her participation in the learning community/study, Sally replied "Ideas that are relevant are: starting where they are and ways to show growth - evidence of it; celebrating that growth - it's not always big leaps" (interview, January after study completed). During the study both of the classroom teachers at level three (Susan and Ray) were vocal about the challenges of teaching learners who struggle and often referred to them with a tone of frustration and/or detachment. Susan had mentioned several times that her students were not able to generate ideas and compositions independently. Yet she worked with Sally to

plan and implement writing workshop and in April Susan wrote in an exit slip, "I modeled and talked through the process with the kids [-] it went better than I expected!! The kids were very involved and eager to share their ideas. We had lots of fun." In June Susan wrote, "[A] huge success was that I realized that my students who struggle putting their thoughts in print have amazing thought[s, they] are typically my deeper thinkers." This kind of dispositional shift of perceiving and working to engage students in a positive and learning-oriented manner seemed to be pivotal in terms of both Susan and Ray's learning and engagement in their teaching and professional development.

While partners' cycles of inquiry - co-planning, co-enacting, co-reflecting - were not as sustained or consistent at level three as at level four, seemingly rich, integrated learning did occur. Level three classroom teachers' reports of their learning linked aspects of writing instruction, student affect/engagement, accommodating diverse learners, and teacher collaboration. For instance in his Spring interview Ray explained:

> This year has been kind of like an epiphany. I mentioned that I used to always have a – I'd do a novel, I'd do a short story, and [I'd always use a] teacher's manual, and they would have 'this would be an interesting place to put in a creative writing exercise' and they'd give you a topic, so then I'd just follow that for years and years that was my way of doing things. This year [trying writing workshop] I let the kids go through their territories and [asked] 'what else does this jog in your mind? What else – what other thing can come of this? What other kind of memory do you have that kind of relates to this?'… and I'm getting to the point where now as long as they can kind of express this, or justify the connection, they can go write it. So, [I have learned about] drawing upon their experiences and then building upon that and going on with it, and then giving

them encouragement and then seeing how they're doing, and then creating lots of positive instruction, and then monitoring it.

Like Ray, an interesting aspect of the learning for teachers at levels three and four (Cory, Kelly, Barb, Chad, Candice, Margaret, Jill, Susan and Sally) was that they all implemented writing workshop, focused on positive and encouraging feedback for all students, and created multiple ways for students to access learning. In addition most level three through four participants (all but Margaret and Jill) used approaches that accommodated diversity and positioned students as authors who could draw from mini-lessons based on formative assessment. For these eight teachers the explicit teaching of strategies was used as a resource to scaffold student learning rather than require students to create the same piece as the teacher.

Teachers in level three partnerships also gained some insight about aspects of self- and co-regulated learning (but not as richly realized or described as the teachers at level four). Susan realized that "I have given the kids more choice in their writing and have explored different types of writing…I no longer control but guide. The kids are much more eager and involved. They ask for writing time (interview, January after study completed). Ray felt that within all of his inter-related learnings his single greatest insight involved students in choosing their topics and shifting to offering mini-lessons to students rather than controlling what every step of a composition looks like Spring interview). This shift created opportunities for increased student ownership and self-regulation of their writing and learning. In September, Ray stated that in his 21 years of teaching he had not had such a "needy" class. Yet, in January Ray noted "I need to focus on making my needy students more independent in their writing." By his May interview he noticed that "After this first semester I could ease off and let them have more of their own

freedom and choices, this year much more of that, and I found the progress was faster, and the kids were more successful, and [they] saw that they were successful."

Sally's insights were quite different from Susan's. She connected student self- and co-regulation of learning with teachers' co-regulation of practice. In her April exit slip she wrote that she was learning that "Criteria seem to be really important…as ways to support the students with diverse needs by scaffolding and mini-lessons, developing goals or narrowing goals that can be revisited. Continuing to talk about ways to move the kids forwards, not just at the end of a unit." At level three (and two) classroom teachers did not describe learning about collaborative teaching or the role collaborative teaching played in supported their learning. However, evidence from field notes and the written plans they made with their LRT partners suggested that collaboration did support classroom teachers' learning. Level three teachers did not necessarily acknowledge the impact they had on one another's learning. At level four, classroom teachers' goals and actions typically led to similar goals and actions for their LRT partners while at level three LRTs supported the learning of their CT partners - collaborating was less lateral. Perhaps one factor was that there was more trust and "buy in" to learning and trying new things from the classroom teachers at level four. Whatever the reasons the teachers at level three did not relate their practice-related learning to their partner despite considerable evidence that Sally:Susan and Ray:Krystal had found ways to collaborate that resulted in learning for each of them.

A final attribute of teacher partnerships at level three was that both educators described what they had learned about themselves as learners. In April, Sally wrote, "It has been difficult for me as part of a team. Its been hopeful at points - its created a feeling of hope that growth can and will occur. Personally I have gained very valuable

202

perspectives on what is realistic to expect when working with others". It would seem that a tension in the Sally: Susan partnership was that Sally did not expect to learn from Susan, but was in fact focused on helping Susan learning and grow. While this was a quality of her role, for much of the Fall it seems to have hindered how she interacted with Susan – as she expressed some impatience and disappointment. It was only in her April and June reflections that Sally commented on learning something about herself as a teacher and learner from her collaboration with Susan. She noted, "I am learning that I can't do it all and I'm not responsible for everyone's success or failure" (June reflective writing).

Susan had gained insight that involved her disposition towards teaching, teacher knowledge and her identity as a teacher. She wrote, "I am learning that it's okay to not know everything" (April exit slip). This seemed to complement and crystallize her January written reflection about being a "control freak." In April she wrote "Change in routine and practice is scary but I am more confident in my ability to do so for the greater benefit for the kids in my care." Finally in June she wrote, "I personally feel like I'm doing a better job with this subject area." Through her inquiry, supported intermittently by her co-planning and co-debriefing with Sally, Susan learned to reflect on her perceptions of herself, her students and teaching; she could recognize that they were shifting to be more open, positive and productive.

To sum up, teachers at level three – intermittent collaborative inquiry into practice – engaged in collaborative planning and/or enacting and reflecting, developed their practice in the area of writing instruction, developed more positive and supportive classrooms, increased access to learning for diverse learners, scaffolded students' learning, and to a lesser degree, nurtured students' self- and/or co-regulation of their

writing and learning. Within these partnerships there were tensions that seemed to limit what was tried and learned compared to the level four partners. Many factors appear to have contributed to this including, one partner dominating interactions, the classroom teachers' reticence to change (though they did consent to participate, developed practices and reported learning by the Spring), and the intermittent nature of collaborative activities (i.e., cycles of planning, enacting and reflecting were somewhat disjointed; parts of these cycles did not occur or only occurred at cross-school meetings). A key factor for level three classroom teachers' application of approaches and development of insights seems to be their collaboration with LRTs.

While level three partnerships had fewer layers to the kinds of learning they reported (as compared to level four), they did learn about student learning and/or engagement (e.g., practices that work for struggling students, where they saw increased student learning and/or engagement), instructional practices (i.e., scaffolding, offering choice, open-ended strategy instruction), and themselves as learners. Partnerships at level three also distinguished themselves because partners reported different kinds of learning from one another.

Little collaboration (level one).

The collaboration between Laura (classroom teacher) and Alice (LRT) was a working relationship deemed as level one. Laura was another life-long northerner. She grew up in a mid-sized community in the Southern Arctic. She spent her first four years of teaching in small communities in the North. Since 1990 she had taught grades five through eight, all but one of these years in the public system's middle school. Laura was a very structured teacher with a strong desire to learn and develop her practice according

to current thinking/research. She joined the study as the teacher with the most experience with writing workshop.

Alice went to a large university in Central Canada and started teaching in 1979. Then she and her husband moved to the community where this study took place. She taught Math and Science at the high school for a year, then became a generalist teaching grades four through nine. Alice took a break from full-time teaching for several years to have and raise her children. During this time she worked for the Department of Education writing resources and taking on part-time teaching assignments. When she returned to teaching full time she spent five years as a generalist in the district's middle school. She then moved into a district-level LRT position for three years. For the most recent seven years she had been a LRT at the middle school and considered and introduced herself to our inquiry community as an experienced LRT.

For the year previous to this study, LRTs had been facilitating school-based learning communities; this required LRTs to plan and offer professional book clubs. Thus Alice was used to leading groups of teachers and sharing her expertise. During the study she was also completing a Master's degree. Over the years, Alice and the school's second LRT had primary offered "pull out" support for students and their main contact with teachers was through IEP meetings and consulting with teachers as questions and issues arose. The spring prior this study taking place, Alice and her school's administrators adjusted the school's timetable to allow for more collaboration between teachers and LRTs. Alice saw this as a way to help teachers work on implementing practices to better meet the needs of the diverse students in their classrooms.

Like the Barb:Kelly and Seline:Carole partnerships, Laura and Alice had both been teaching for more than 15 years. Interestingly, these three partnerships with two

very experienced teachers was deemed to have a different level (qualities and depth) of collaboration. Though both Laura and Alice were excited to participate in the study/learning community (unlike Seline in the Seline:Carole partnership), their work together had a distinctly different character from the deeply collaborative learning-oriented partnership of Barb:Kelly (level four). Laura began the study with a great deal of experience, knowledge, confidence and a desire to learn. Alice came into the study with a great deal of experience, knowledge and confidence, but did not take on a learning or inquiry disposition. She saw her role as helping Laura despite information and prompts that were offered at cross-school meetings to help partners to collaboratively debrief and make plans for their next steps. Unlike level three partnerships where one teacher dominated goal setting and collaborative activities were intermittent, this partnership was deemed level one because Alice and Laura did not, for the most part, work together to set goals, co-plan, co-enact plans, or co-reflect on how their practice-based activities were going. In our cross-school inquiry community meetings they moved into discussions about other topics that distanced them from talking about what they were going to try to do differently in their practice. However, it should be noted that Alice and Laura were engaged in productive conversation and dialogue. They were actively engaged in discussing teaching.

Perhaps the first clue to why Alice and Laura's work together involved very little collaboration can be found in the goals they shared with me in their interviews. Although Laura and Alice attended the first day of the our learning community where we discussed ideas related to writing instruction, writing workshop as an inclusive approach to teaching, and collaborative teaching, when asked, Laura shared goals that seemed only peripherally connected to the texts we read or the ideas that other participants had shared

at our first two learning community meetings. While she had indicated early in the first day we met that she wanted to learn where "current thinking was at" related to writing workshop, she did not set a goal in this area. Instead her goals focused on deepening her understanding and use of two approaches she had learned the year before: one an approach to writing where teachers lead students step-by-step though drafting, revising and editing (which left little room for teacher inquiry or generativity) and the second was a strategic approach to reading instruction that was more open-ended and welcoming of students' diverse ideas, approaches and backgrounds. In addition, with Laura's almost strident approach to planning and sharing, she did not, initially, draw from the ideas presented by myself, the texts we were reading, or the other teachers in the learning community meetings. Laura's second goal area was to share what she already did around writing workshop and to become better at presenting to and teaching other teachers. In her Fall interview she noted:

> I also hope to benefit because I like to teach teachers as well. I have done major workshops and PD when we had a teachers' conference. I've given lectures on writing workshop, and so I like to share what I've learned with other people. Long term goal: university prof, teaching teachers.

Alice did not set any instructional goals for herself. In fact, she only set one goal: developing/facilitating learning communities. This was indeed part of the role of the LRT as well a focus for her in her Masters degree in Educational Leadership. This made for a unique dynamic in Laura and Alice's planning together. In our first two meetings together, Alice and Laura both positioned themselves as knowledgeable about writing workshop – experts even – and did not set instructional goals around writing (or anything else) together. Unlike partnerships at levels two through four, at level one the classroom

207

teacher and the LRT did not collaboratively inquire. Instead, Laura usually explained what she was going to do next in her instruction. Alice encouraged her and confirmed her choices and then they talked about how they could support teachers in their school to try some of the ideas we had read about and discussed that day in the cross-school learning community. Thus the only co-planning and co-reflecting they were engaging in related to supporting the learning of other teachers, which was the goal they shared in common.

Initially, Laura's affinity for following and creating steps for processes did not match up particularly well with the ideas we read in the Atwell text, shared by myself, or examples from most of the other teachers in the group. When teachers did share something that seemed to have steps that could be directly taught to students, Laura asked many questions, made a copy or approximation of their process and tried it out. Laura's natural inclination to seek out structured, somewhat formulaic approaches caused her to stand out in the learning community. But she was encouraged to share and inquire along with others.

Over time there was a shift in Laura's disposition that coincided with her trying out approaches and sharing her implementation stories with the group. Fueled by her reading of the new Atwell resource (she had previous read and used Atwell's 1986 text) and conversations in the large group, Laura (CT) worked by herself to revise how she organized writing workshop processes with her three ELA classes and focused, in particular, on revision. Alice (LRT) did not participate in the implementation of this revision process beyond acting as a sounding board and encouraging Laura. Even though Laura became very engaged in the learning community and took on a learning orientation, the absence of a partner with whom she set goals, co-planned, co-enacted or even co-reflected seemed to have limited the impact of her practice-oriented actions.

Laura reported exploring many fewer things than the classroom teachers at levels two through four. Unlike teachers at levels two through four, Laura did not report any activities in the areas of teacher-to-teacher collaboration, nurturing positive classroom climate/affect, or self-/co-regulated learning. She did, by the end of the year, try implementing writing workshop, organizational supports, scaffolding student learning and curricular integration. In November Laura reported that she had "set up the [writing workshop] structure, [including] binders, posters, [and] teaching the process" (exit slip). Most of the other teachers in the study had begun to weave in other practices like offering students multiple ways to engage in learning/writing instruction. Meanwhile Laura who was eager to learn and poised to deepen her practice through inquiry was working alone on a few, more structurally oriented practices. There was little practice- or inquiry-oriented collaboration between Laura and Alice to spur on and support Laura's efforts. Even Susan who was reluctant to engage in and try new approaches engaged in deeper and more varied cycles of action and reflection than Laura. But she had Sally working to support her.

By the Spring, after hearing and seeing examples shared by myself, others in the group and the professional text we were reading, Laura reported trying out approaches in two other areas. After seeing Barb and Kelly teach a lesson that focused on conferencing and hearing other group members share examples, Laura decide to reintroduce conferencing in her writing workshop (she reported that she had abandoned it some years before as too impractical). In May she wrote in her exit slip that she "had been meeting one-on-one with students." Finally, along with the majority of teachers in the cross-school learning community, Laura had started to work on using mini-lessons as a responsive instructional approach based on formative assessment. When thinking ahead

to the next school year, she reported in her June interview, "I'm going to meet the kids, I'm going to see what I feel like at the time, and then I'm going to pull out a lesson and go and then see which direction the kids are going to pull me." This may best sum up the kinds of shifts Laura made in her practice. She maintained a stance as expert and regulator of instruction, but tried out approaches that were more responsive to students' learning needs (mini-lessons based on formative assessment) and offered some individualized support (i.e., conferencing).

During the study Alice did not take on a learning/inquiry stance related to practice or co-plan and co-enact practices with Laura. All of the practices that Alice reported trying occurred outside of Laura's classroom and were not approaches that Laura reported exploring. Unlike the partners at levels two through four, where there was a relationship between what these partners did, for the most part Alice and Laura did not report planning or trying out the same approaches. The only area where there was overlap was that they both reported using organizational supports, yet they developed and used different kinds of cues (Figure 4.5). One reason for this may be that Alice was reporting what she was trying out with students in her resource room, a very different setting then the rest of the learning community's inclusive classrooms. During the study Alice used a broad array of approaches including using various graphic organizers that differentiated how students could process and engage in tasks, offering picture prompts to students, and most interestingly, building up and breaking down criteria with students, often in reference to examples. For example, Alice noted that she:

> start[ed] out with a good piece of writing [and engaged students in conversations about how] this is good writing and why? I have the rubric. The kids are really confused with how subjective the evaluations are, I explain that to them but this is

good writing, why, and here are the rubrics.

Laura, however, did not seem aware that Alice was using these approaches, as Alice did not discuss what she was trying with Laura. As a result Laura's opportunities to think through and try out activities in these areas were stymied. Alice also missed any feedback that Laura could have offered her. Ironically, neither Laura nor Alice reported engaging in any practices related to developing or facilitating professional learning communities or relationships - the area that they had set similar goals in. Hence this partnership can be characterized as one where little collaboration happens - some sharing and supportive comments were made, but there were no discernable cycles of co-planning, co-enacting, co-reflecting and/or co-problem-solving.

While teachers at levels two through four had reported learning in multiple domains – writing workshop, student affect/classroom climate, accommodating the needs of diverse learners, scaffolding students' learning, student self- and/or co-regulation of learning, curricular integration, teacher collaboration, professional learning communities and/or self as learner – Alice and Laura reported learnings from only one and two domains, respectively. Laura reported learning about scaffolding student learning and professional learning communities. In her Spring interview she explained that she had learned to focus on including and using students strengths and interests to help her create and scaffold writing instruction. Of all the instructional practices she tried over the year, using formative assessment to guide her instruction was the only practice she relayed as learning (Spring interview). Laura could describe what she had done, but when asked what she had learned, she had very little to offer in response. While this may reflect her disposition coming into the study – that of expert – teachers with similar years of experience – Barb, Carole, Margaret, Ray and Susan were able to describe what they had

learned through their collaborations around practice. But they had partners who supported them in their learning. This might suggest that the acts of setting goals together, co-planning, co-enacting and co-reflecting and co-adapting practices helped these teachers to recognize what they were learning. It is also possible that Laura's limited response could be related to the fact that she had set goals that were not similar to others in the learning community. Perhaps then the combination of not having a partner who took a practice-oriented learning stance, setting goals that were not in the scope of the resources she had available to draw from, her predisposition to taking an expert stance, and her affinity for learning procedures over adaptable practices hampered her learning.

Both Alice and Laura reported learning about qualities of and processes within a learning community. This was an area that Laura and Alice had both set goals in and connected to many of the conversations they had during reflection and planning time (as they pertained to how they could support the learning and practice of teachers at their school). In June, Laura, who came into the study a fairly independent-minded teacher, said to me "I want you to know that having time to talk with colleagues is invaluable."

Alice only reported learning related to one domain. This learning was connected to the goal she set for herself at the beginning of the study. When I asked Alice "How have you benefited from membership in our learning community?," she replied, "It's not really knowledge, but the time to converse with colleagues. I can't say I'm any smarter from content. I haven't learned anything new that was out there…it's more the conversation than anything" (Spring interview). When speaking about teacher learning and professional learning communities she focused on three sub-areas: providing structure and sustainability, helping teachers find balance, and developing a sense of community. For example, Alice felt she had learned that bringing teachers together

regularly with time to talk about what they were doing and where they wanted to go next supported their learning (Spring interview). Another key insight for her was that participation in a learning community offered teachers a way to find balance by stepping back to think about what they could and should be doing and how and to weigh their options before planning next steps. In her Spring interview she noted, "It's clever to have these learning communities because it forces us to find balance…slow down, you come in and have us slow down and think, why are you doing this?"

Figure 4.5   Activities of Alice and Laura, level one (little collaboration)
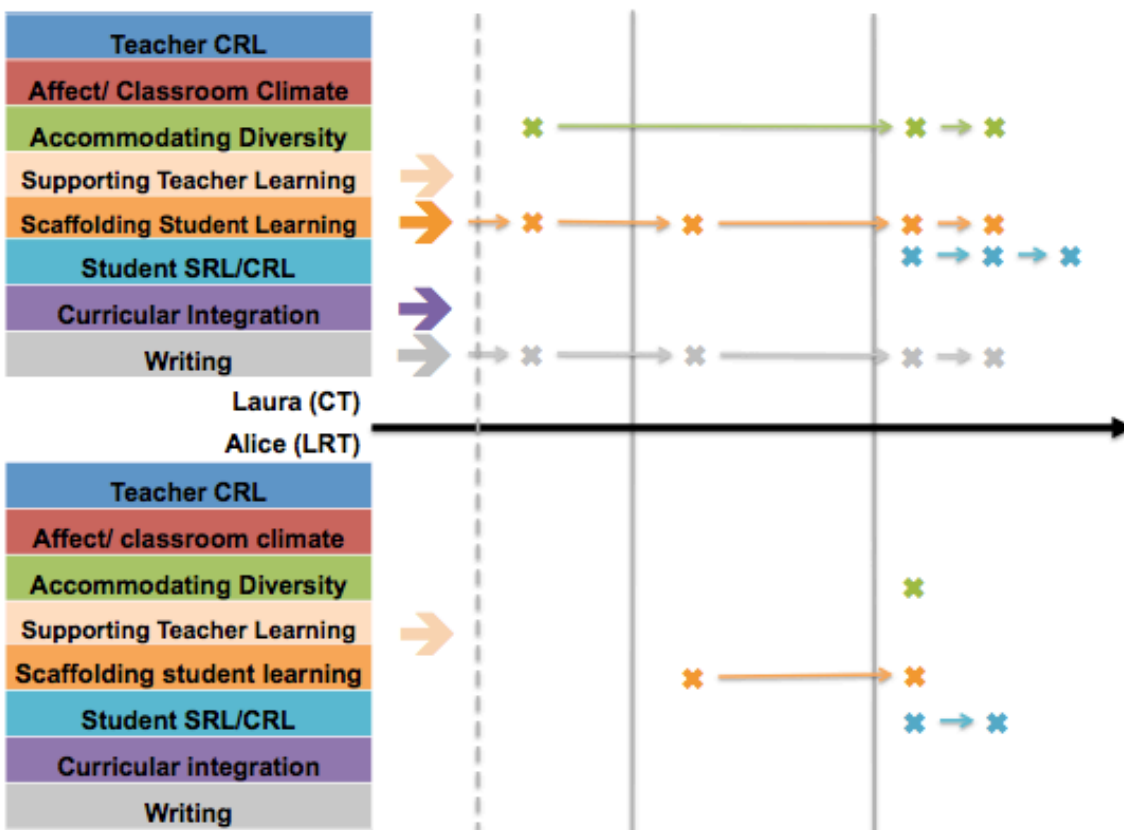
Examining Laura and Alice's work together demonstrates how even teachers in a level one partnership engaged in and developed practices and reported learnings, though these were fewer and less classroom practice oriented. Both teachers at level one struggled to take a learning and/or inquiry stance. Unlike other partnerships they did not work with their partner to support or be supported through co-planning, enacting and/or reflecting. This resulted in level one teachers exploring fewer practices and reporting learning in significantly fewer domains.

It is difficult to know why Seline, the LRT in the level 0 partnerships, did not participate more in the study, learning community and with her co-teachers. She had the opportunity to withdraw from the study, but elected to stay. She declined to give an explanation for this, but may have felt obligated as all other LRTs in the school district participated. Although not much data was received for Seline, making it difficult to include her in most cross community and dyad analyses, it is not uncommon for school staffs to have members who take up a similar stance and participation pattern. It should be noted that Seline elected to participate again in a study the next year with a different classroom partner, but avoided questions about how and why she participated the way she did the previous year.

Summary: Teacher collaboration as a support to professional learning.

These portraits of partners' activities and reflections demonstrate the interconnections between collaboration and learning. Looking across the qualities of teachers' collaborations, the practices they developed, and the learning they reported, richer professional development was arrived at when both the classroom teacher and LRT took a learning/inquiry stance. At level four both teachers identified goals they had for

themselves. These goals were often the same or developed together. But individuals also brought their own goals that also influenced what their partners did and learned.

At level four - iterative shared inquiry into practice and bridged to own learning - partners engaged in ongoing co-planning with sustained conversation about goals as related to practices; collaboratively developed strategies and approaches; worked together to implement, adapt and refine practices related to goals; and shared and critiqued one another's classroom examples. Even though this collaborative learning stance developed and played out differently across these four (Kelly:Cory, Candice:Chad, Jill:Margaret, Kelly:Barb) partnerships, they were similar in that each teacher saw or came to see their partner as a resource and support for their learning. Their different experience, perspectives and goals came to be seen as value added to their co-learning, rather than a frustration or barrier to their individual or collaborative learning. Their collaborative work can be characterized as engagement in iterative inquiry cycles where ongoing co-reflection, problem-solving, and adaptation of approaches occurred with their own practice and student-learning goals in mind. Partners had – or developed - a shared inquiry stance.

Partnerships at level three involved intermittent shared inquiry into practice and at level two involved episodic shared inquiry into practice. Within these collaborations teachers attempted fewer practices, with one teacher primarily supporting the other to try out and learn about various aspects of practice and collaboration that were important to them. There was a shared attention to progress regarding goals over time and partners' collaborations involved exploring ideas from various resources, intermittent planning, sharing and reflecting on approaches they enacted. At levels two and three one partner tended to dominate the other, but teachers' collaborations could be characterized as engagement in inquiry that eventually benefitted both partners. At level one, while there

215

was good will, partners did not work together on practice-oriented goals. There was very little engagement in inquiry, which could be related to little-to-no co-planning, sharing of ideas and practices as works-in-progress, or co-reflecting (i.e., debriefing, feedback).

In partnerships where LRTs approached their collaborations with CTs from an inquiry stance, both LRTs and their CT partners were more likely to try more approaches and learn from and with each other. For example, Kelly and Candice consciously supported the learning of their classroom teacher colleagues, yet took a learning stance as well. This may be why they were able to learn with their partners while the two other most experienced LRTs, Alice and Seline acted more as consultants offering ideas, resources and advice. The qualities and depth of partners' collaborations – and the LRTs' stance – seemed to impact the kinds of practices tried and the learning both partners derived. The LRTs in level four partnerships took the most collaborative learning stance characterized by verbal and non-verbal expressions of parity. At level three, the LRTs struggled to work with their CT partners as co-learners, but did take a learning stance. For instance, Sally collaborated with Susan "from the side" sharing what she was trying and learning. At level one and zero the LRTs almost exclusively took an expert stance, they did not engage in their partnerships as learners and in fact, there was little to no co-learning. At level two, Lorna, the district administrator, stepped in to a collaborative role to offer the CTs in the level zero partnerships (David and Carole) an opportunity to work with her. Lorna's collaborative, inquiring approach to interactions with David and Carole resulted in learning for all three of them. However, the episodic nature of this relationship seems to have limited their co-inquiry and co-learning from reaching level three and four type qualities and outcomes.

The four partnerships at level four can most clearly be viewed as co-inquiry. At these levels teachers set and/or developed goals at the beginning of and during their

partnerships, debriefed and reflected on whether their plans and actions were making a difference, co-adapted approaches, adjusted plans and actions, and either continued on with or set new goals. They not only shared resources with one another, but were resources to one another. To a lesser degree, level three and two partners also helped one another become more open to new ideas, consider a broader range of possible pedagogical options, and pay attention to the impact of what they were doing, thinking and learning.

In the previous section of this dissertation I described teachers' development of practices, while in this section I described how the development of practices and learning were connected to collaboration. Collaboration did indeed relate to the practices teachers tried and what they learned. Participants involved in sustained, collaborative, iterative and inquiry-oriented partnerships reported rich learning in more domains than did their colleagues in levels three, two, one or zero partnerships (see Table 4.11).

What Conditions and Qualities Within Professional Development Activities Supported Teacher Learning and Development of Practice?

Participants were asked what supported them to develop new understandings and practices. Responses were first coded using a "bottom up" method, then conceptual categories were determined and applied based on the patterns derived (Figure 4.6). The most commonly identified supports that participants identified could be classified as co-planning (11/15), co-enacting (11/15), co-reflecting (12/15), drawing from expert others as resources (11/15), encouragement and mutual respect (11/15) and diversity of group membership (12/15). A closer look at these themes suggested that participants' responses fell into four overall domains of PD processes: collaborative inquiry with a partner, structures and qualities of the learning community, drawing from expert others as resources, and district level collaborative learning.

217

Collaboration with a partner as a support to teacher learning.

Participants were not asked to specifically comment on their collaboration

partners as supports or expected to identify specific kinds of collaborative activities. Yet,

all classroom teachers interviewed (9/9), 4/5 LRTs and Lorna (DA) identified working

one-on-one with another member of the learning community as a resource that supported

their learning. The high incidence of these references suggests that this pattern was robust

(i.e., one might expect that a specific question about collaboration partners would yield

an even higher response). In fact three of the four most commonly identified supports

were related to or were an extension of the collaborative inquiry partnerships. Butler and

Schnellert's collaborative inquiry model (2008) was again helpful in analyzing data as

participants' responses could be framed as describing the value of co-planning, co-

enacting, and co-reflecting (See Figure 2.3).

Referring back to what participating educators did, of the 15 respondents, 10 had

engaged in *collaborative planning* within a level 3-4 partnership. Of these teachers nine

out of ten (90%) of them reported that co-planning with their partner helped them to

develop new practices and/or understandings. Of all responses related to supports for

learning, co-planning was the second most frequently identified of all activities. Barb felt

that without co-planning "I don't think really that much about what I do. I don't think

sometimes I just do it" (Spring interview). Co-planning supported her learning by helping

her to reflect on her actions and make her tacit knowledge explicit, for example, about

how she already supported diverse learners within her practice. Of those in level 3-5

partnerships only Sally did not report co-planning as a support to her learning.

Figure 4.6   What helped teachers develop practices and understandings?

Structures and Qualities of the Learning Community

Collaboration Partner

Valuing & encouraging diversity

Sense of community

Encouragement & mutual respect

Seeing & being able to do things in multiple ways

Seeing & being able to do things in multiple ways

Facilitator providing resources & modeling ideas

LRTs providing resources & modelling ideas

What helped teachers develop practices and understandings?

Accountability to the group

Co-planning

Drawing from expert others as resources

Co-enacting

Having a shared focus

Co-reflecting

Large group sharing & debriefing

Sustained cycles of inquiry

Affective qualities

Increasing pathways to learning

Scaffolding learning

Self- and co-regulated learning

Carole and David's LRT partner (Seline) actively resisted engaging in collaborative activities like co-planning with them; however, Carole reported that co-planning had supported her to develop her practice. This required deeper analysis. Carole had struggled to get a project going with Seline, so she applied what other members of the cross-school learning community were doing and exploring and collaborated with other CTs at her school. She and two other teachers grouped all of their grades 2-4 students together for Science and co-planned stations and built ways to offer students choice based on their interests. Later in the year, Carole and David also engaged in co-planning with Lorna, but neither identified this level two episodic planning as a support for their learning. Overall, 11 of the 13 teachers who engaged in co-planning reported that this had supported them to develop new practices and/or understandings.

A second area that participants identified as supporting them to develop new practices and/or understandings was classified as what Butler and Schnellert (2008) consider co-enacting in their inquiry model. Nine of the ten (9/10) teachers in levels three and four partnerships reported that co-enacting supported them in their learning (Krystal did not sit for an interview or submit her written reflections). Eight of these teachers described with more specificity the ways in which co-enacting supported them. In addition Sally, who did not co-enact with Susan, felt that co-enacting with other teachers in her school had supported her to develop her practice. Margaret, who had been teaching more that 25 years, felt it was co-enacting that made the most significant difference in her learning and shifts in practice. In both her Fall and Spring interviews she explained that she had been to workshops and had colleagues, in particular a previous LRT, try to explain and show her how to implement writing workshop with the diverse learners in her classroom. However, she had not been able to translate this to her practice, even though

she recognized a disconnect between her reading program - where students had lots of choice - and her writing instruction which involved her leading the group in composing shared texts on chart paper. When I asked "What made the most difference [in supporting your learning]?," Margaret replied "co-[enacting]. And I just thought, how lucky I was that it worked for [Jill and I] so that I was able to have that, because I could've been frustrated sitting there listening to all of that [other members of the learning community sharing examples], it might not have worked for me [without co-enacting with Jill]" (Spring interview).

Carole, also found co-enacting important for her learning but had the additional challenge of finding a partner to help her take the ideas she was hearing from the group and using them to restructure how she was teaching content writing. Seline, her LRT partner, neither sat with Carole during the inquiry group meetings, nor co-enacted approaches with her at the school level. In January, Lorna (DA) offered to be Carole and David's collaboration partner. These ad hoc partnerships involved one or two cycles of co-planning, co-enacting and co-reflecting. Lorna also began to sit with David and Carole at the cross-school meetings to co-plan and co-debrief. These two partnerships constituted the level two partnerships in the study (see Figure 4.7). Based on these experiences, both Carole and Lorna (but not David) reported that co-enacting supported them in their learning. Carole explained that, "Lorna came in and co-taught… I found that that was the one area where I really tended to work on some of the things that we talked about in here (the cross-school learning community), and expanded it" (Spring interview).

Figure 4.7   **Collaboration levels of inquiry partners**

Type	Name	Partnerships
zero	No collaboration	David/Seline Carole/Seline
one	Little collaboration	Laura/Alice
two	Episodic shared inquiry into practice	Carole/Lorna David/Lorna
three	Intermittent shared inquiry into practice	Roy/Krystal Susan/Sally
four	Iterative shared inquiry into practice and own learning	Cory/Kelly Barb/Kelly Margaret/Jill Chad/Candice

Co-enacting not only increased teachers' likelihood of trying out an approach, but also often offered them feedback from their partner during or directly after the act of teaching. For example, Cory found that:

Having somebody like Kelly [co-enacting] by your side helped in so many ways, like she would be waiting for the question to come and she'd always be ready with a way she has done it. Many times through the year when she would just kinda [give me feedback during a lesson] I thought 'okay, I can flip around a lot' and she'd just help me [decide what direction] to go. You know. 'Here, check here'. So…the collaborative approach is good (Spring interview).

Similarly, Chad found that co-enacting together once a week helped him "to

reflect on my practices even like assessment things, who's going to take notes on these kids today? How are we going to track, record? Just those conversations make you better" (Spring interview). In sum, 11 of the 12 individuals who engaged in co-enacting reported that it was a process that supported them to develop new understandings and practices.

A third activity that participants identified as supporting the development of their practice and learning was co-reflecting (12/15). This particular collaborative inquiry activity was accessible to partnerships at all levels. All of the teachers at level four reported that collaborative reflection (including debriefing and problem-solving) supported them. But Lorna (level one), Carole, David and Lorna (level two) and Ray (level three) also reported that collaborative reflection with an inquiry partner helped them in making shifts in their practice and understandings about diverse learners, writing instruction and making learning more accessible. Candice felt that reflecting and talking with Chad helped her to figure out what "really works…then maybe you figure out why or maybe you read, oh this is best practices" (Spring interview). David reported that "having discussions with Carole and Lorna about the poetry unit" (Spring interview) helped him to think about what was working and why. Collaborative reflection supported teachers to debrief their efforts, make explicit their tacit knowledge, decide on their next pedagogical moves, and, in some cases, step back to make theory-practice connections.

One final category could be derived related to collaboration partners. Eleven of 15 participants described some affective aspect of the ethos and/or interactions they had with their partner that helped them to develop their practice and/or understandings (red section, Figure 4.7). Five teachers (Laura, Margaret, Candice, Barb and Jill) mentioned that their partners' encouragement, reinforcement and/or validation helped them to learn.

223

Barb called this "validation that I'm on the right track" (Spring interview). Candice felt supported through Chad's "encouragement" (Spring interview). She explained that, "I could tell [Chad] specifically what I appreciated or what I liked or he could do the same for me." Cory and Ray also referred to their LRT partners' supportive interactions with them made a difference in their learning.

Two LRTs (Kelly and Jill) felt that open communication helped them to learn. Candice felt less isolated and Lorna felt that being treated like an equal helped her to engage as a learner, not just as the district literacy expert. Kelly, Candice, Jill, and Kelly were all in support roles, but their description of what supported them to learn confirms that they took a learning stance during the study, specifically when working with their CT partners.

Sally offered a negative example related to her partnership with Susan. She looked back on their year together and saw that her efforts to push Susan to do particular things, in particular ways, hindered her engagement as a co-learner. From two classroom teachers' (Chad and Margaret) perspective, their LRT partners' (Candice and Jill respectively) willingness to co-teach made a difference. Both of these LRTs had expressed nervousness about co-teaching. Their humility and honesty helped to create a tone of co-learning and parity. Through open communication, Chad and Margaret's relationships with their LRTs became more reciprocal; they were able to welcome and support Candice and Jill, as well as be supported (which is part of the LRT's role) in turn. Six of the teachers commented on the overall tone of their collaborative relationships. Chad, Barb, Margaret and Jill described having a good connection with their partners. Margaret said, "I feel totally, totally comfortable working with someone like Jill" (Spring interview). Kelly and Jill felt that developing close relationships with their classroom

partners had helped them learn, while Candice felt Chad's personality and style complemented hers, which enabled them both to learn.

Based on the reports of these individuals and the artifacts they shared, teachers found activities such as co-planning, co-enacting, co-reflecting and affective aspects within these collaborative partnerships helpful. Thus collaborative inquiry (combined with participation in the learning community which offered Carole, Lorna and David partners) spurred and supported teachers' professional development.

Structures and qualities of the learning community that supported teacher learning.

In describing what supported them to make changes in their practice and thinking educators also identified structures and qualities of the cross-school learning community (Figure 4.6). Through inductive coding participants' responses grouped into several subcategories: having a shared focus (7/15), feeling accountable to the group for actions taken between cross-school meetings (9/15), large group sharing and debriefing (10/15), sustained cycles of collaborative inquiry (9/15), affective aspects of the learning community (9/15), and diversity of inquiries and learning community membership (12/15).

Having a shared focus.

Seven (7/15) educators suggested that the learning community's focus on a common topic scaffolded their learning. Barb reported that she "found it meaningful [that] we were all discussing the same thing" (Spring interview). Laura felt that "working with teachers who had the same goal, or wanted the same thing as I do" (Spring interview) deepened her learning. She suggested, "If they continue with these learning communities, which I find are excellent, then two or three people can say, well I also

want to work on …" (Spring interview). Ray felt that a group of educators "brought all together in writing" helped him to focus and maintain his efforts to explore and develop his writing instruction (Spring interview). Chad felt that his learning was supported because the cross-school group built and used common language. Having a shared, practice-oriented focus on writing instruction and diverse learners nurtured professional learning by providing participating educators with a foundation from which to engage with each other. The learning community's focus on a shared goal helped educators to develop their own goals and plans, articulate their ideas and implementation stories, and acquire new ideas, perspectives and insights.

Feeling accountable to the group.

Another aspect of the learning community that nurtured participants' learning was that they felt that they were accountable to make plans, try them out, and bring examples and stories to the next group meeting (9/15). This could be considered co-regulation. There was an expectation that all members were trying things out in their classrooms: the design of prod activities supported each partnership (or individual) to engage in cycles of action of reflection that were be reported on at the next meeting. With all of the competing demands for his time, Cory felt that coming back and sharing with the group helped to keep him focused not only on his goals, but made sure he tried something out. Candice reported that "just having that little push, you know what I mean, 'okay we're actually going to try writers' workshop'" supported her learning. She elaborated, "I really enjoyed having that opportunity [to implement approaches with Chad] because I don't have my own classroom so [I] actually [got] to try some of these things" (Spring interview). Chad felt that part of the reason that he tried out approaches was because "something [was] expected to be ready" for the cross-school meeting (Spring interview).

Collaborative enacting.

A form of collaborative enacting involved educators engaged as writers in writing workshop. At the cross-school meetings I engaged participants in brainstorming their own writing territories, drafting compositions, drawing and applying ideas from mini-lessons, working on a piece of their choosing between meetings, conferencing and sharing their writing. Five (5/15) teachers referenced this kind of collaborative enacting as a support for their learning. Candice felt it "helps you to identify with students…You start to see that learning does have to be meaningful. If you're not engaged what could be more boring than having to write about something you just don't care about" (Spring interview). Ray noted that writing together and sharing writing with his colleagues made him "all enthused and eager to put this in practice" (Spring interview). This practical aspect was particularly important to teachers who were unfamiliar with and/or resistant to writing workshop and/or accommodating diversity in their teaching. For Ray a key aspect of the initiative that supported his learning was experiencing "something that you can use, something that you can take back to the classroom, try out, and try it again, and see if it works with you and fits your style of teaching" (Spring interview). In our first three learning community sessions, Ray and his LRT partner, Krystal, discussed how what they experienced together in these lessons as writers could be contextualized for their grade 4/5s. For Ray, collaboratively enacting – writing side-by side and sharing with Krystal and other community members – proved to be a pivotal experience that Krystal then helped him use as a lens for his classroom planning and teaching. For example, when Krystal explained to Ray that she was a very reluctant writer and very uncomfortable sharing her ideas aloud, Ray was visibly shaken by this information and asked her repeatedly why. This led to an intense conversation about why students need flexibility

about when and how they can be invited and supported to engage in classrooms and become better writers.

Collaborative enacting within the CoI supported the learning of teachers in less productive inquiry partnerships. In the Fall, David had to rely on the resources available to him in the learning community as he did not have an inquiry partner who wanted to work with him in his classroom. He noted that, "I think I learned better when something was shown to me. I'd kind of either do the same thing or change it a little bit on my own" (Spring interview). For Alice, who did not take a co-learning or inquiry stance with Laura, the time when she felt supported to learn was "when you had us all write" (Spring interview). The act of doing helped engage her with the learning community's shared focus on writing. During the two sessions where I taught a simulation lesson that teachers participated in, I was able to scaffold Alice's engagement in the topic and the learning community. She felt that "creating something" supported her learning. Both trying out new practices with the intent to share what was done with the cross-school community and engaging in writing workshop together under my facilitation offered Alice and the other participants common experiences as members of a community of practice. Enacting and exploring these practices together in the cross-school learning community fueled school-level inquiry activities.

Large group sharing and debriefing (collaborative reflecting).

A third kind of activity that participants felt supported their learning was sharing and debriefing. Ten (10/15) educators described attributes of the cross-school learning community that were grouped in this category. Laura and Cory felt that debriefing with the large group supported them in their learning. Laura reported that, "Getting to share what I do reinforces for me that I'm on the right track" (Spring interview). Seven of the

participants (Laura, Chad, Cory, David, Candice, Kelly and Lorna) felt that listening to what other teachers were doing made a difference for them. In his Spring interview, Cory noted "In a round table when [I] can hear everybody else's story [I am] always wondering where [I] sit. Where am I in relation to other teachers who are [teaching] at my level and what they're doing?" (Spring interview). Candice explained that the sharing and debriefing supported her learning, "I really like hearing about how people do things. So that's been a real benefit because you get to hear from across from a broader perspective of people" (Spring interview). She later noted that when she heard other teachers reflect on what they did and what they felt they were learning "you see there's more than one way to do things" (Spring interview). Nine of the 15 participants explained that seeing multiple ways of doing something helped them to develop new practices and understandings. Kelly and Chad specifically noted that teachers' willingness to share their success and failures within large group debriefs was a key support to their learning. It appears that group sharing, debriefing and problem-solving helped teachers to personalize and synthesize what they were doing and learning – and think about different ways to approach their similar and related goals.

One particular learning community activity, "lesson study," was referenced as a key support to learning. Six of the fifteen participants explained how this activity engaged the entire learning community in co-planning, co-enacting, co-reflecting and co-problem solving (Fernandez, Cannon, & Chokshi, 2003; Hiebert, Gallimore & Stigler, 2002). After the learning community had met four times, I asked the group what they wanted to learn more about and get better at. These shared foci were adopted by those who were still get oriented to writing workshop as an approach (Susan, Ray, David, Margaret), those who wanted to better attend to diverse learners (Barb, Kelly, Krystal,

Jill, Cory and Candice), and those who wanted to work on conferencing, a component of writing workshop that most participants felt they did not do well (Laura, Sally, Susan, Candice, Chad, Cory, Barb and Kelly) or at all (everyone else). Through group discussion and gentle prompting on my part, we decided to use Barb and Kelly's class to engage in lesson study. The group co-planned the focus and some aspects of the lesson on Friday. Then Barb, Kelly and I met over breakfast on the weekend to work out the details. On Monday morning, Barb and Kelly presented the plan for the lesson to the group and group members decided on aspects of the lesson and workshop set up that they wanted to observe. These were shared and a few adjustments were made to the lesson so that Susan and Sally could see students sharing their writing and a couple others could see a mini-lesson in this context. The co-enacting phase involved Barb and Kelly teaching/facilitating various aspects of writing workshop in Barb's class while the rest of the members of the learning community took notes on the areas that were of interest to them. Together we debriefed what was noticed and how it could be applied to various settings. Then partners planned the next steps of their collaborative activities in the afternoon. Several members of the group reported this as a significant support for their learning. For example, Cory said, "It was really powerful for me to see conferencing being done" (Spring interview). For Margaret, she and Jill observed the lesson to see how Barb and Kelly led the lesson. At the end of the year Margaret reflected back and referenced the observation and debrief as a turning point, "After watching Barb and Kelly, I said to Jill 'that's it, I am about not telling [the students] every time what they have to write about.' I don't do that anymore" (Spring interview). David noted "It's beneficial when I go to somebody else's class, or see somebody else's lesson" (Spring interview). Reflecting back on how she and Chad learned from the lesson, Candice said,

"I think it just raises the bar, you don't want to be left behind you want to be where the action is" (Fall interview). Going into the classroom with a lesson that stemmed from the group's interests (several months into the study when a culture of collaboration and partners' inquiries were well on their way) engaged and supported the learning of many of the community members. It also helped partners see what co-teaching could look like.

Sustained cycles of collaborative inquiry.

When talking about what supported their learning and ability to refine their practice, three of the community members described what might be considered as the learning community's integrated cycles of collaborative inquiry – goal setting, planning, enacting and debriefing/problem-solving. Three (Barb, Candice, Carole) described how having a study group format – reading, trying things out, sharing, problem-solving, planning – helped them to engage and learn with their inquiry partners and other community members. Interestingly, Barb, who also participated in learning communities at her school, compared her school-based study group to our learning community: "Sometimes I think we get a little too locked into an agenda actually because, not [this learning community] necessarily but with the other ones, a lot can come out from discussion" (Spring interview). She was worried that her school-based learning communities were not responsive enough to the needs of participating teachers; they were very closely kept to the times on an agenda. She raised an interesting point about how the way our inquiry community activities impacted how teachers participated. In the learning community studied here, we followed an agenda for the day, but over the course of the year there was fluidity and responsiveness that allowed for longer sharing periods as needed or broke into large group discussion and problem-solving when a interesting point arose. As noted earlier in this section, many teachers expressed that it was this sharing

and problem-solving aspect of our time together that helped them to think about new possibilities and actions.

Six of the community members (Laura, Cory, Chad, Barb, Kelly and Lorna) suggested that the ongoing, sustained quality of our work together had made a difference for them. Cory noted that:

> sharing has been really good. Just to talk about, to talk about the structure and the format of a writers' workshop. To always revisit it. To come back I mean the one shot PD I really don't believe in it, it doesn't work for me I know that. I kinda need, I tend to need to be pushed in [a] direction and come back and check on it (Spring interview).

Finally, Candice and Kelly stated that seeing growth in everyone had spurred their learning. Candice and Kelly, who also led a learning community at their school, reported planning to alter how they facilitated meetings in those contexts based on what they observed as effective, particularly in terms of working with members' diverse learning needs, styles and trajectories as a way to help them embrace and support the diverse teachers in their school level study groups.

Affective aspects of the learning community that supported teacher learning.

Similar to teachers' descriptions of affective qualities of their relationships with collaboration partners, nine (9/15) participants felt that there were affective aspects to the learning community that positively supported learning. Four teachers (Laura, Chad, Candice, Jill) mentioned that having a sense of community within the cross-school group supported their learning. Candice reported that, "You feel like you're involved in something that is sort of alive and you are excited about learning, you know, talking with people you hear them getting excited. 'Oh gosh, maybe I should try that!' and that

232

encourages you" (Spring interview). Related to this, Jill felt supported by the group's cohesiveness and "coming together as a collective whole." Five of the teachers (Chad, Laura, Ray, Margaret, Kelly) talked about how working with a group of committed and/or interested teachers made a difference. Finally, Chad and Kelly felt that there was a supportive tone within the learning community and that helped community members to share their successes and failures.

Diversity of learning community membership.

Our learning community was diverse. Seline played the role of conscientious objector (she attended, but did not "participate"), Krystal was not willing/able to share personal examples, Laura and Alice often seemed to be (and were) talking about something different from the rest of the group and Ray and Susan were visibly and/or vocally reluctant and skeptical in many of the meetings. Yet when asked, members of the learning community focused on and described how this was, in the end, positive. For Susan, this was an understanding that emerged over our time together. Four of the teachers (Chad, Ray, Kelly, Jill) specifically noted that the diversity of our group supported them to learn. They framed group members' diverse personality styles and experiences as a strength. The community's internal diversity provided the group with a range of examples. Questions were asked that surfaced a variety of perspectives and this helped group members consider new options and possibilities.

This recognition of the value of diversity connects to the other most frequent response from participants. Nine educators expressed that having an element of individuality as part of what was valued and encouraged in the learning community and their school- and classroom-based activities supported their learning. Candice found that "Interacting with peers and hearing how it was for them, and getting pointers from

them…suited my learning" (Spring interview). Without the range of examples and different, yet complementary approaches, community members may not have considered, focused on and/or extended their inquiries in the ways they did. They drew upon each other as resources and inspiration. This aspect of the learning community not only supported participants like Laura and David, who did not have partnerships that involved cycles of planning, action and reflection, but also those involved in level 3-4 partnerships. Afternoon planning time was often peppered with comments and questions between partnerships.

Inherent in notions of a learning community is that its members are learning together. Educators' responses suggested that participating in the cross-school learning community supported their practice-based activities and learning. This study helps to unpack what the benefits of learning within an inquiry community means. In essence, the cycles of collaborative inquiry that LRT:CT (and CT:DA) partners engaged in were parallel to and intersected with the learning community's cycles of planning, action, reflection and problem-solving.

Drawing from expert "others" as resources.

The manner in which participants read and drew ideas from professional resources can also be framed as a kind of collaboration in this study. Eleven of the fifteen group members reported that using a professional resource helped them to consider what approaches could look like. When talking about what supported her learning Candice explained,

> Our book where you could pick something out that you wanted to try, it was a
> frame for us. I like that I might not like it and didn't have to use it. We tried some
> of her ideas, some of them were okay, some of them I didn't like and some of

234

them were really good…. But at least it sort of gave me some place to start from and I really enjoyed that, having a starting point (Spring interview).

Margaret elaborated, "Well the Calkins was great, that's where we got out little ideas from. When [Jill and I] would meet, we would [refer] that book and we'd come up with something new." Similarly, Barb illustrated how she drew ideas from the professional resource into her inquiry when she said, "I think that even if you read it over it gives you some ideas and then you just take it and obviously make it your own" (Spring interview). At the end of our year together, Barb was able to talk not only about what she learned, but how she would now draw on resources to support the development of her practice and learning. She explained, "I think that I just have a better understanding of the writers' workshop, the writing process, what I want from kids, and how I can modify things. Now I can go to Kelly and books and stuff, to [help me] make it better" (Spring interview).

Seven participants mentioned my role as facilitator as being a support to learning. Several (David, Carole, Margaret, Kelly , Lorna) referenced the lessons I modeled as resources. David found "sample lessons" helpful (Spring interview). Margaret explained, "You always gave us a purpose, and you always gave us a deadline of what it had to be, and I think that was what made it so worthwhile" (Spring interview). Alice, who was focused on getting better at supporting other teachers' learning, noted "You have us slow down and think [and ask] 'why are you doing this?'" (Spring interview). Similarly, Carole stated "I think that what helped me learn best was all of the examples and the showing and the role-modeling" (Spring interview). In particular, she found that "We weren't sent back with twenty-five ideas. [We] were sent back with one little handout, kind of, that gave you ideas of the way that you could implement the program (Spring

235

interview).

Clearly different aspects of what I did as a facilitator supported different participants, and in different ways. Some found seeing examples to be very helpful. Carole appreciated having four principles to keep in mind. Margaret and David found modeled lessons useful. The ways that the sessions were shaped – from the tone of the text (conversational and invitational) to extended time for sharing and problem-solving to engaging the group in planning the lesson observed and debriefed – can be traced to the actions of the learning community facilitator. The facilitator can, in turn, be framed as a resource to the group and their learning. The facilitator's (my) actions can have an impact on many aspects of qualities of the learning community and its members' learning.

A third kind of expert "other" in this study were the LRTs and DAs. Part of the role of the LRT was to support their teacher colleagues. This was also true for Astrid and Lorna in their district administration roles (e.g., procuring and sharing resources and their expertise). Six of the nine classroom teachers described how their LRT partners provided them with resources/tools to support their learning. For example, Ray explained that, "It's always a nice resource to have her because [Krystal] finds stuff when I can't find anything on this, and she'll go and find me all kinds of books and stuff. So, it's nice to have that support, and that's the benefit of having her at our school" (Spring interview). There was also sharing and the borrowing of resources from the DAs and LRTs from other schools. Carole found, "The resources that Kelly [shared] were very helpful for the poetry" (Spring interview). Later in the interview she elaborated that "I mentioned all the books that Lorna gave – that excellent package of books, and the books, and even the one that I borrowed from Barb, so I think that's really advantageous." In Cory's description of his LRT partner Kelly, who many members of the learning community referenced as a

support, he explained that one of the ways she supported his learning was that, "She's always offered her door to be open. She's a real big benefit" (Fall interview).

On one hand, the LRT's role was a pre-existing resource to their school-based inquiry partners and their expertise was recognized and accessed with the cross-school learning community. However, on the other hand, this put them in a position of power and influence that was threatening to some (e.g., Susan). The "expert" role may also have been part of the reason why Seline and Alice did not engage in collaborative learning with their classroom teaching partners (David & Carole and Laura, respectively). Sally realized that one reason she struggled in her efforts with Susan was that she felt she had the knowledge and practice that Susan was missing and that it was her job to help Susan change. While most LRTs shared their expertise at one point or another, Seline, Alice and Sally struggled to develop and/or maintain collaborative relationships with their classroom partners. However, LRTs who coupled their role as a resource with actions that suggested they were engaging in reciprocal learning not only supported the learning of others, but also enabled deeper learning for themselves. In addition, they also consciously (Kelly, Lorna) or unconsciously (Jill, Candice, Krystal) contributed to a community-wide tone of collaborative inquiry. Looking at the trends in the data, to a certain degree, Kelly, Lorna, Candice, and Jill's modeling, Kelly's behind-the-scenes work, and my engaging the group in discussions about welcoming each participants' experience and expertise helped to develop a tone where each member of the community was perceived as a resource and having expertise.

Cycles of learning and inquiry at the district level.

A final kind of support that was reflected in participants' responses was how the activities of the learning community were related to district-level collaborative learning

activities. Astrid felt that taking part in the learning community helped her to be up to date in her knowledge of theory-practice connections, which in turn helped her to support teachers across the district. She had been feeling like she had started to "miss the whole - you start to lose touch with what's going on and then you're feeling guilty about it" (Spring interview). Keeping abreast of what could be helpful for struggling learners in her district, Astrid mentioned that she was able to keep the conversation going across schools because "[w]e talk about [co-teaching and writing workshop] at district-wide LRT meetings now. And so it's moving things along because more kids are getting support" (Spring interview). Lorna felt that participation in the learning community helped her to learn how to support teachers, staffs, and the district in developing shared foci, understandings and practices. Barb, a classroom teacher, felt that across our learning community and district and school-based study groups, "We're all kind of on the same page in the district, trying to do the same thing" (Spring interview). In a way Astrid and Lorna were creating bridges for the learning community's effort to feed district level cycles of collaborative learning.

Conclusion: Key Characteristics of this Professional Learning Initiative

In this study of a teacher professional development community there were several resources and opportunities that supported teachers to develop their practice and understandings. While different teachers focused on different aspect of their practice, their shared focus on writing and writing workshop as an inclusive approach supported them to develop their practice and contributed to their learning. Supports fell into four overall domains of PD processes: collaborative inquiry with a partner, structures and qualities of the learning community, drawing from expert others, and district level collaborative learning. Butler and Schnellert's collaborative inquiry model (2008) was

238

useful for framing activities that supported educators' learning as co-planning, co-enacting, and co-reflecting. Several aspects and qualities of the cross-school learning community supported teacher learning: having a shared focus, feeling accountable to the group for actions taken between cross-school meetings, collaborative enacting, collaborative reflecting, sustained cycles of collaborative inquiry, affective aspects of the community, and the diversity of membership. At both the co-teacher and learning community levels the tone and quality of the interactions and relationships between participants also impacted their learning.

It is possible to characterize partners' activities, the learning community's activities and even district-level initiatives and meetings as inter-connected layers of collaborative inquiry where members draw in a variety of resources (e.g., colleagues, print texts, district-level conversations) – in ways that support and develop their learning.

Chapter 5: Discussion and Conclusion

This study examined how sustained, situated, collaborative, inquiry-based professional development models can bridge the gap between research and practice (Ball, 1995; Borko, 2004; Cole & Knowles, 2000; Palinscar, 1999; Schnellert, Butler & Higginson, 2008). Specifically, it addressed how professional development activities or initiatives might be (re)conceived and organized so that the research and knowledge we have related to inclusive and collaborative approaches to teaching and learning can be better realized in practice.

The theoretical framework outlined in chapter two highlighted *contextualist* and *socio-constructivist* understandings and aspects of teacher professional development. Based on relevant literature and previous research, I suggested that professional development models that build from these theoretical perspectives to construct initiatives that are collaborative, inquiry-oriented, situated and sustained hold potential for supporting teachers to develop new understandings, approaches and agency (Butler, Schnellert & Higginson, 2007; Campbell, McNamara, & Gilroy, 2004; Cochran-Smith & Lytle, 1999a, 2004, 2009; Fichtman Dana & Yendol-Hoppey, 2008; McLaughlin & Talbert, 2006). Thus, this case study was designed to address the following research questions: (1) What practices did educators engage in as co-teachers within a CoI to consider, explore, and construct more inclusive writing instruction?; (2) How and why did collaborative, action-oriented inquiry cycles help teachers to develop understandings and practices that addressed, nurtured and supported diverse students' literacy learning?; and (3) What conditions and qualities within professional development activities supported teacher learning and development of practice?.

Revisiting the Research Questions

In my report of findings, I described the practices that educators explored, how they collaborated, the different kinds of collaboration they engaged in, the impact of their collaborative inquiry on their practice and learning, and what resources they drew from to support their professional development. I described what participants focused on together, what they did related to writing instruction, inclusive practice and collaborative teaching, and how this related to their reported learning experiences. I also relayed the factors that participants felt supported the development of their practice and learning. In this concluding chapter, I integrate the findings reported in chapter four, connect them to theory and research, and suggest directions for further research. I also relate what we know from theoretical and empirical literature to what I have added through this study and synthesize this in terms of what we know now.

What practices did educators engage in as co-teachers within a CoI to consider, explore, and construct more inclusive writing instruction?

Findings from this study were that many positive shifts in educators' practice and learning could, indeed, be related to their participation in this professional development initiative. For example, all teachers reported trying out and expanding their understandings of writing instruction, writing workshop, and writing process(es) (the "topic" of our shared inquiry). The practice gains observed were hoped for outcomes that address Borko's (2004) call for teacher professional development efforts that both affect teacher learning and improve schools. Another helpful contribution in understanding the potential impact of this kind of professional development approach was the documentation of the *kinds* of practices that participants engaged in within this shared area of exploration and the nuanced kinds of understandings they reported, which extend thinking related to how teacher professional development can be designed and lead to

layers of positive outcomes at teacher learning, teacher practice, student learning, and teacher collaboration levels.

One notable pattern observed in the results reported here was that teachers' goals, activities and practices were predominantly student focused. For example, participating educators reported engaging in practices that involved scaffolding student learning, nurturing positive student affect and dispositions toward learning, increasing pathways for student learning, and supporting students to self- and co-regulate their learning. Almost all of the participants' goals and the practices they engaged in were linked directly to student learning. For example, Kelly and Barb wanted students to be more metacognitive about their writing. Through activities that involved students in self- and co-regulation such as conferencing and building and breaking down criteria, their students increased their capacity to identify, discuss and adjust their work in relation to the criteria. Thus, findings from this study contribute to research by demonstrating how collaborative, inquiry-oriented, situated and sustained professional development initiatives, like the one enacted here, have the potential to focus on the exact kinds of outcomes for learners and teachers that are being called for in relation to professional development initiatives (Borko, 2004; Rogers et al., 2006; Sailors, 2009; Schnellert, Butler & Higginson, 2008; Snow & Biancarosa, 2003; Strickland & Alvermann, 2004), and as part of accountability agendas for districts and schools (Cochran- Smith & Fries, 2005; Cochran-Smith & Lytle, 2009; Earl, 1999; Fitz, 2003; Furlong, 2001; Nuthall, 1999; Shepard, 2000).

These findings also suggest that professional development activities that require teachers to identify a shared area of interest or concern and to co-construct activities and outcomes for their professional development can help them to engage in and attend to how the theory, research and practices they are introduced to and seek to implement

242

relate to enhancing student learning. The ways in which teachers worked together here were very reflective of what Butler and Schnellert (2008) refer to as teachers' cycles of self-regulation of practice. In this study educators appeared to become more strategic; that is they made pedagogical decisions based on what they were learning about their students and drew from the researcher, colleagues and other resources to design practices that might better meet those student needs. As demonstrated by the practices teachers engaged in, most participants in this study reported increased intentionality and responsiveness in their teaching and this was almost always linked to a perceived benefit to student learning.

Over the last twenty years, the move to examine how readers and writers construct meaning has led to two often competing foci in reading and writing research. First, many research agendas have focused on students' reading and writing performance and the explicit teaching of reading (e.g., Duke & Pearson, 2002; Palinscar & Klenk, 1992; Pressley, 2000) and composition (e.g., Troia & Graham, 2002; Harris & Graham, 1996) strategies and skills. In many classrooms and professional development approaches this has taken on the form of direct and sometimes transmissive teaching. Second, others focus on the role of the teacher, not as a director of learning, but rather as a participant-observer in the learning process, acting as a supportive guide and coach when necessary (Cambourne, 2002). Drawing on a constructivist perspective, researchers here are considering students as readers and writers who produce "gradually more sophisticated rule-governed representations… [where] the learner is an active problem-solver who is influenced by background knowledge, text, and context" (Langer & Flihan, 2000, p. 116).

In this study, teachers appeared to engage with and combine both approaches in ways that can help us rethink both traditional notions of explicit teaching that control

243

what and how students write *and* project-oriented learning that is entirely self-directed by students. By describing practices that were both explicit and constructivist, this study illustrates how thinking and research regarding teacher as both fellow writer and model, and a crafter of lessons, can fit together. For example, the mini-lessons designed by teachers offered students explicit examples of the craft of writing, but in ways that empowered students to draw on those examples as resources in meaningful writing tasks if and as they saw fit.

Another key pattern observed was that what teachers did and learned as they inquired together included aspects of pedagogy that were not explicitly targeted, but were indeed crucial for student and teacher learning, and became practice and knowledge outcomes. For instance, while writing process, writing workshop, and collaborative teaching were explicitly identified and explored early (and throughout) the study, other practices that were modeled but not explicitly named as goals (implicit, embedded approaches) such as developing a positive classroom climate, strength-based, person-centered approaches to interactions with students, creating and offering accommodations to all students not just those with special needs, cross-curricular integration of approaches, and co-constructing curriculum with students were also commonly reported outcomes. This suggests that collaborative, inquiry-oriented, situated and sustained professional development initiatives, while seemingly focused on a few explicitly identified research-based outcomes, may yield pedagogical (attitudinal, knowledge and practice) outcomes that exceed and enrich initial identified goals. In this study where teachers worked together with an inquiry-oriented stance (e.g., open-ended) and a limited number of theory- and research-rich ideas and practices, a number of related "embedded" outcomes could be identified and traced through bottom-up (inductive) analysis.

Studies of other sustained, situated, inquiry-oriented, collaborative professional development initiatives related to inclusion, collaboration, and/or literacy have also reported valued outcomes that were not explicitly targeted at the onset of the studies, but emerged as teachers were working collaboratively to achieve valued outcomes for students. Looking at this study in relation to these other studies validates attention to some of the embedded learning and practice outcomes that were realized by teachers.

The positive practices that emerged in this study were sought after and valued in many of the empirical professional development studies referred to in chapter two. Similar to Walther-Thomas' (1997) study where teachers developed support systems for students with "family-like" feelings of community and care, Candice and Chad, Barb, Kelly and Cory, Margaret and Jill, and Sally (in her work with classroom teachers not in the study) reported positive shifts in overall classroom climate. Studies by Carmichael, Fox, McCormick, Proctor and Honor (2006) and Marshall and Drummond (2006) found that teachers creating more welcoming environments contributed to increased success for students. Marshall and Drummond (2006) also found that a validating and success-oriented tone in their participants' classrooms embodied the "spirit" of assessment for learning. Mitchell (2000) observed that by the end of his professional development study, participating teachers created classrooms that supported risk taking. Similarly, in this study, Sally and Susan, Barb, Cory and Kelly, Ray, and Margaret and Jill all reported students taking more risks in their writing by extending themselves as writers. In sum, trends related to teachers developing a more positive classroom climate and positive teacher-to-student interactions are supported by literature highlighting the importance of emotional and intellectual safety and connection (e.g., Bransford, Brown & Cocking, 2000; Levine, 2003). This area of focus was evident in the professional development activities (i.e., readings and discussion) of participants in this study, yet only received

245

attention as a positive outcome in its own right when I noted the qualities of different kinds of practice changes during data analysis.

Speaking more generally, what is suggested by the rich combination of practices that teachers in this research explicitly targeted, co-constructed and enacted over time, is that collaborative, inquiry-oriented, situated and sustained professional development initiatives where teachers work together to support the literacy learning of students in inclusive classrooms can result in participants' development of "bundles of practices," that is inter-related approaches that are rooted in different, yet complementary research and theoretical literatures. In this instance, teachers drew from a rich set of resources over time to create bundles of practices for nurturing community, risk-taking, self- and co-regulation, strategic writing, and increased pathways to learning for diverse learners.

Another clear pattern discernable across the themes reported in chapter four was that the practices and understandings teachers developed were strongly interconnected. Data (e.g., from interviews, artifacts, reflective writing) revealed that if teachers engaged in ongoing exploration of a practice and had the support of colleagues (e.g., their co-teaching partner and/or other members of the inquiry community), they reported developing new or refined understandings in that domain. Phrased another way, there was a strong correlation between what teachers did and what they reported learning. More specifically, teachers reported developing understandings related to all of the conceptual categories they reported engaging in: exploring/implementing aspects of writing workshop and writing process(es); teacher collaboration; nurturing positive student affect and dispositions toward learning; offering students multiple ways to access curriculum and learning; explicit teaching/scaffolding; engaging students in self- and co-regulated learning; and integrating approaches into other curriculum areas. Teachers conveyed learning in each of these areas and two additional areas: professional

246

learning communities, and about themselves as learners.

It also appears that each of the categories of "learning" was experientially derived. By this I mean that teachers who did not engage in recursive cycles of inquiry related to an area did not report new or revised understandings in that area. For instance within the learning community meetings Laura was very interested and involved in discussions about students' self-regulated learning, but she did not sustain classroom-based exploration (or collaborate with her co-teaching partner) in this area. She also did not report any learning in this domain. This finding presents a challenge to many current forms of professional development and approaches to teacher learning, ones that rely more on conveying information than nurturing teachers' co-construction of new understandings through inquiry into practice. Britzman (1991, 2003) and Cochran-Smith and Fries (2005) have traced the long, historical shadow of education's turn-of-the-century training discourse. While there have been dramatic shifts in research and theory related to pedagogy that take up transactional and constructivist approaches to teaching and learning, to varying degrees, individuals and communities (often unconsciously) take up a "training discourse" related to teacher professional development. This study provides an example of teachers building practice-based knowledge and agency that used and developed inclusive, constructivist and metacognitive instructional approaches while engaging in professional development that used similar approaches (Cochran-Smith & Lytle, 2009). But, again, getting away from false binaries (as when considering how to foster student learning), findings from this study were powerful in that they illustrated how teachers could draw on resources (e.g., explicit descriptions of others' practices) within constructive, collaborative inquiry to spur their teaching and learning.

This research adds to prior literature by providing a case study of the complex, embedded and relational ways that participating teachers' practice and learning occurred.

247

It lends support to theory and research that conceptualize teacher professional development as changes in participation in socially organized activities and individuals' use of knowledge as an aspect of their participation in social practices (Borko, 2004; Heron & Reason, 1997; Wenger, 1998). While receiving and applying knowledge and approaches shared by experts is one type of social practice, professional development through knowledge transmission is refuted by most theories of learning (Bransford, Brown & Cocking, 2000). Cochran-Smith and Lytle (2009) write that there is "a struggle to democratize the locus of knowledge and power that determines the quality and quantity of educational opportunities afforded to children" (p. 10). This study illustrates how teacher learning may be better conceptualized as "radically local – embedded in the immediate relationships of students and teachers, shaped by the cultures of schools and communities, and connected to the experiences and biographies of individuals and groups" (Cochran-Smith & Lytle, 2009, p. 10).

Findings reveal the inter-related nature of teachers' development of practice and knowledge can challenge professional development activities that teach teachers to use generic universally applicable "best practices". Analyses suggest that when teachers draw research-based (i.e., best) practices into their ongoing theory-practice, inquiry-oriented explorations they can develop situated applications, adaptations and understandings regarded these practices. By documenting how practice and learning were supported through teachers' drawing in and reflecting on resources within collaborative, situated inquiry, this study challenges "scientifically-based research and evidence-based education [that] positions practitioners as the recipients of other people's knowledge" (p. 11). More consistent with the findings reported here are conceptions of professional development that consider teacher learning as local and collaboratively constructed practice that draws from theory and research.

248

How and why did educators' collaborative, action-oriented inquiry cycles help them to develop understandings and practices that addressed, nurtured and supported diverse students' literacy learning?

This dissertation contributes descriptions of what collaboration can look like as a form of inquiry-oriented professional development, for example, teachers' prior knowledge and experiences of how what teachers bring and the personal goals they set can impact and contribute to their own and others' learning. Also, co-teaching can be (re)conceptualized as a support to and even a form of professional development. This work thus extends previous research on how different kinds of teacher collaboration relate to teacher practice and learning outcomes (Butler, Schnellert & Higginson, 2007; Butler, Schnellert & Cartier, 2008a, 2008b).

In chapter two, I described studies where teacher collaboration was found to support teachers' professional development by providing opportunities for them to co-plan, co-enact and co-debrief lessons and/or engage in teaching practices with peers (e.g., Brownell, Adams, Sindelar, Waldron, & Vanhover, 2006; Santamaria & Thousand, 2004; Walther-Thomas, 1997). Findings were similar as revealed by data analysis in this study. Just as many participating teachers invited students to take ownership for and engage in self- and co-regulation of literacy and inclusion practices, educators' own collaborative activities (i.e., sharing resources, co-planning, co-enacting, co-reflecting with colleagues) supported and spurred their own development of teaching practice and professional learning.

In chapter four, I reported findings describing how teachers' goals, actions and learning related to the ways that collaboration partners worked together. To examine relationships between collaboration and outcomes, I documented the kinds of practices teachers tried as they pertained to collaboration and what they reported learning. I drew

249

from interviews and teachers' written plans and reflections, complemented by evidence from field notes, e-mails and documents to analyze the quality of collaboration between co-teaching partners. To aid in this analysis I adapted criteria developed in Butler, Schnellert and Higginson's (2007) study to categorize the quality of collaboration based on the ways and the degree to which pairs collaboratively engaged in inquiry cycles, from no to little collaboration to iterative, shared inquiry into practice that bridged to teachers' own learning (see Figure 4.7).

Based on constant comparison across 10 partnerships, seven dyads (those described as levels 2, 3, 4) were put forward as illustrative examples of levels of collaborative inquiry. Educators were deemed to have engaged in co-inquiry if they set and/or developed goals at the beginning of and during their partnerships, debriefed and reflected on whether their plans and actions were making a difference, adapted plans and actions, and either continued on with or set new goals. They not only shared resources with one another (as did level 0 and 1 partners), but they also acted as resources to one another. Unlike the three non-collaborating dyads, co-inquiry partners helped one another become more open to new ideas, considered a broader range of possible pedagogical options, and paid attention to the impact of what they were doing, thinking and learning.

This detailed analysis of collaborative inquiry processes enabled me, through this research, to study how and why teacher-to-teacher collaboration helped participants make shifts in practice and learning. Findings showed links between collaborative processes and teachers' practice and learning. More specifically, teachers' cycles of action, reflection and strategic problem-solving were processes that helped them to bridge the knowledge and practice divide in ways that they perceived as positively impacting their practice as well as student learning.

An implication of these findings is that the qualities of teachers' collaboration can be studied and fostered, in research and practice, in addition to the other positive benefits that come out of collaboration. It also follows that a researcher/facilitator and/or member of an inquiry community can examine the qualities of collaboration that are occurring during an inquiry-oriented, situated and sustained professional development initiative and offer ideas and/or observations so that partners can adjust how they are engaging in collaboration. For instance, when the Seline:Carole and Seline:David partnerships failed to progress in this study, as part of my role as facilitator I spoke to Lorna and she stepped in to partner with Carole and David.

If information about the qualities of collaborative inquiry and learning are available to teachers working together, they can self- and co-regulate how they are collaborating, likely resulting in better practice and learning outcomes for themselves and students. For example, in this study, Sally was able to look back on her year with Susan and learn from her assumptions, and she took up a different stance in the next year with her collaboration partners. Similarly, Kelly emailed me after our third cross-school meeting. She wrote:

> I have spent the day reflecting on Friday's session. Lots of what was
>
> shared was great. But ... [my] observations of the big picture was that people were
>
> stuck on writing and NOT on the process of connecting, co-planning, co-teaching,
>
> collaborating... for the purpose of supporting students in an inclusive community.
>
> The idea of "WE" as opposed to "I" was not as evident as [I] hoped. I had hoped
>
> to hear about what the various school teams did as a "we" ... from the seed of an
>
> idea to the actual implementation of a lesson and on to the reflective piece (e-
>
> mail, Janaury 22).
>
> I was able to feed this information into my planning and facilitation of the group.

251

All partners were asked to come to our next cross-school meeting ready to share as a team. There was a significant shift in how members shared at the next meeting and this translated into an increase in partners' co-planning and co-enacting and how ideas were shared in the CoI over the rest of the year. Kelly's agency positively impacted the next iterations of the CoI as she drew theory from our earlier meetings into her correspondence with me. This research also suggests that aspects of how professional development activities are designed and analyzed – for instance with teachers signing up with a partner, ongoing reflection on how their partnership is working, and bi-directional feedback between members and researchers/ facilitators – might open up opportunities for self- and co-regulation of collaboration and inquiry practices.

This study also shows how what teachers' prior knowledge and experiences and the personal goals they set can impact and contribute to their own and others' learning. For example, when teacher-to-teacher collaboration was identified through on-going iterative cycles of bottom-up and top-down coding, it became apparent that the goals individual participants set may have guided their own actions early on and even throughout the study, yet many things that teachers tried and learned were not specifically related to their original, personal goals. Analyses revealed that co-teachers' goals, intentions and actions, in addition to the perceived needs of their students, significantly shaped and shifted what their partners focused on and did as the study unfolded. Thus, in this study, one key benefit of this collaborative, inquiry-oriented, sustained and situated PD approach appeared to be that the combination of a shared focus (writing instruction, inclusion) and room for individuals' intentions, experiences and learning contributed to the learning of both participants and their partners. For instance, Chad wanted to develop graphic organizers to support students' writing, while one of Candice's goals was to become a better writer. Working together they both took up each other's areas of interest

and developed practices and understandings in both areas (see Figure 4.4).

Thus, a key contribution of the research reported here is its detailed examination of how collaboration could be related to teacher practice and learning. In chapter two I suggested that teachers who work together through cycles of collaborative goal setting, planning, enacting, reflecting and adapting practice and learning rarely have the opportunity to collaboratively enact *in situ* the goals they set and plans they make. Because of the design of this study, where a special educator and classroom teacher were able to co-teach in an inclusive classroom, the impact of co-enacting, co-reflecting and co-adapting in the context of classrooms could be examined and understood. Thus, this study adds empirical data to extend previous research related to collaborative processes by focusing attention specifically on the benefits of co-teaching as a support for teachers' professional learning and the potential it affords for teachers to co-enact approaches together. One interesting finding was that co-teaching relationships, of many kinds, spurred teacher learning. For example, Sally and Susan did not actually co-teach in Susan's classroom, but the other aspects of their partnership supported Susan's learning. This would not have occurred at all if Susan and Sally were not working together as a learning resource teacher: classroom teacher partnership. There is excellent potential for PD in co-teaching, even when there is no actual teaching together (co-enacting)!

Teachers in this study associated a number of positive gains with opportunities for co-teaching. Participating teachers reported that working with a co-teacher resulted in opportunities to develop, try and see more ways to meet more students' learning needs. Kelly, Barb, Cory, David, Ray, Candice and Chad all offered evidence that co-teaching provides greater opportunity to capitalize upon the unique, diverse and specialized knowledge, skills, and instructional approaches of other educators (Bauwens, Hourcade, & Friend, 1989; Hourcade & Bauwens, 2002). Similar to other studies, co-teachers in this

study found that working together they could structure their classes to more effectively use research-based approaches (Miller et al., 1998; Santamaria & Thousand, 2004). Consistent with prior research, co-teaching also seemed to foster an increased sense of agency and efficacy in teachers when they collaboratively made decisions (Duke, Showers & Imber, 1980; Walther-Thomas, 1997). As in other research, teachers here also adapted and/or created their own approaches based on the needs of their students and their collective experience (Nevin, Thousand, Paolucci-Whitcomb, & Villa, 1990; Skrtic, 1987). Thus, this study contributes by documenting how collaborative inquiry in the form of co-teaching can extend and enrich opportunities for professional development within collaborative cycles of action, reflection and learning.

Another contribution to prior literature on co-teaching and instructional coaching is the finding that, in partnerships where LRTs (specialists) approached their collaborations with CTs (generalists) from an inquiry stance, both LRTs and their CT partners were more likely to try more approaches and learn from and with each other. Interestingly, the kinds of collaboration activities partners engaged in, combined with a co-learning stance from the LRT, superceded in importance (in relation to observed outcomes) the amount of expertise or years of teaching that the partners brought to their collaboration.

Findings from this study also revealed strong connections between the degree and quality of teacher-to-teacher collaboration, the practices teachers tried, and what they learned. Looking systematically at patterns across all participants, educators in sustained, collaborative, iterative and inquiry-oriented partnerships (level 4) reported rich learning in more domains than their colleagues in level 0-3 partnerships (see Table 4.11). Working with an inquiry partner helped teachers who had not had success in making changes to their practices previously (i.e., Margaret, Susan and Ray) to experiment with, implement

and personalize new approaches. Many participants underscored how their partner, who offered another perspective, new ideas, different goals/foci, significantly affected their learning (Figure 4.6). Thus, this study offers research, policy and professional development communities a nuanced analysis of how co-teaching can be utilized as a collaborative structure to help to sustain action, learning, and inquiry.

Methodologically speaking, this research suggests a useful approach to studying how collaborative partnerships can make a difference in dynamic ways to teachers' practice and thinking. Collaboration can be viewed as a practice that educators want to develop *and* a way that they develop other practices (e.g., writing instruction, inclusive practices, supporting student self-regulated learning). Thus collaboration is both a process of *how* as well as a *what*. This study's examination of teachers' goals related to writing and inclusion practices, how they worked together to achieve their goals, and what they reported learning shows how collaboration evidenced in this study offers a jumping off point for further research on teacher collaboration as a form of inquiry (Butler & Schnellert, 2008).

What conditions and qualities within professional development activities supported teacher learning and development of practice?

At the onset of this study four core elements of professional development were built into its design and supported by a theoretical framework. Here I synthesize what was learned about the conditions and qualities of this professional development initiative that appeared to positively influence teachers' practice and learning. To do this I draw from what teachers reported and what additional analyses revealed.

As mentioned in chapter two, literature related to longitudinal, situated, inquiry-oriented and collaborative PD typically has a practice orientation. In this study, findings

suggested that practice was an important and necessary vehicle for teacher learning and development. When participants in this study identified and created or adapted approaches, they were able to report how they were developing their practice and new knowledge. For example, Ray made practice and knowledge gains that surprised him as much as the other members of the learning community (many of whom had known him for 15 or more years). He described and appreciated how the concreteness of trying something out scaffolded his participation and learning. In contrast, Alice, who attempted very few changes to her practice, and Susan, who did not identify or try out new approaches until several months into the study, had much less to report about their learning. Cecile left the learning community because, like Susan, she struggled to see how the ideas we were reading about and discussing could apply to her context and students. This is not to say that Cecile would not have grown in her practice and understandings if she had continued to participate and eventually made some attempts to alter her practice. These findings are consistent with those of Sailors (2009) and Timperley and Phillips (2003), who also found that the only teachers who did not make practice gains were those who did not try out approaches.

It should be noted that teachers in this study did not all engage in practices the same way or at the same time. Susan did make practice and knowledge gains by the end of the year, but she needed to listen and see how others were engaging before she was willing to try. She may have made fewer gains than her peers, but her growth was significant for someone who had previously avoided professional development opportunities. For teachers like Susan and Ray, who were more reluctant learners and participants, as well as for the newer (e.g., Chad, Cory) and more experienced teachers (e.g., Margaret, Kelly, Laura), having a practice focus and open-endedness in terms of

256

how their efforts might play out – supported by an inquiry orientation to learning community gatherings – were important conditions that supported their learning.

When asked what supported their learning during the study, seven of the fifteen (7/15) respondents identified having a shared focus. Yet twelve of the fifteen (12/15) participants also described how the diversity of community members' interests, perspectives and approaches supported their learning. It is this kind of nuanced relationship between factors that sheds light on the many inter-related conditions that appeared to breed success for teacher learning in this study.

Unlike Sailors (2009) and Timperley and Phillips' (2003) studies, which prescribed the practices teachers were to use, in this study approaches were introduced as possible jumping off points for how to better support student learning (more like Huziak-Clark et al., 2007). Like Santamaria and Thousand (2004) having a shared focus but also inviting participants decide what they would explore and in what ways offered the learning community a broader range of relevant practices and ideas related to supporting student learning and inclusion. Instead of making approaches prescribed or introducing them as finite end goals, this research suggests that professional development initiatives that invite teachers to draw on resources as they explore, adapt, and create their own practices related to student learning can deepen and enrich the learning of members of a CoI. This approach is consistent with those of Mitchell (2000) and Butler et al. (2004) who invited teachers to develop practices to match instructional goals related to students' metacognition and self-regulated learning, and of Ball (2008) who worked with teachers to generate culturally responsive practices with their students. In sum, findings from this study suggest that, within a shared focus, taking up a generative and constructivist practice focus and an inquiry approach that values personalized participation offers important conditions for learning in professional learning communities. In that context,

257

teacher and student practice become a generative means of learning and a valued outcome.

This research further opened the "black box" of teacher professional development initiatives by attending to how the resources teachers brought interacted with resources from colleagues and expert others (e.g., research, professional texts, researcher/group facilitator) to influence their learning and practice. In this study one key benefit of a collaborative, inquiry-oriented, sustained and situated approach was that particular qualities of the learning community contributed to participants' learning. For example, many study participants (9/15) described how the learning community's sustained cycles of collaborative inquiry were important to supporting their learning and shifts in practice. The cycles of collaborative inquiry that LRT:CT partners engaged in were nested in and intersecting with the learning community's cycles of planning, action, reflection and problem-solving.

Two contrasting qualities of community-wide action and reflection cycles help suggest how this finding might inform other professional development initiatives. One is that more than half of the educators expressed how they felt accountable to the group for actions taken between cross-school meetings (9/15). Feeling like a member of a group that was working towards valued and shared outcomes appeared to fuel members' cycles of exploration. Similarly, being responsible to share what was happening between sessions kept some members engaged despite competing demands. The sustained nature of the study (over the course of a year) also appeared to help teachers to develop an inquiry stance through several iterations of inquiry cycles.

A second key condition members identified and appreciated was having an element of individuality as part of what was valued and encouraged in the learning community. Candice found that "Interacting with peers and hearing how it was for them,

and getting pointers from them, suited my learning." By accessing teachers' diverse interests, experiences and concerns as part of pro-d activities, what teachers did and learned surpassed the ideas and approaches originally put forth by me, the researcher/ facilitator, and the resources I provided. Teachers built from what they knew and, as the researcher/facilitator, I was able to draw in and help make public the diverse ways that teachers addressed our shared goals.

In addition, many teachers identified multiple goals they planned to address over the course of the year. Few teachers shared identical goals. While their goals were at least somewhat influenced by context (i.e., the initial, agreed upon focus on writing and inclusion) what they wanted and needed to focus on for their own professional development covered quite a range of possibilities. Allowing members to share their own experiences, approaches, examples and questions helped teachers to see a greater range of what was possible, how to think about and identify positive shifts in students' learning, and how several "unnamed" or "embedded" approaches such as formative assessment, strength-based interactions and building multiple points of access into their curriculum related to writing workshop.

Findings here are again consonant with prior research on professional learning communities. For example, in one study, Little (2003) also found a diversity of goals and practices within a group that at first seemed to have only one shared intention. Unlike that study, where teachers did not feel welcome to share ideas and information that they perceived as outside the protocols of their learning community, at the end of this study, teachers found that sharing and seeing a diversity of ideas was critical for their learning. In other studies (Butler et al., 2008a, 2008b; Butler & Schnellert, 2008; Schnellert et al., 2008), my colleagues and I have found that teachers had a variety of learning intentions and actions they were taking, and that they had enriched their own and others' learning.

259

From this study, it could be argued that welcoming the resources of the group during goal setting, planning, enacting, and problem-solving provided differentiated learning for members that tightly structured, top-down and/or prescriptive protocols would have suppressed. There are many personal and contextual factors that combine to inform teachers' individual interests, intentions, and ways of knowing and learning (Cochran-Smith & Lytle, 1993a). This study demonstrates how individuality and diversity within a learning community, when tapped into, can spur rich and complex learning for teachers within professional development initiatives. Because they were already engaged in inquiry (most with a co-teaching partner) participants were able to draw on others' goals, ideas, and approaches as resources to their own inquiries. Just as co-teachers reflected on- and in-action, members of the learning community were drawing in resources in generative ways. Different from most models of professional development (including some learning community models), teachers in this study were actively taking note of, reflecting on, and problem-solving using theory/practice connections.

Indeed, two-thirds (2/3) of the participants felt that collaborative reflecting and problem-solving with members of the learning community was a key quality that supported them in their learning. Drawing on the resources of the community helped to shape what teachers did and learned within cycles of action and reflection. For example, the entire learning community benefited from Cory and Barb's interest in developing formative assessment skills. It is possible that without a range of examples and different, yet complementary approaches shared, community members would not have considered, focused on and/or extended their inquiries, practice and understandings in the ways they did. They drew upon each other as resources and inspiration.

Contributions, Limitations, and Future Directions

Ball and Cohen (1999), Borko (2004), Putnam and Borko (1997), and Wilson and Berne (1999) have pointed out that stakeholders, from researchers to policy makers, are calling for professional development initiatives that support teachers to develop new knowledge and practices, particularly knowledge and practices that have been articulated in research, but are not realized in classrooms. Borko (2004) has called for situative research that studies how to support teachers to develop and sustain valued practices that increase student learning (also see Ball, 2008; Huziak-Clark et al, 2007; Santamaria & Thousand, 2004). A major contribution of this case study is that it demonstrates how a sustained, situated, collaborative, inquiry-oriented professional development model can support educators to bridge the gap between theory and practice.

This study also contributes by demonstrating how professional development that involves educators working together in cycles of collaborative inquiry – engaged in activities such as planning, enacting, debriefing/problem-solving, adapting, and goal setting together – can be conceived of as *collaborative learning.* Through careful, multilevel analyses of individual participants', co-teachers', and the inquiry community's activities and learning, this study illustrates that engaging in a practice does not necessarily mean that an individual is becoming more strategic – or consciously skilled. Instead, what is necessary is for educators to engage with colleagues metacognitively, reflecting on and sharing what they are doing and wondering, using evidence to consider and determine possible pedagogical choices of action (and how these relate to one another and to theory), and personalizing approaches based on and within cycles of action and reflection.

This study shows how situated, inquiry-oriented, collaborative, longitudinal professional development activities hold significant promise for helping teachers develop

261

practices, and understandings of and agency related to practice, that increase access to and better support student learning. Layered examinations of the practices teachers used and developed, what they reported learning, and how they collaborated at the teacher-to-student, teacher-to-teacher and inquiry community levels reveal how intertwined – and likely inseparable – practice and learning are. By parsing and comparing group-level, dyad level and individual-level conceptual perspectives and considering both the learning activities of the professional development community and the knowledge and instructional practices of individual teachers and co-teaching partners, this study offers an exemplar of what Borko calls situative perspectival research. It also adds the lens of co-teaching/inquiry partners when taking into account the contexts and activities in which educators learn and how they become a part of what they learn (Borko, 2004; Greeno, 2003).

This study also contributes a nuanced explication of key aspects of this type of professional development model that can be applied to and studied in more sites as a basis for further research. For example, teachers developed learning and practices that were theoretically sound and yet context specific when they engaged in iterative cycles of goal setting, enacting, reflecting, and adapting with others, drew from one another as resources, and engaged in formative assessment and responsive teaching. This helped educators to become more consciously skilled and knowledgeable – which often involved making the tacit explicit by drawing in research and theory to explain and extend their practice-based collaborative inquiries. Other researchers might take up and investigate a similar model, with other inquiry communities and/or engaged in inquiry learning about different kinds of foci or desired outcomes, and consider whether similar practice-learning patterns in outcomes are observed.

This study also extends the literature by offering a microanalysis of co-teaching,

through an elaboration of different partners' collaborations. By including teachers who do not typically participate in professional development studies and activities, a more robust conception of co-teaching was delineated to illustrate collaborative learning. This microanalysis demonstrated that co-teaching is an approach with potential not only to increase student access to curriculum and learning (Huziak-Clark et al, 2007; Santamaria & Thousand, 2004), but also to support teacher learning and sustained shifts in practice. Comparing the various dyads, it became apparent that when partners took an inquiry stance within a co-teaching partnership, their activities were more productive and their learning was richer. Of note, when a non-enrolling teacher (special educator, district administrator) took a learning stance, both she and the classroom teacher experienced deeper learning and practice outcomes. At all levels of learning (teachers' self-regulated learning, co-teaching and learning in partnership, participation in the cross-school inquiry community), participants shared and illustrated how learning through inquiry made it okay to make mistakes, not know answers to questions they posed, work at their own pace, and generatively move from the known to the unknown. Thus, building from the promising results of this study, future research questions might include: What happens when co-teaching is positioned and supported as professional development?

A particular contribution to the field is the further elaboration of Butler, Schnellert and Higginson's (2007) levels of collaborative inquiry. The five levels articulated here can serve as a resource to co-teachers and researchers alike. Borko and Putman (1998) noted that most volunteers for professional development studies are keen to participate. But in this study there was a full range of learning profiles. This diversity in participants helped to illustrate how teachers come to professional learning with varied levels of confidence, commitment, participation, and learning intention and how

this relates to their collaborations and learning. The participation of more reluctant

teachers who had not had positive and/or productive professional development

experiences in the past increased the trustworthiness and informativeness (Guba, 1981)

of the study. Because of their participation, I could analyze how they contributed to the

inquiry community, the kinds of activities they and their co-teachers engaged in, and the

learning they reported.

More specifically, findings reported here suggested that collaborative, situated,

inquiry-oriented and sustained professional development may be a good match for

teachers who are reluctant to engage in professional learning. Such approaches appear to

welcome and support a full diversity of teachers and suggest that this diversity supports

members to consider more perspectives, articulate why they are making particular

observations and pedagogical decisions, and sustain an inquiry stance. For example, two

of the more reluctant teachers reported significant learning – as did their partners. Some

of the attributes that supported their learning were the nested kinds of collaborative

learning embedded within the professional development design. For instance, Susan

witnessed how other members of the cross-school learning community focused on

exploration versus "getting it right" and she recounted how this observation encouraged

her to begin to implement and adapt approaches. Ray found that collaborative planning,

enacting, reflecting on and adapting instruction based on the learning needs of students

was both doable and important due, in part, to his interactions with Krystal, other

members of the learning community, and the researcher. But more research needs to be

done in this area to see if and how empowering teachers with various profiles, within a

diverse community of practice, achieves better outcomes than top-down, short term and

more formulaic professional development. Attention could profitably focus on how

plurality within an inquiry community impacts the practice and learning of teachers with

various learning profiles and stances (e.g., reluctant, confident, student-centered, passive, assertive, experienced, novice).

A final contribution of this research is an illustrative example of how nested kinds of collaborative learning can support and enrich the learning of all inquiry community members. The cross-school learning community provided an important structure for teachers to deepen, and in some cases offered the principal means to engage in collaboration, reflection, planning and problem-solving. Almost all of the teachers mentioned how ideas were clarified, enriched and extended by seeing and hearing how other individuals and partners explored, adapted and implemented the kinds of approaches they were or could be exploring. At the same time, while many co-teaching partnerships resulted in rich learning, not all partners were well matched. Future research that examines relationships between inquiry partners within an inquiry community could prove quite fruitful, particularly in terms of exploring conditions in which collaboration and co-teaching are maximally helpful.

From a methodological perspective, this case study demonstrates how professional development projects and their impact should not be analyzed from a simplistic process-product perspective. When coding to see what themes were in the data, it became apparent that different kinds of outcomes emerged in complex ways and were inter-related, building over time from what teachers brought to the study as much as from the resources they accessed throughout. Methodologically collaboration was a critical and generative vehicle for participants' learning. The approaches used here, that included analyzing what collaboration looked like, the impact of inquiry partners' goals and actions on one another, and the ways that the inquiry community functioned to support members' learning, might be used in future studies as an alternative to more linearly designed, process-product oriented approaches.

Further, Borko (2004) and Borko and Putnam (1998) argue that professional development initiatives should be analyzed based on the professional development program; the teachers who are the learners in the system; the facilitator who guides teachers as they construct new knowledge and practices; and the context in which the professional development occurs. This study provides an example of a methodological approach designed to weave together a portrait of a learning system within which all of these elements are related. But, based on Borko's (2004) framework, future research needs to (1) scale up this model and test it out in other settings, (2) more thoroughly study the role of the researcher/facilitator as a resource to the learning system; and (3) include student data as an impact measure.

Like all research, this study had some key limitations that might be addressed in future research. As noted earlier, this study spanned just one year, so future research can look at longer-term impacts including the ways that learning communities and participation in them change over longer periods of time.

Other limitations that derive from the boundedness of this case might also be taken up in future studies; for example, claims were made based on research in a single community focused on the topics of writing and inclusion with co-teaching built into its design. Would similar results occur with different combinations of topics? Another limitation is how the research design did not attend to what happened after the inquiry community disbanded. Further research could attend to questions such as: What understandings, practices and dispositions do teachers retain, extend and develop once participation in a situated, sustained, collaborative, inquiry-oriented professional development initiative ends? Do they continue to inquire? What does their engagement with their practice, other resources (e.g., colleagues), and theory look like? These are questions that need to be asked about all professional development programs to better

understand how PD initiatives impact student outcomes and teacher learning, practice and participation in learning communities in the longer-term.

Also, while I was careful to warrant any conclusions drawn here by carefully tracing links between evidence and conclusions, caution must be exercised in generalizing from a single case to other contexts/situations. Whether and how any patterns observed here might be applicable in other settings should be a subject for further consideration and research. If similar patterns/relationships hold up over time or elsewhere, this would lend credibility to the theoretical framework developed and applied here as an analytic form of generalization.

Other areas to refine in future studies include attention to the role of the researcher and how this impacts teacher participation, learning and performativity. To what degree did teachers perform the outcomes I, and others, hoped for? In future studies, the situative, inquiry-oriented and collaborative aspects of this study still need to include design elements that attend to the uniqueness and enabling and constraining ways that each setting and participants' interests, goals, wonderings and experiences relate to what is done and learned, but also better attend to the influence of the facilitator/researchers' actions, intentions and beliefs. Examinations of the role and impact of the facilitator/researcher could parallel the analyses of inquiry partners and the cross-school community – recognizing that a facilitator's actions can be at times generative and emergent and at other times limiting or too directive. One hoped for outcome of this kind of professional development initiative is for teachers to not only continue to participate in CoIs, but have ownership for and even create similar learning communities themselves. In future studies participants can play more of a role in defining the work of a learning community, particularly a CoI. How might teachers who have more of a hand in co-constructing the design of the study make deeper and more

personalized connections to previous professional development and/or theory, participate differently, and draw even more diverse members into the community?

While not a focus of Borko's level one, situative PD studies, future research could move to level two and add a focus on student artifacts, perspectives and/or practices. Such data should be analyzed for intended and unanticipated outcomes. Other areas for potential investigation include more purposefully including and inviting local (e.g., First Nations) ways of knowing as resources into a CoI and examining the model's impact on district level goals, initiatives, structures, ways of communicating and staffing. Finally, further attention is needed to better understand teacher agency as a potential outcome is such models and studies.

Concluding Comments

This research report has provided insight into qualities of professional development projects that appear to make a difference: a practice orientation, teachers generatively drawing on resources within collaborative inquiry, collaboration that values diversity, shared foci, accountability within a community of practice, and personalizing and situating theory/practice connections. That these factors came to the fore as important and valuable suggests that the nature of knowledge construction and teaching practice are not entirely individual, value-free or universally applicable without considering context (Britzman, 1991, 2003). This dissertation illustrates the many ways that teacher learning is social and sets the stage for future studies of professional development models and initiatives that further examine the ways that the knowledge and practice of participating teachers is and has been produced.

Findings from this research suggest that situated, inquiry-oriented, collaborative, longitudinal professional development activities hold significant promise for helping teachers not only develop practices, but also develop and articulate understandings and

268

agency that can increase access to and better support students' and colleagues' learning. When professional development is designed, enacted, and reshaped in cycles of formative assessment and responsiveness, models of professional development, how teacher engage with ideas, practices, and peers, and subsequent outcomes for teachers can extend our understandings and embodiments of inclusivity and plurality.

Bibliography

Adler, J. (2000). Social practice theory and mathematics teacher education: A conversation between theory and practice. *Nordic Mathematics Education Journal, 8*(3), 31-53.

Anderson, C. (2000). *How's it going? A practical guide to conferring with student writers.* Portsmouth, NH: Heinemann.

Agar, M. (1996). *The professional stranger: An informal introduction to ethnography*. San Diego, CA: Academic Press.

Atwell, N. (1986*). In the middle: Writing, reading, and learning*. Portsmouth, NH: Boynton Publishers Inc.

Atwell, N. (1998*). In the middle: New understandings about writing, reading, and learning.* Portsmouth, NH: Heinemann Publishing.

Atwell, N. (2002). *Lessons that change writers*. Portsmouth, NH: Heinemann.

Ball, D. L. (1995). Blurring the boundaries of research and practice. *Remedial and Special Education*, *16* (6), 354-363.

Ball, A. (2009). Toward a theory of generative change in culturally and linguistically complex classrooms. *American Educational Research Journal, 46* (1), 45-72.

Ball, D. & Cohen, D. (1999). Developing practice, developing practitioners. In Sykes, D., H. & Sykes, H. (Eds.), *Teaching as the learning profession: Handbook on policy and practice*. San Francisco, CA: Jossey-Bass.

Bandura, A. (1977). *Social learning theory.* Englewood Cliffs, NJ: Prentice Hall.

Bauwens, J. & Hourcade, J. (1997). Cooperative teaching: Pictures of possibilities. *Intervention in School and Clinic, 33* (2), 81-85.

Bauwens, J., Hourcade, J. & Friend, M. (1989). Cooperative teaching: A model for general and special education integration. *Remedial and Special Education, 10* (2), 17-22.

Bereiter, C. & Scardamalia, M. (1982). From conversation to composition. In R. Glaser (Ed.) *Advances in instructional psychology (vol. 2)*. Hillsdale, NJ: Erlbaum.

Black, P. & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability, 21* (1), 5-31.

Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2003). *Assessment for learning: Putting it into practice.* Maidenhead, England: Open University Press.

Borko, H. & Putnam, R. (1998). Professional development and reform-based teaching: Introduction to the theme issue. *Teaching and Teacher Education, 14* (1), 1-3.

Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher, 33* (8), 3-15.

Bransford, J., Brown, A., & Cocking, R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school.* Washington, DC: National Academies Press.

Britzman, D. (1991). *Practice makes practice: A critical study of learning to teach*. New York, NY: State University of New York Press.

Britzman, D. (2003). *Practice makes practice: A critical study of learning to teach (rev. ed.)*. Albany, NY: State University of New York Press.

Brownell, B., Adams, A., Sindelar, P., Waldron, N., & Vanhover, S. (2006). Learning from collaboration: The role of teacher qualities. *Exceptional Children, 17* (2), 169-185.

Brownlie, F. (2009). Adolescent literacy assessment: Finding out what you need to know in Paris, Fisher, & Headley (Eds.), *Adolescent literacy, field tested: effective solutions for every classroom*. Newark, DE: International Reading Association.

Brownlie, F. Feniak, C., & Schnellert, L. (2006). *Student diversity* (2nd ed.). Markham, ON: Pembroke Publishers.

Brownlie, F. & King, J. (2000). *Learning in safe schools*. Markham, ON: Pembroke Publishers.

Bruner, J. (1996). *The culture of education*. Cambridge, MA: Harvard Business School.

Butler, D. L. (1998). The strategic content learning approach to promoting self-regulated learning: A summary of three studies. *Journal of Educational Psychology, 90* (4), 682-697.

Butler, D. L. (2004). Adults with learning disabilities. In B.Y. L. Wong (Ed.), *Learning about learning disabilities*, 565-598. Toronto, ON: Academic Press.

Butler, D. L., Novak Lauscher, H. J., Jarvis-Selinger, S., & Beckingham, B. (2004). Collaboration and self-regulation in teachers' professional development. *Teaching and Teacher Education, 20 (5)*, 435-455.

Butler, D. L., Schnellert, L., & Cartier, S. C. (2005). Adolescents' engagement in "reading to learn": Bridging from assessment to instruction. *BC Educational Leadership Research, 2*.

Butler, D. L., Cartier, S. C., Schnellert, L., & Gagnon, F. (2006). Secondary students' self-regulated engagement in "learning through reading": Findings from an

integrative research project. Paper presented at the annual meetings of the Canadian Society for Studies in Education, Toronto, ON.

Butler, D.L., Schnellert, L., & Higginson, S. (2007). Fostering agency and co-regulation: Teachers using formative assessment to calibrate practice in an age of accountability. Paper presented at the 2007 AERA Annual Meeting in Chicago, Illinois.

Butler, D. L. & Schnellert, L. (2008). Bridging the research-to-practice divide: Improving outcomes for students. *Education Canada 48* (5) 36-40.

Butler, D. L., Schnellert, L., & Cartier, S. C. (2008a). Layers of self-regulation: Teachers working strategically to improve practice so as to foster student self-regulation. Presented at the 2008 AERA Annual Meeting in New York, New York.

Butler, D. L., Schnellert, L., & Cartier, S. C. (2008b). Adolescents' learning through reading: Relating professional development, students' perceptions of learning through reading tasks and performance-based assessment. Presented at the 53rd annual conference of the International Reading Association, Atlanta, Georgia.

Calkins, L. M. (1986). *The art of teaching writing*. Portsmouth, NH. Heinemann.

Calkins, L. M. (1994). *The art of teaching writing.* Portsmouth, NH: Heinemann.

Calkins, L. M. (2003). *Units of study for primary writing: A yearlong curriculum*. Portsmouth, NH: Heinemann.

Calkins, L., Hartman, A., & White, Z. (2005). *One to one - the art of conferring with young writers.* Portsmouth, NH: Heinemann.

Cambourne, B. (2002). Holistic, integrated approaches to reading and language arts: The constructivist framework of an instructional theory. In A. E. Farstrup & S. Samuels (Eds.), *What research has to say about reading instruction,* 25-47. Newark, DE: International Reading Association.

Campbell A., McNamara, O., & Gilroy P. (2004). *Practitioner research and professional development in education.* London, ON: Paul Chapman Publications.

Carini, P. (2000). Prospect's descriptive process. In M. Himley & P. Carini (Eds.), *From another angle: Children's strengths and school standards.* New York, NY: Teachers College Press.

Carmichael, P., Fox, A., McCormick, R., Procter, R., & Honour, L. (2006). Teachers' networks in and out of schools. *Research Papers in Education, 21* (2), 217-234.

Carr, W. & Kemmis, S. (1986). Becoming critical. Education, knowledge and action research. Lewes: Falmer.

Cassidy, J. & Cassidy, D. (2008). What's hot for 2008. Reading Today, 25 (4), 1, 10-11.

Cazden, J. & Hymes, D. (Eds.) (1972*). Functions of language in the elementary and secondary schools.* New York, NY: Teachers College Press.

Clandinin, J. & Connelly, M. (2000). *Narrative inquiry.* San Francisco, CA: Jossey-Bass.

Clandinin, D. J. & Connelly, M. (2004). Knowledge, narrative, and self-study. In J. J. Loughran, M. L. Hamilton, V. K. LaBoskey & T. Russell (Eds.), *International handbook of self-study of teaching and teacher education practices,* 575-600. Norwell, MA: Kluwer Academic Publishers.

Clarke, A. & Erickson, G. (2004). The nature of teaching and learning in self-study. In Loughran, K., Hamilton, M., LaBoskey, V., & Russell, T. (Eds.), *International handbook of self-   study of teaching and teacher education practices*, 41-68. Norwell, MA: Kluwer   Academic Publisher.

Clarke, A., & Erickson, G. (2006). What's old is new again. *BC Educational Leadership Research, 4*. Retrieved July 17, 2010, from http://slc.educ.ubc.ca/eJournal/index.htm.

Clough, P. (1988). Bridging "mainstream" and "special" education: A curriculum problem. *Journal of Curriculum Studies, 20* (4), 327-338.

Cobb, P. & Bowers, J. S. (1999). Cognitive and situated learning perspectives in theory and practice. *Educational Researcher, 28* (2), 4-15.

Cobb, P. (2005). Where is the mind? A coordination of socio-cultural and cognitive constructivist perspectives. In C. T. Fosnot (Ed.), *Constructivism: theory, perspectives and practice*. New York: Teacher College Press.

Cochran-Smith, M. & Fries, K. (2005). Researching teacher education in changing times: Politics and paradigms. In Cochran-Smith, M. & Zeichner, K. (Eds.), *Studying teacher education: The report on the AERA panel on research and teacher education*, 69-109. Washington, DC: AERA.

Cochran-Smith, M. & Lytle, S. (1993a). *Inside/ outside: Teacher research and knowledge.* New York, NY: Teachers College Press.

Cochran-Smith, M. & Lytle, S. (1993b). Research on teaching and teacher research: The issues that divide. *Educational Researcher, 19* (2), 2-11.

Cochran-Smith, M. & Lytle, S. L. (1999a). The teacher research movement: A decade later. *Educational Researcher, 28* (7), 15-25.

Cochran-Smith, M. & Lytle, S. (1999b). Teacher learning in communities. In A. Iran-Nejad & D. Pearson (Eds.), *Review of research in education*. Washington, DC: American Educational Research Association.

Cochran-Smith, M. & Lytle, S. L. (2004). Practitioner inquiry, knowledge, and university culture. In J. J. Loughran,. M. L. Hamilton, V. K. LaBoskey, & T. Russell (Eds.), *International handbook of self-study of teaching and teacher education practices* (601-649). Norwell, MA: Kluwer Academic Publishers.

Cochran-Smith, *M. & Lytle*, S.L. (2009). *Inquiry* as *stance*: *Practitioner research in the next generation.* New York, NY: Teachers College Press

Cole, A. L. & Knowles, J. G. (2000). *Researching teaching: Exploring teacher development through reflexive inquiry*. Needham Heights, MA: Allyn & Bacon.

Cook, L. & Friend, M. (1995). Co-teaching - Guidelines for creating effective practices. *Focus on Exceptional Children, 28* (3), 1-16.

Creasey, M. S. & Walther-Thomas, C. (1996). Using planning teams to implement inclusive education effectively. *Preventing School Failure, 41* (1), 39-43.

Creswell, J. (2007). *Educational research: planning, conducting, and evaluating quantitative and qualitative research.* Thousand Oaks, CA: Sage.

Creswell, J. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage.

Darling-Hammond, L. (1996). The quiet revolution: Rethinking teacher development. *Educational Leadership*, *53* (6), 4-10.

Darling-Hammond, L. & McLaughlin, M. (1999). Investing in teaching as a learning profession—Policy problems and prospects. In L. Darling-Hammond and G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice*. New York, NY: Jossey-Bass, 376-412.

Darling-Hammond, L. (2000). *Solving the dilemmas of teacher supply, demand, and standards: How we can ensure a competent, caring, and qualified teacher for every child*. New York, NY: National Commission on Teaching and America's Future.

Darling-Hammond. L. & Bransford, J. (Eds.). (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco, CA: Jossey-Bass.

Denzin, N. K. & Lincoln, Y. S. (2005). *The discipline and practice of qualitative research.* Thousand Oaks, CA: Sage.

Dewey, J. (1938). *Experience and education.* New York, NY: Macmillan.

Dillon, D. R., O'Brien, D. G., & Heilman, E. E. (2000). Literacy research in the next millennium: From paradigms to pragmatism and practicality. *Reading Research Quarterly, 35,* 10–26.

Driver, R., Asoko, H., Leach, J., Mortimer, E., & Scott, P. (1994). Constructing scientific knowledge in the classroom. *Educational Researcher, 23* (7), 5-12.

DuFour, R., DuFour, R., Eaker, R., & Karhanek, G. (2004). *Whatever it takes: How professional learning communities respond when kids don't learn.* Bloomington, IN: National Education Service.

Duke, N. & Pearson, P. D. (2002). Effective practices for developing reading comprehension. In A. Farstrup & J. Samuels (Eds.), *What research has to say about reading,* 205-242. Newark, DE: International Reading Association.

Duke, D., Showers, B., & Imber. M. (1980). Teachers and shared decision-making: The costs and benefits of involvement. *Educational Administration Quarterly, 16* (1), 93-106.

Earl, L. M. (1999). Assessment and accountability in education: Improvement or surveillance. *Education Canada, 39* (3), 4-6, 47.

Eisner, E. (1979). *The educational imagination.* Upper Saddle Hills, NJ: Merril Prentice Hall.

Eisner, E. (2002). From episteme to phronesis to artistry in the study and improvement of teaching. *Teaching and Teacher Education, 18* (4), 375-385.

Elbow, P. (1981). *Writing with power: Techniques for mastering the writing process.* New York, NY: Oxford University Press.

Elster, D. (2009). Biology in context: Teachers' professional development in learning communities. *Educational research, 43* (2), 53-61.

Erickson, G., Minnes Brandes, G., Mitchell, I., & Mitchell, J. (2005). Collaborative teacher learning: Findings from two professional development projects. *Teaching and Teacher Education, 21* (7), 787-798.

Fazio, X. (2009). Development of a community of science teachers: Participation in a collaborative action research project. *School Science and Mathematics. 109* (2), 95-107.

Fernandez, C., Cannon, J., & Chokshi, S. (2003). A U.S. - Japan lesson study collaboration reveal critical lenses for examining practice. *Teaching and Teacher Education*, *19* (2), 171-185.

Fichtman Dana, N. & Yendol-Hoppey, N. (2008). *Learning to teach and teaching to learn through practitioner inquiry.* Thousand Oaks, CA: Sage.

Fisher, D. & Frey, N. (2004). *Improving adolescent literacy.* Pearson Merrill Prentice Hall.

Fisher, D. & Frey, N. (2007). *Checking for understanding.* Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).

Fitz, J. (2003). The politics of accountability: A perspective from England and Wales. *Peabody Journal of Education, 73* (4), 230–241.

Flower, L. S. (1994). *The construction of negotiated meaning: A social cognitive theory of writing.* Carbondale, IL: Southern Illinois University Press.

Flower, L. S. & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, *32* (4), 365-87.

Freebody, P. (2003). *Qualitative research in education.* Thousand Oaks, CA: Sage.

Friend, M. (2005). *Special education: Contemporary perspectives for school professionals.* Montreal, QE: Pearson.

Fullan, M. (1993). *Change forces: Probing the depths of educational reform.* London, ON: Falmer.

Fullan, M. (2005). *Leadership and sustainability.* Thousand Oaks, CA: Corwin Press.

Furlong, J. (2001). Reforming teacher education, reforming teachers; accountability, professionalism and competence. In R. Phillips, & J. Furlong (Eds.), *Education, reform and the state: Twenty five years of politics, policy and practice*, 123–147. London, ON: Routledge Falmer.

Giroux, H. (1988). *Teachers as intellectuals.* South Hadley, MA: Bergin & Garvey.

Goodman, J.F. & Bond, L. (1993). The individualized education program: A retrospective critique. *Journal of Special Education, 26* (4), 408-422.

Government of Northwest Territories (2006). Ministerial directive on inclusive schooling. Yellowknife, NT: Department of Education, Culture & Employment.

Graham, S. & Perin, D. (2007). *Writing next: Effective strategies to improve writing of adolescents in middle and high schools.* New York, NY: Carnegie Corporation.

Graves, D. (1984). *A researcher learns to write.* Portsmouth, NH: Heinemann.

Graves, D. (2003). *Writing: Teachers and children at work.* Portsmouth, NH: Heinemann.

Graves, D. (2004). What I've learned from teachers of writing. *Language Arts, 82* (2), 88-94.

Greeno, J.G. (2003). Situative research relevant to standards for school mathematics. In J. Kilpatrick, W.G. Martin, & D. Schifter (Eds.), *A research companion to principles and standards for school mathematics,* 304-332. Reston, VA: National Council of Teachers of Mathematics.

Grimmett, P.P. & MacKinnon, A.M. (1992). Craft knowledge and the education of teachers. In G. Grant (Ed.), *Review of Research in Education 18,* 385-456. Washington D.C.: The American Educational Research Association.

Guba, E. (1981). Criteria for assessing the trustworthiness of naturalistic inquiry. *Educational Communications and Technology Journal , 29*, 75-92.

Guba, E.G. & Lincoln, Y.S. (1994). Competing paradigms in qualitative research. In N.K. Denzin and Y.S. Lincoln (Eds.), *Handbook of qualitative research*, 105-117. Sage: Thousand Oaks, CA.

Guskey, T. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice, 8* (3/4), 380-391.

Hall, T., Strangman, N., & Meyer, A. (2003). *Differentiated instruction and implications for UDL implementation*. Wakefield, MA: National Center on Accessing the General Curriculum.

Halliday, M. (1978). *Language as social semiotic: The social interpretation of language and meaning*. Baltimore, MD: University Park Press.

Hamilton, M. L. (2004). Professional knowledge, teacher education and self-study. In J.J. Loughran, M. L. Hamilton, V. K. LaBoskey, & T. Russell (Eds.), *International handbook of self-study of teaching and teacher education practices.* Norwell, MA: Kluwer Academic Publishers.

Harris, A. (2005). *Crossing boundaries and breaking barriers: Distributing leadership in schools.* London, England: Special Trust.

Heard, G. (2002). *The revision toolbox - teaching techniques that work.* Portsmouth, NH: Heinemann.

Harris, K. R. & Graham, S. (1996). Memo to constructivists: Skills count, too. *Educational Leadership, 53* (5), 26-29.

Heath, S.B. (1983). *Ways with words: Language, life, and work in communities and classrooms.* New York, NY: Cambridge University Press.

Heron, J. & Reason, P. (1997). A participatory inquiry paradigm. *Qualitative Inquiry, 3* (3) 274-294.

Hiebert, J., Gallimore, R., & Stigler, J. (2002). A knowledge base for the teaching profession: What would it look like and how can we get one? *Educational Researcher, 31* (5), 3-15.

Hilden, K & Pressley, M. (2007). Self-regulation through transaction strategies instruction. *Reading and Writing Quarterly, 23* (1), 51-75.

Hillocks, G., (1986). *Research on written composition: New directions for teaching.* Urbana, IL: NCTE.

Hillocks, G. (1995). *Teaching writing as reflective practice.* New York, NY: Teachers College Press.

Hillocks, G. (1999). *Ways of thinking, ways of teaching.* New York, NY: Teachers College Press.

Hillocks, G. (2002). *The testing trap: How state writing assessments control learning.* New York, NY: Teachers College Press.

Himley, M. & Carini, P. (2000). *From another angle: Children's strengths and school standards*. New York, NY: Teachers College Press.

Hitchcock, C., Meyer, A., Rose, D., & Jackson, R. (2002). *Technical brief: Access, participation, and progress in the general curriculum.* Peabody, MA: National Center on Accessing the General Curriculum.

Hobson, D. (2001). Action and reflection: Narrative and journaling in teacher research. In Burnaford, G., Fischer, J., & Hobson, D. (Eds.), *Teachers doing research: The power of action through inquiry.* Mahwah, NJ: Erlbaum.

Horn, I. S. & Little, J. W. (2010) Attending to problems of practice: Routines and resources for professional learning in teachers' workplace interactions. *American Educational Research Journal, 47* (1), 181-217.

Hourcade, J.J. & Bauwens, J. (2002). *Cooperative teaching: Rebuilding and sharing the schoolhouse.* Austin, TX: ProEd Inc.

Howland, J. (2003). Into the province of shared endeavor. *Independent School, 62* (3), 12-17.

Human Resources and Social Development Canada. (2004). Advancing the inclusion of persons with disabilities (Executive summary). Ottawa, ON: Human Resources and Social Development Canada.

Hutchinson, N. (2007). *Inclusion of exceptional learners in Canadian schools: A practical handbook for teachers. Second edition*. Toronto, ON: Pearson Education Canada.

Huziak-Clark, T., Van Hook, S., Nurnberger-Haag, J., & Ballone-Duran, L. (2007). Using inquiry to improve pedagogy throughk-12/university partnership. *School Science and Mathematics, 107* (8), 311-324.

Kaplan, J. (2008). The national writing project: Creating a professional learning community that supports the teaching of writing. *Theory into Practice, 47* (4), 336-344.

Klein, E. (2008). Learning, unlearning and relearning: lessons from one school's approach to creating and sustaining learning communities. *Teacher Education Quarterly, 35* (1), 79-97.

Langer, J. & Flihan, S. (2000). Reading and writing relationships: Constructive tasks. In R. Indrisano & J. R. Squire (Eds.), *Perspectives on writing: Research, theory and practice*. International Reading Association. Newark, DE.

Laskway, L. (2003). Distributed leadership. *Research Roundup, 19* (4).

Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation.* Cambridge: University of Cambridge Press.

LeCompte, M. & Schensul, J. J. (1999). *Designing and conducting ethnographic research*. Walnut Creek, CA: Alta Mira.

Leggo, C. (2007). Writing truth in classrooms: Personal revelation and pedagogy. *International Journal of Whole Schooling, 3*(1), 27-37.

Lenz, B. K., Deshler, D. D., & Kissam, B. (2004). *Teaching content to all: Evidenced-based practices for middle and high school settings*. New York, NY: Allyn Bacon.

Levine, M. (2003). Celebrating diverse minds. *Teaching All Students. 61* (2), 12-18.

Levine, T.H. & Marcus, A.S. (2010). How the structure and focus of teachers' collaborative activities facilitate and constrain teacher learning. *Teaching and Teacher Education 26* (3), 389-398.

Lincoln, Y. & Guba, E. (1990). Judging the quality of case study reports. *Qualitative studies in education, 3* (1), 53-59.

Lipman, M. (2003). *Thinking in education. (2nd ed.)*. Cambridge, MA: Cambridge University Press.

Little, J. W. (2003). Inside teacher community: Representations of classroom practice. *Teacher College Record, 106* (6), 913-945.

Loreman, T. (2007). How we view young children with diverse abilities: What Canada can learn from Reggio Emilia. *Exceptionality Education Canada, 17* (1), 5-26.

Loughran, J.J. (2006). Developing a pedagogy of teacher education: Understanding teaching and learning about teaching. London, ON: Routledge.

Luna, C., Botelho, Fontaine, D., French, K., Iverson, K., & Matos, N. (2004). Making the road by walking and talking: Critical literacy and/as professional development in a teacher inquiry group. *Teacher Education Quarterly, 32* (1), 67-80.

Lytle, S. (2008). Practitioner inquiry and the practice of teaching: Some thoughts on `better'." *Research in the Teaching of English, 42* (3), 373-379.

MacArthur, C. A., Graham, S., & Fitzgerald, J. (Eds.). (2008). *Handbook of writing research*. New York, NY: Guilford.

Malhotra Bentz, V. & Shapiro, J. (1998). *Mindful inquiry in social research.* Thousand Oaks, CA: SAGE Publications.

Marshall, B. & Drummond, M. (2006). How teachers engage with assessment for learning: lessons from the classroom. *Research Papers in Education. 21* (2), 133-149.

McLaughlin, M. & Talbert, J. (2006*). Building school-based teacher learning communities.* New York, NY: Teacher College Press.

Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass Publishers.

Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook (2nd ed.)*. Thousand Oaks, CA: Sage.

Miller, A., Valasky, W., & Molloy, P. (1998). Learning together: The evolution of an inclusive class. Active Learner: *A Foxfire Journal for Teachers, 3* (2), 14-16.

Mitchell, I. (2000). Moving from professional talk to teacher research. Paper presented at at the American Education Research Association meeting in New Orleans, LA: April 24-28, 2000.

Moje, E. B. (1996). "I teach students, not subjects": Teacher-student relationships as contexts for secondary literacy. *Reading Research Quarterly*, *31*, 172-195.

Morrell, E. (2004). Legitimate peripheral participation as professional development: Lessons from a summer research seminar. *Teacher Education Quarterly, 32 (*1), 89-99.

Murawski, W.W. & Dieker, L.A. (2004). *Tips and strategies for co-teaching at the secondary level. Teaching Exceptional Children, 36*, 52-58.

National Commission on Writing. (2003). *The neglected R: The need for a writing revolution*. Retrieved July 16, 2010, from http://www.writingcommission.org/report.html

National Commission on Writing. (2004). *Writing: A ticket to work… or a ticket out: A survey of business leaders*. Retrieved July 16, 2010, from

http://www.writingcommission.org/report/html

National Commission on Writing. (2005). *Writing: A powerful message from state government*. Retrieved July 16, 2010, from http://www.writingcommission.org/report/html

Nevin, A., Thousand, J., Paolucci-Whitcomb, P., & Villa, R. (1990). Collaborative consultation: Empowering public school personnel to provide heterogeneous schooling for all. *Journal of Educational and Psychological Consultation*, *1* (1), 41-67.

National Writing Project & Nagin, C. (2006). *Because writing matters: Improving student writing in our schools.* San Francisco, CA: Jossey-Bass.

Nuthall, G. A. (1999). Learning how to learn: the evolution of students' minds through the social processes and culture of the classroom. *International Journal of Educational Research, 31* (3), 139-256.

Palincsar, A.S. (1999). Response: A community of practice. *Teacher Education and Special Education, 22* (4), 272-274.

Palinscar, A.S. & Klenk, L. (1992). Fostering literacy learning in supportive contexts. *Journal of Learning Disabilities, 25* (4), 211-225, 229.

Paris, S., Byrnes J., & Paris, A. (2001). Constructing theories, identities and actions of self-regulated learners. In Zimmerman, B., & Schunk, D. (Eds.), *Self-regulated learning and academic achievement: Theoretical perspectives.* Mahwah, NJ: Erlbaum.

Pennington, J. L. (2007). Re-viewing NCTB through the figured worlds of policy and teaching: Creating a space for teacher agency and improvisation. *Language Arts 84* (5), 465-474.

Pressley, M. (2000). What should comprehension instruction be the instruction of? In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research, (vol. 3).* 545-561. Mahwah, NJ: Erlbaum.

Pritchard, R & Honeycutt R (2006). The process approach to writing instruction. In MacArthur C, Graham S and (Eds.), *Handbook of writing research.* New York, NY: Guilford Press.

Putnam, R. T. & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, *29* (1), 4-15.

Radnor, H. (2002). *Researching you professional practice.* Buckingham, UK: Open University Press.

Ray, K.W. & L. Laminack. (2001). The writing workshop: working through the hard parts (and they're all hard parts). Urbana, IL: NCTE.

Richardson, V. (2001). Teacher change. In V. Richardson (Ed.), *Handbook of research on teaching (4th ed.).* Washington, D.C.: American Educational Research Association.

Rief, L. (1994). Writing for life: Teachers and students. In M. Barbieri & L. Reif (Eds.), *Workshop 6, by and for teachers: The teacher as writer*, 84 – 101. Portsmouth, NH: Heinemann.

Rief, L. (2006). What's right with writing. *Voices from the Middle, 13* (4), 32-39.

Rief, L. (2007). *Inside the writer's-reader's notebook: A workshop essential*. Portsmouth, NH: Heinemann.

Rinaldi, C. (2006). In dialogue with Reggio Emilia, Routledge: London, ON.

Robertson, J. (2000). The three Rs of action research methodology: reciprocity, reflexivity and reflection-on-reality. *Educational Action Research, 8* (2), 307-326.

Robertson, J., Hill, M., & Earl, L. (2004). *Conceptual frameworks in school-university action research communities*. Paper presented at the New Zealand Research in Education conference. Wellington, N.Z.

Rogers, T., Winters, K., Bryan, G., Price, J., McCormick, F., House, L., Mezzarobba, D., & Sinclaire, C. (2006). Developing the IRIS: Toward situated and valid assessment measures in collaborative professional development and school reform in literacy. *The Reading Teacher*, *59* (6), 554-553.

Rogoff, B. (1990). *Apprenticeship in thinking: cognitive development in social context*. New York, NY: Oxford University Press.

Rose, D.H. & Meyer, A. (2002). Teaching every student in the digital age: Universal design for learning. Alexandria, VA: ASCD.

Rose, D.H. & Meyer, A. (2006). A practical reader in universal design for learning. Cambridge, MA: Harvard Education Press.

Rosenblatt, L. (1938/1995). *Literature as exploration.* New York, NY: Modern Language Association.

Routman, R. (2005). *Writing essentials.* Portsmouth, NH: Heinemann.

Sailors, M. (2009). Improving comprehension instruction through quality professional development. In S. E. Israel & G. G. Duffy (Eds.), *Handbook of research on reading comprehension, 373-388.* New York: NY: Routledge

Santamaria, L. & Thousand, J. (2004). Collaboration, co-teaching, and differentiated instruction: A process-oriented approach to whole schooling. *International Journal of Whole Schooling (1)* 1, 13-27.

Schnellert, L. (2005). Towards an understanding of understanding: how indigenous knowing can help articulate a metalanguage for situated teacher inquiry and self-regulated transformation. Paper presented at CATE session at the annual meetings of CSSE. London, ON.

Schnellert. L., Higginson, S., & Butler, D. (2006). Co-constructors of data, co-constructors of meaning: Teacher professional development in an age of accountability. CAEP session presented at the annual meetings of CSSE, Toronto, ON.

Schnellert L., Butler, D. L., & Higginson, S. (2008). Co-constructors of data, co-constructors of meaning: Teacher professional development in an age of accountability. *Teaching and Teacher Education 24* (3), 725-750.

Schnellert, L. & Brownlie, F. (2005). Using literature circles to explore issues and develop social responsibility. Presented at the 50th annual international conference of the International Reading Association, San Antonio, TX.

Schnellert, L. & Butler, D. L. (2009a). Examining teachers' practice-oriented inquiry into middle years students' literacy learning. Presented at the National Council of Teachers of English (NCTE) Annual Convention, Philadelphia, PA.

Schnellert, L. & Butler, D.L. (2009b). Examining the influence of collaboration on teacher learning and practice. Presented at the 2009 Council for Exceptional Children (CEC) Annual Convention in Seattle, WN.

Schnellert, L., & Butler, D. L. (2009c). Teacher professional development as situated, goal-oriented co-construction of practice: Teachers working together to develop teaching practices that respond to and support diverse learners. Roundtable presentation, Constructivist Research, Theory and Practice SIG, at the AERA Annual Meeting in San Diego, CA.

Schnellert, L. & Butler, D. L. (2010a). Teacher professional development as longitudinal, situated, inquiry-oriented co-construction of practice: Teachers working together to develop teaching practices in elementary and middle   years writing classrooms. Research poster presented in The Canadian Association for Teacher Education (CATE) session at the annual meetings of the Canadian Society for Studies in Education. Montreal, QE.

Schnellert, L. & Butler, D. L. (2010). Towards a better understanding of teacher professional development: Examining teachers' practice-oriented inquiry into middle years literacy teaching and learning. Presented at the 55th annual conference of the International Reading Association, Chicago, IL.

Schnellert, L., Campbell, J., Loat, C., Rollo, C., & Widdess, N. (2004). Richmond's

"Strengthening Student Writing Network": A study group exemplar. Presented at the 36th annual meeting of the National Staff Development Council. Vancouver, BC.

Schnellert, L. & Widdess, N. (2005). Student-generated criteria, free verse poetry, and residential schools. *English Practice: the Journal of BC Teachers of English Language Arts, 47* (2), 19-28.

Schon, D. (1983). *The reflective practitioner*. New York, NY: Basic Books.

Schon, D. (1987). *Educating the reflective practitioner.* San Francisco: Jossey-Bass.

Shagoury Hubbard, R. & Miller Power, B. (2003). *The art of classroom inquiry.* Portsmouth, NH: Heinemann.

Shulman, L.S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher, 15* (2), 4-14.

Shulman, L.S. (1987). Knowledge and teaching: Foundation of the new reform. *Harvard Educational Review, 57*, 1-22.

Schwab, J.J. (1978). *Science, curriculum and liberal education.* Chicago, IL: University of Chicago Press.

Shepard, L. (2000). The role of assessment in a learning culture. *Educational Researcher, 29* (7), 4–14

Simpson, D. (2006) *John Dewey*. Peter Lang Publishers.

Singh, K. & Shifflette, L. M. (1996). Teachers' perspectives on professional development. *Journal of Personnel Evaluation in Education, 10,* 145-60.

Skrtic, T. M. (1987). An organizational analysis of special educational reform. *Counterpoint, 8* (2), 15-19.

Snow, C. & Biancarosa, G. (2003). *Adolescent literacy and the achievement gap: What do we know and where do we go from here?* New York, NY: Carnegie Corporation of New York.

Snow-Gerono, J.L. (2005). Naming inquiry: PDS teachers' perceptions of teacher research and living and inquiry stance toward teaching. *Teacher Education Quarterly, 32* (4), 79-95.

Stake, R. (2005). Qualitative case studies. In N. Denzin & Y. Lincoln (Eds.), *The SAGE handbook of qualitative inquiry*, 443-466. Thousand Oaks, CA: Sage.

Stenhouse, L. (1975). *An introduction to curriculum research and development.* London, ON. Heinemann.

Stiggins, R. J. (2002). Assessment crisis: The absence of assessment FOR Learning. *Phi Delta Kappan*.

Strickland, D. S. & Alvermann, D. E. (2004). Learning and teaching literacy in grades 4–12: Issues and challenges. In D. S. Strickland & D. E. Alvermann (Eds.), *Bridging the literacy achievement gap grades 4-12*. New York, NY: Teachers College Press.

Tellis, W. (1997). Introduction to case study. *The Qualitative Report*, *3* (2). Downloaded January 19, 2009 from http://www.nova.edu/ssss/QR/QR3-2/tellis1.html .

Thomas, P. & Kincheloe, J. (2006). *Reading, writing & thinking: The postformalism basics*. Rotterdam: Sense Publishers.

Thousand, J., Villa, R., Nevin, A., & Paolucci-Whitcomb, P. (1995). A rationale and vision for collaborative consultation. In W. Stainback & S. Stainback (Eds.), *Controversial issues confronting special education: Divergent perspectives*, 223-232. Baltimore, MD: Paul H. Brookes Publishing Co.

Thousand, J.S., Villa, R.A., & Nevin, A.I. (2006). The many faces of collaborative planning and teaching. *Theory Into Practice, 45* (3), 239-248.

Santamaria, L. & Thousand, J. (2004). Collaboration, co-teaching, and differentiated instruction: A process-oriented approach to whole schooling. *International Journal of Whole Schooling, 1* (1), 13-27.

Thomas, P.L. (2005). *Teaching writing*. New York, NY: Peter Lang.

Throneburg, R.N., Calvery, L.K., Sturm, J. J., Paramboukas, A.A., & Paul, P.J. (2000). A comparison of service delivery models: Effects on curricular vocabulary skills in the school setting. *American Journal of Speech-Language Pathology, 9*, 10-20.

Timperley, H. & Alton-Lee, A. (2008). Reframing teacher professional learning: An alternative policy approach to strengthening valued outcomes for diverse learners. *Review of Research in Education, 32* (1), 328-369.

Timperley, H. & Phillips, G. (2003). Changing and sustaining teachers' expectations through professional development in literacy. *Teaching and Teacher Education, 19*, 627-641.

Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms. (2nd ed.)*. Alexandria, VA: ASCD.

Tomlinson, C. A. & McTighe, J. (2006). *Integrating differentiated instruction and understanding by design.* Alexandria, VA: Association for Supervision & Curriculum Development.

Troia, G. A. & Graham, S. (2002). The effectiveness of a highly explicit, teacher-

directed strategy instruction routine: Changing the writing performance of students with disabilities. *Journal of Learning Disabilities, 35,* 290-305.

Tuhiwai-Smith, L. (2001). *Decolonizing methodologies: Research and indigenous peoples*. London, England: Zed Books Ltd. and University of Otago Press.

Van Horn, L. (2006). Re-imagining professional development. *Voices in the Middle, 13* (4), 58-63.

Villa, L. & Thousand, J. (2004). Collaboration, co-teaching, and differentiated instruction: A process-oriented approach to whole schooling. *International Journal of Whole Schooling, 1* (1), 1-34.

Villa, R., Thousand, J. (2000). *Restructuring for caring and effective education: Piecing the puzzle together (2nd ed.),* Baltimore, MD: Paul H. Brooke.

Villa, R., Thousand, J., & Nevin, A. (2004). *A guide to co-teaching: Practical tips for facilitating student learning.* Thousands Oaks, CA: Corwin Press.

Vygotsky, L. S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.

Walsh, J.M. & Jones, B. (2004). New models of cooperative teaching. *Teaching Exceptional Children, 36* (5), 14-20.

Walther-Thomas, C.S. (1997). Co-teaching experiences: The benefits and problems that teachers and principals report over time. *Journal of Learning Disabilities, 30* (4), 395-407.

Wenger, E. (1998). *Communities of practice. Learning, meaning and identity*. Cambridge, MA: Cambridge University Press.

Whitney, A. (2008). Teacher transformation in the national writing project. *Research in the Teaching of English, 43* (2), 144-187.

Wilhelm, J. (2001). *Improving comprehension with think aloud strategies: Modeling what good readers do*. New York, NY: Scholastic.

Wiliam, D. (2007/2008). Changing classroom practice. *Educational Leadership, 65* (4), 36-42.

Wilson, S. M. & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. In A. Iran-Nejad & P.D. Pearson (Eds.), *Review of Research in Education Vol. 24*, 173-209.

Wilson, S.M., Shulman, L.S., & Richert, A. (1987). "150 different ways" of knowing: Representations of knowledge in teaching. In J.Calderhead (Ed.), *Exploring teacher thinking*. Sussex, UK: Holt, Rinerhart & Winston.

Wollman-Bonilla, J.E. (2004). Principled teaching to(wards) the test? Persuasive writing in two classrooms. *Language Arts, 81* (6) 502-512.

Wood, D.R. & Lieberman, A. (2000). Teachers as authors: the national writing project's approach to professional development. *Leadership in Education, 3* (3), 255-273.

Yin, R. K. (2003). *Case study research: Design and method*. Thousand Oaks, CA: Sage.

Zeichner, K. (1996). Teachers as reflective practitioners and the democratization of school reform. In K. Zeichner, S. Melnick, & M. L. Gomez (Eds.), *Currents of reform in preservice teacher education*, 1-8. New York, NY: Teachers College Press.

Zeichner, K. and Liston, D. (1996). *Reflective teaching: An introduction.* Lawrence Erlbaum Associates, Inc., Publishers.

Zembylas, M. (2000). Something 'paralogical' under the sun: Lyotard's postmodern condition. *Educational Philosophy and Theory, 32 (2)* 159-184.

Zimmerman, B., & Schunk, D. (2001). *Self-regulated learning and academic achievement: Theoretical perspectives (2nd Ed.)*. Mahwah, NJ: Erlbaum.

Appendix A: Interview questions

Fall interview questions:
1. What is important for your students to learn when they are learning about writing?
2. What is writing (participants' perception)?
3. How do you approach planning for writing instruction?
4. What would effective writing instruction look like?
5. How do you address (include/accommodate) diverse learners within your writing program?
6. How do you hope to benefit through your participation in this professional study group?
7. What do you want to refine or change in your program? Why?
8. What actions are you thinking of taking to achieve this goal?
9. Can you think of an example of an aspect of your practice that you have previously had success adapting/changing/refining?
10. How might the members of the study group support you in achieving your goals?
11. How would you describe a worthwhile and supportive professional development experience?

Spring interview questions:

1. What is important for your students to learn when they are learning about writing?
2. What is writing (participants' perception)?
3. How do you approach planning for writing instruction? Has this changed?
4. What would effective writing instruction look like?
5. How do you address (include/accommodate) diverse learners within your writing program?
6. How have you benefited from membership in this group?
7. Were you successful in refining or change in your program? Why?
8. What actions did you take to achieve this goal?
9. Can you give me an example of an aspect of your practice that you had success adapting/changing/refining?

10. How did members of the study group support you in achieving your goals?
11. How would you describe a worthwhile and supportive professional development experience?
12. How did the study group contribute to your learning?

Appendix B: Data informed, analysis derived, thematic color codes

Teacher collaboration

Affective qualities

Increasing pathways to learning

Supporting teacher learning

Scaffolding learning

Self- and co-regulated learning

Curricular integration

Writing

Own learning