

THE PATH FROM INSIGHT TO ACTION: THE CASE OF AN ONLINE LEARNING
COMMUNITY IN SUPPORT OF COLLABORATIVE TEACHER INQUIRY

By

CHRISTOPHER DAVIS SESSUMS

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2009

© 2009 Christopher Davis Sessums

To Lynn for all of her love and patience

ACKNOWLEDGMENTS

I would like to acknowledge the support of my peers, mentors, and staff in the College of Education at the University of Florida. In particular, I want to thank Tom Dana and Nancy Dana for their candor, friendship, and guidance throughout my career in the College of Education; Rick Ferdig, Kara Dawson, and Cathy Cavanaugh for their support and inspiration; Buffy Bondy and Dorene Ross for their guidance and encouragement; Elaine Green for registering me in courses that otherwise would have been impossible for me to take; Sebastian Foti for opening the educational technology door; Robert Wright a model mentor, Ben Nelms, Jane Townsend, Barbara Pace, I truly would like to thank you all. I would also like to thank Tracy Irani for the opportunity to work together on research and writing projects at the university. I would like to especially thank Bill Fitzgerald for his time, effort, and graciousness; Alan Nail for the pints and zombies; the coaches in this study; and to the online learning networks and communities in which I have participated and have yet to participate in. Finally, I would like to acknowledge Duncan, Zoë, and Samuel for inspiring me with their gifts of life; and to Anne and Dave, thank you for making all of this possible.

TABLE OF CONTENTS

	<u>page</u>
ACKNOWLEDGMENTS.....	4
LIST OF TABLES.....	9
LIST OF FIGURES	10
ABSTRACT	11
CHAPTER	
1 BUILDING ORGANIZATIONAL STRUCTURES TO PROVIDE EFFECTIVE ONLINE TEACHER PROFESSIONAL DEVELOPMENT	13
Introduction	13
Teacher Inquiry/Action Research as a Professional Development Strategy	14
Learning Communities.....	14
Online Learning.....	15
Purpose of this Study	16
Organization of the Study	16
Benefit of this Study	17
2 LITERATURE REVIEW	19
Introduction	19
Teacher Professional Development.....	19
Professional Learning Communities.....	21
Action Research	24
Online Teacher Professional Development	26
Activity Theory	29
Purpose of this Study	29
3 RESEARCH METHODOLOGY	32
Introduction	32
Participants and Setting	33
Researcher’s Role	35
Data Sources.....	36
Online Learning Community	36
Facilitator-initiated discussion prompts	36
Participant activity	37
Technical data	38
Summary	40
In-Depth Interviews	40
Field Notes.....	41

	Data Analysis.....	41
	Personal Narrative Analysis of Weblogging.....	42
	Technical Data Analysis.....	44
	In-Depth Interview Analysis.....	45
	Field Notes and Personal Notes.....	45
	Summary.....	46
4	SETTING THE CONTEXT: HISTORY LEADING UP TO THE ONLINE LEARNING COMMUNITY.....	47
	Introduction.....	47
	Background Information: The Center for School Improvement at the University of Florida, P.K. Yonge Developmental Research School, and the Northeast Florida Educational Consortium.....	47
	Year One Training.....	48
	Year Two Training.....	49
	Year Three Training.....	50
	Year Four Training.....	51
	The Online Learning Community Participants.....	52
	Experiences that Complimented Participants' Online Learning Community Membership....	53
	Summary.....	54
5	THE ONLINE LEARNING COMMUNITY.....	57
	Basic Overview of the Site's Design.....	57
	Online Learning Community Site Elements.....	58
	Front Page.....	58
	Tabs.....	59
	Left-column Navigation Elements.....	59
	My Blog.....	60
	My Account.....	60
	Recent Posts.....	61
	Log out.....	61
	Bloggers.....	61
	Center-column Navigation Elements.....	62
	Announcements.....	62
	Posts and Comments.....	63
	Comments.....	64
	Right-column Navigation Elements.....	64
	Administrator Elements.....	66
	Summary.....	67
6	SITE FACILITATOR ACTIVITY.....	77
	Action 1: Community Establishment.....	77
	Definition.....	77
	Two Examples of Community Establishment.....	78

Analysis	81
Action 2: Invitation to Post.....	82
Definition	82
Examples of Invitations to Post	82
Analysis.....	91
Action 3: Modeling Online Learning Community Participation	91
Definition	91
Examples of Modeling Online Learning Community Participation.....	92
Analysis.....	103
Action 4: Announcements	104
Definition	104
Examples of Announcements.....	104
Analysis.....	107
Summary	107
7 COACH ACTIVITY	113
Action 1: Responding to Site Facilitator Prompts.....	113
Definition	113
Examples of Responding to Site Facilitator Prompts.....	114
Analysis.....	118
Action 2: Commenting.....	119
Definition	119
Examples of Commenting.....	120
Analysis.....	125
Action 3: Peripheral Participation	126
Definition	126
Examples of Peripheral Participation	127
Analysis.....	129
Summary.....	130
8 CONCLUSIONS	134
Summary of the Study	134
Assertion	138
Site Facilitator Roles	139
Community leader	139
Educative mentor.....	139
Participatory modeler.....	140
Analysis.....	141
Coaches' roles	141
Advice seeker	141
Advice giver	142
Encourager.....	142
Eavesdropper	143
Implications	144
For Members of an Online Learning Community	144

For Staff Developers.....	146
For Educational Researchers.....	146
Summary	148

APPENDIX

A OUR INQUIRY FACILITATOR ON-LINE PROFESSIONAL LEARNING COMMUNITY	150
B FORMING GROUND RULES	153
C SAMPLE PROBING QUESTIONS	155
LIST OF REFERENCES	156
BIOGRAPHICAL SKETCH	163

LIST OF TABLES

<u>Table</u>		<u>page</u>
4-1	Basic demographics of online learning community participants	56
5-6	Total participation data according to the online learning community administrator log files.	74
5-7	Total participation data according to the online learning community administrator log files sorted by month.	75
7-1	Total participation data of participating coaches according to the online learning community administrator log files.	129

LIST OF FIGURES

<u>Figure</u>		<u>page</u>
5-1	Screen shot of the Center for School Improvement’s online learning community’s homepage. (Source: http://csi.uflearn.org . Last accessed November 2008).	69
5-2	An example of a three-column layout used to support the CSI online learning community design. (Source: http://www.alistapart.com/articles/holygrail . Last accessed November 28, 2008).	70
5-3	An example of elements associated posts in the online learning community.	71
5-4	An example of a comment box feature associated with a post in the online learning community.	72
5-5	An example of the right-hand navigation element supporting keywords in the online learning community.	73
7-1	Power log trend based on participation totals of the site facilitator and coaches in the online learning community.	133

Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

THE PATH FROM INSIGHT TO ACTION: THE CASE OF AN ONLINE LEARNING
COMMUNITY IN SUPPORT OF COLLABORATIVE TEACHER INQUIRY

By

Christopher Davis Sessums

May 2009

Chair: Thomas Dana

Major: Curriculum and Instruction

Teacher professional development is a complex enterprise (Sprinthall, Reiman, and Thies-Sprinthall, 1996). While many online professional development programs have been introduced over the past several years that provide continuous, job-embedded support, empirical evidence relating what works and what does not has been limited (Whitehouse, Breit, McCloskey, Ketelhut, & Dede, 2006). This study examined the case of a practice-based, task-oriented, online teacher professional learning community designed to further develop participants' knowledge and understanding of coaching teacher inquiry/action research. Using activity theory as an analytical framework, this study looked at the ways in which participation in an online learning community (as a teacher professional development organizational structure) supported/hindered participants' abilities to (1) deepen their understanding of the teacher inquiry/action research process; (2) deepen their understanding of coaching teacher inquiry/action research; and (3) deepen their understanding of their own evolving stance toward their coaching practice. The various motivations that brought participants to the online learning community translated into ways of acting that helped to explain how and why the community functioned. The study's findings showed that participants perceived value in the online learning community as a communication medium that supported collaborative learning and knowledge production.

Ultimately, this study identified specific actions and roles within which teachers' learning can be meaningfully situated online, offering insight into the application of online learning communities for professional development purposes. It is hoped that this study will be helpful to those who facilitate online communities as well as those who seek such communities for growth and inspiration.

CHAPTER 1
BUILDING ORGANIZATIONAL STRUCTURES TO PROVIDE EFFECTIVE ONLINE
TEACHER PROFESSIONAL DEVELOPMENT

Introduction

Teacher professional development is a complex enterprise (Sprinthall, Reiman, and Thies-Sprinthall, 1996) and wrought with low quality, fragmented, and “intellectually superficial” (Borko, 2004) professional development programs. The need for meaningful professional learning opportunities that fit the busy schedule of teachers and that take advantage of resources and expertise not found locally has led to the creation of online teacher professional programming (Dede, Ketelhut, Whitehouse, Breit, & McCloskey, 2009). While many online professional development programs have been introduced over the past several years that provide continuous, job-embedded support, empirical evidence relating what works and what does not has been limited (Whitehouse, Breit, McCloskey, Ketelhut, & Dede, 2006). This study examines the case of an online teacher professional development learning community designed to enhance teachers' capacity to conduct, support, and promote teacher inquiry/action research. The goal of this study was to analyze this particular case's strengths and limits in order to develop insights for bettering teacher practice, staff development, and research in the field of teacher professional development. To better understand how an online teacher professional development program could support teacher professional learning, the purpose of this study was designed to look at the activity in which participation in an online learning community (as a teacher professional development organizational structure) supported/hindered participants' abilities to (1) deepen their understanding of the teacher inquiry/action research; (2) deepen their understanding of coaching other educators in the process of teacher inquiry/action research; and (3) deepen their understanding of their own evolving stance toward their coaching practice.

Teacher Inquiry/Action Research as a Professional Development Strategy

In terms of organizational structures designed to support teacher professional development, teacher inquiry, or action research, offers a compelling model. The term action research has been used correspondingly with other terms such as *teacher research*, *classroom research*, and *practitioner inquiry* with slight variations in meaning and intent. For the purposes of this study, *teacher inquiry* and action research are defined as a systematic, intentional investigation by a teacher into specific elements of his or her own classroom practice (Cochran-Smith & Lytle, 1993). As such, teacher inquiry/action research is considered by some educational researchers to be one of the most powerful forms of professional development in that it allows a teacher the opportunity to actively engage with "problems of practice" (Darling-Hammond, 2007).

As teachers engage with problems embedded in their own classroom teaching, they have the opportunity to carefully examine students and their work, to take action and adjust aspects of their practice, and to share what they learn with their peers. Often, they begin with an assessment of what their students need and what teachers identify as areas for their own learning (Easton, 2008; Wei, Darling-Hammond, Andree, Richardson & Orphanos, 2009). Settings in which teachers are provided supportive opportunities for inquiry, and time and space to share their results is considered more powerful than abstract seminar-style professional development experiences (Ball & Cohen, 1999). A professional development approach where teacher knowledge develops from inquiries of practice can be built upon "substantial professional discourse that fosters analysis and communication about practices and values ways that build collegiality and standards of practice" (Darling-Hammond, 2007).

Learning Communities

Professional learning communities (PLCs) offer another organizational structure by which teachers can learn from their practice. Professional learning communities offer a structure that

allows teachers to work jointly around shared, explicit, learning goals (Little, 1990; Darling-Hammond, 1997; Fullan, 2000). A professional learning community structure can serve to support teachers engaged in teacher inquiry/action research by providing an organizational framework around which participating teachers can discuss issues and concerns associated with their practice in a meaningful, organized way. Moreover, as noted by Yendol-Hoppey & Dana (2008)

when action research becomes a part of the work of a PLC, there is a greater likelihood that the learning that occurs from individual teacher inquiries conducted into classroom practice will spill over into collective inquiries conducted by a group of teachers sharing a goal for school improvement (p. 11).

Professional learning communities offer educators a chance for regular professional exchanges where teachers mentor each other through sharing what they know and have learned, exchanging stories of practice, and developing plans and activities to refine and sharpen their skills and practice.

Online Learning

Given the promise of teacher inquiry/action research to transform educators' practices and improve schools, as well as advances in thinking about professional learning communities, it is reasonable to wonder about the role of an online learning community and how participation in such a facilitated professional development environment might enhance participants' understandings about their own practice (Dede, 2004; Mejias, 2005; LaFerrière, T., Lamon, M., Chan, C.K.K., 2006).

Online teacher development programs come in a variety of shapes, sizes, embody a variety of foci, and utilize a variety of forms, formats, and technologies for delivering and supporting instruction and interaction. They can be delivered completely online or offer a hybrid approach that includes some face-to-face interactivity. The choice of technologies used to support online

programs offer a range of capabilities that support synchronous and asynchronous communication as well as the ability to collect participant "voices" and learning data that can be used to inform participants, staff developers, and educational researchers. In a larger sense, measuring the educational effectiveness of online learning programs offers practitioners, designers, and researchers "a major challenge" (Dede, 2006).

Purpose of this Study

Given this challenge and the need for more empirical research on the effectiveness of online teacher professional development, this study closely examined the ways in which participation in an online learning community (as a teacher professional development organizational structure) supported/hindered participants' abilities to (1) deepen their understanding of the teacher inquiry/action research process; (2) deepen their understanding of coaching teacher inquiry/action research; and (3) deepen their understanding of their own evolving stance toward their coaching practice. While this study does not address the ultimate effect teacher professional development had on student learning, it offered the opportunity to deeply examine the activity that took place in a particular online learning community.

Organization of the Study

This study is organized into eight chapters, each offering evidence designed to provide the information necessary to understand the nature of this research.

Chapter 2 offers a brief review of the literature associated with teacher professional development in general, professional learning communities, teacher inquiry/action research, online teacher professional development, and the theoretical lens used to frame the findings. Chapter 3 provides details associated with the methodology used to conduct the research underlying this study. Chapter 4 sets the context for the study offering a brief history of events leading to the development of the online learning community under investigation. Chapter 5

offers a detailed explanation of the online learning community itself and shows how the different elements of the site functioned in support of participant activity. Chapter 6 offers an analysis of the online learning community's site facilitator actions and activity related to the three research questions framing this study. Chapter 7 analyzes the actions and activities associated with the teacher inquiry/action research coaches participating in the online learning community. Finally, Chapter 8 summarizes the study and offers a set of implications for members of an online learning community, staff developers, and educational researchers.

The tasks and activities associated with participation in the online learning community are directly related to coaching groups of teacher researchers through a teacher inquiry/action research process and producing a "Showcase" of teacher inquiry/action research projects developed by teacher researchers across northeast Florida. This is not a study on the quality of those projects. Nor is this a study on the quality of participants' training. Instead, this study looks at the types of activity that took place in an online learning community and what the narratives and discourse generated by participants tell us about their understanding of teacher inquiry/action research, coaching teacher inquiry, and their own stance toward their coaching practice.

Through such a study I was able to qualitatively analyze and frame participant narratives and discourse patterns through in-depth interviews, learning community posts, and comments, using a narrative analysis technique as the primary tool of inquiry. Narrative analysis provided a means by which to examine and document observable aspects of activity on the site. Site administrative activity logs provided supporting technical data that further allowed an examination of activity that was largely invisible to participants.

Benefit of this Study

The benefit of this study gives online learning community participants, staff developers, and educational researchers the opportunity to examine context-specific knowledge that can be

useful for exploring a model for learning community patterns and relationships in the world at large. Given the question of how to “situate” (Nardi, 1996, p. 89) participants’ learning, this study identifies specific advantages and limitations within which learning community activities can be situated online. Exploring how online communication tools support learning communities and the issues associated with their care and guidance is "educationally meaningful and worthwhile" (Putnam & Borko, 2000, p. 12) and is therefore clearly warranted.

CHAPTER 2 LITERATURE REVIEW

Introduction

This chapter provides a review of literature related to the present study: the ways in which an online professional development learning community as an organizational structure facilitates participants' abilities to (1) deepen their understanding of the action research process; (2) deepen their understanding of coaching action research; and (3) deepen their understanding of their own evolving stance toward their coaching practice. The review is organized around four major themes: teacher professional development, professional learning communities, action research, and online teacher professional development.

The first section, teacher professional development will briefly trace the history and transformation of professional development. The second section, professional learning communities, describes the particular role networks or communities play as an organizational structure in supporting school-based teacher professional development. Similarly, the third section, action research, focuses on using action research as a means for structuring school-based teacher professional development. The fourth section, online teacher professional development, shows how information and communication technologies can serve as a medium to foster communication, collaboration, and a sense of community among practitioners leading to sustained teacher professional development. Finally, I discuss the use of activity theory as a theoretical framework to support the study's findings.

Teacher Professional Development

Teacher professional development is a complex and relatively messy process (Sprinthall, Reiman, and Thies-Sprinthall, 1996). There are no fixed standards, no single best practice, and no clean linear equation from theory to practice or from practice to theory. For the purposes of

this study, the term teacher professional development refers to formal courses and programs based on systematic and scientific knowledge of teaching and learning and to the formal and informal development of skills that occur in and around teacher practice. In this sense, teacher professional development is structured around intentional activities with the goal of enhancing professional skills in a stepwise, cumulative manner (Sternberg et al., 2000).

Teachers come to the classroom with varied experiences and knowledge bases (Lortie, 1975). How teachers develop as professionals is a fundamental question that has motivated educational researchers and teacher educators for years (Hammerness, Darling-Hammond, Bransford, et al., 2005). Research suggests that knowledge from experience combines with knowledge generated from teaching episodes that lead to the implicit and explicit know-how of teaching (Berliner, 1988). Such know-how ultimately guides teachers' pedagogical choices. Teacher professional development, then, requires an acknowledgement that experienced educators have developed both *knowledge-in* and *knowledge-of* practice (Cochran-Smith & Lytle, 1999). Since most of the knowledge of experienced educators is *situated* (Pressley, 1995; Borko and Putnam, 2000), meaningful professional development should be designed to aid practitioners in assimilating "new techniques into an existing system of ideas about pedagogy and subject-matter knowledge" (Nelson and Hammerman, 1996, p. 4).

Teacher professional development is also a complex social and political issue. For decades, national, state, local policymakers and parent groups have been involved in efforts to reform and improve schools by developing a wide range of standards and initiatives designed to improve the quality and the effectiveness of teachers (Corcoran, 1995; Darling-Hammond & McLaughlin, 1995). Thus given spectrum of managerial systems that govern teacher supervision, assessment, promotion, and incentives, what constitutes effective teacher professional development and the

skills that should be promoted and refined, are regularly in state of relative tension (Dall'Alba & Sandberg, 2006).

Unfortunately, research suggests that many forms of professional development can be insufficient to foster restructuring of teacher knowledge (Desforges, 1995). According to research on staff development much of what passes for teacher professional development is not of high quality, and is often splintered into perfunctory seminars using strategies that do not enable significant changes in teacher practice (Borko, 2004; Drago-Severson, 2004; Little, 1993). Many teacher development programs have been criticized for being unable to provide the guidance necessary to implement new curricula and teaching strategies (Barnett, 2002). Professional support is often made difficult for teachers attempting new strategies in settings made unfriendly and contentious by colleagues and administrators who see the new interventions as an affront to a school's particular culture (National Academy of Education Report, 1999). In addition, conventional one-day workshops or afternoon training sessions associated with many teacher professional development programs fail to provide sustained mentoring opportunities for teachers at various stages throughout their career (Wei, R.C., Darling-Hammond, L., Andree A., Richardson, N., & Orphanos, S., 2009). Research also suggests that the lack of professional support for many teachers is a major factor underlying teacher attrition rates, with nearly 50 percent of new teachers exiting the field within their first five years of stepping into a classroom (Dede, 2006). As such, many teachers have become confounded and disappointed by professional development as it is often regarded as ineffective and requiring sacrifices unequal to the perceived improvement it affords (Dede, 2006).

Professional Learning Communities

Another way of thinking about organizational structures designed to enhance teacher professional development is through the notion of a *professional learning community*.

Professional learning communities can be formal, informal, face-to-face or virtual, operating both inside and outside the physical school environment (Dede, 2004). The idea behind this organizational structure stems from management and business literature that defines a learning community (or more precisely a learning *organization*) as one where participants with common interests continually expand their capacity to create the results they desire. Professional learning communities as an organizational structure are designed to provide a space where new and extensive patterns of thinking are nurtured, and where community members are continually learning how to learn together (Senge, 1990). Adapted by the education community, the notion of a collegial and cooperative learning organization was modified into what is called a learning community (Thompson, Gregg, & Niska, 2004; Vescio, Ross, & Adams, 2008). Essential factors that underlie learning communities include the ideas that (1) knowledge is situated in the experiences of teachers in the context of their workplace, (2) is best understood when shared and critically reflected upon with others sharing the same experience, and (3) that when teachers actively engage in a professional practice community they increase professional knowledge that can ultimately lead to greater student achievement (Buysee, Sparkman, and Wesley, 2003).

Researchers (Anderson, Annand, & Wark, 2005) suggest that learning communities can provide an organizational structure that is capable of fostering professional growth and development of teachers by creating communities of inquiry where teachers (1) share their knowledge and their wonderings; (2) develop communication, time management and teamwork skills; (3) expose members to others' questions, thinking, strategies and tactics; (4) provide peer support; and (5) gain intercultural perspectives.

As Wenger (1998) suggests, a school must be more than a place of instruction, it must also be a place of inquiry, a place that produces knowledge, as well as transmits knowledge. As such,

successful professional learning communities are to be designed with the intention of helping teachers systematically understand and improve their own practice. Yet, what a learning community looks like and how it functions are dependent on community members' intentions, the design and structure of the community, and the activity that takes place among community members.

Fundamental and rapid changes in society related to the explosion in information and communication technologies are permitting researchers and teacher educators the opportunity to re-examine notions of how professional learning communities can be adapted and designed for online settings. Recently, educational and technology researchers have begun investigating ways in which social software enhance professional development organizational structures for practicing teachers (Dede, 2004; Mejias, 2005; LaFerrière, T., Lamon, M., Chan, C.K.K., 2006). Social software are applications that run on a computer designed to support a wide range of communication and interaction among groups of people utilizing an online computer-mediated environment serving as a medium or structural organization for people to communicate, socially network, find information, and expand individual and collective knowledge bases (Shirky, 2003). Information and communications applications like weblogs, wikis, and interactive social networking sites offer a variety of ways to support knowledge building networks and provide space for recording and documenting individual and collective research. Social software applications are designed around principles of fostering cooperation, collaboration, sharing and dialogue between members of multiple learning communities and networks. Mejias (2005) suggests that social software affords the potential to connect virtual practice to physical practice, i.e., to support everyday practice beyond that which exists online. Educators who are researching, reflecting, and discussing issues and practice online can enact what they are

researching and discussing online directly in their daily practice. In this sense social software serves as a conduit between virtual and physical realities.

Action Research

In terms of organizational structures designed to support teacher professional development, one such structure that has grown in popularity over the past two decades is action research. In terms of organizing affective learning organizations, teachers need to become active participants in their professional development; they must become producers of knowledge as well as transmitters and facilitators. In this regard, the notion of “systematic, intentional inquiry by teachers” into their own professional practice (Cochran-Smith & Lytle, 1993, p.5) can play a significant and transformative role.

Action research is a structured and intentional process that invites practitioners/teachers to examine their own individual teaching practices (i.e., their intentions) with an eye towards improving or changing them (Dana & Yendol-Silva, 2003; Cochran-Smith & Lytle, 1996). Engagement in action research, also referred to as teacher inquiry, teacher research, and practitioner inquiry, has been regarded by many education researchers as a critical tool for generating knowledge about teaching and learning and furthering educational reform efforts (Lieberman & Miller, 1990; Cochran-Smith & Lytle, 1993; 1999; Carr & Kemmis, 1986; Kincheloe, 1991). As an organizational and professional development methodology, action research provides an interpretative framework that permits educators to explore different approaches to teaching and learning within their own practice that can lead to a deeper understanding of the teaching and learning processes itself. Teacher researchers gain a better understanding of why they behave as they do and consequently make better choices in their classroom practice (Oberg, 1990).

What makes action research a promising organizational structure/tool for practicing teachers is that it is a systematic and intentional critique of classroom practice, i.e., where the “action” is. According Dana and Yendol-Silva (2003), the action research methodology is based on teachers (1) posing questions or “wonderings,” (2) collecting data to gain insights into their wonderings, (3) analyzing the data along with reading relevant literature, (4) making changes in practice based on new understandings developed during inquiry, and (5) sharing findings with others.

Given the relative importance of action research as a structure that capitalizes on the situated aspects of teaching and a tool to foster purposeful reflection of classroom practice, little is known about guiding or coaching action research. Drennon and Cervero (2002) note

The day-to-day actions taken by the practitioner inquiry group facilitator profoundly influences a group and many of the results.... Facilitators, however, have attained only a subtle presence in the existing practitioner inquiry literature despite their central position. Little is known either about their strategies and tactics or the implications of their efforts (p. 194).

Drennon and Cervero (2002), like Cochran-Smith and Lytle (1996), recognize that it is equally important to capture action research coaches’ voices, the questions coaches pose, “the interpretative frames” coaches of action research use “to understand and improve” classroom practice. Action research facilitators are therefore critical members of a learning community. By developing a better understanding of action research coaches’ strategies and their consequences, more effective and meaningful organizational structures fostering teacher and school-wide improvement can be developed. For a school to become a true learning organization, teacher inquiry should be considered “as an integral part of the activity of teaching and as a critical basis for decisions about practice” (Cochran-Smith & Lytle, 1993, p. 63). When classrooms and schools become active research communities, they become sources of knowledge that foster meaningful practices and identities (Wenger, 1998). What is required of teacher education

programs “are processes that prompt teachers and teacher educators to construct their own questions and develop courses of action that are valid in their local contexts and communities” (Cochran-Smith & Lytle, 1993, p. 63).

Real and positive changes in practice are more likely to occur when there is a personal motivation. The process of action research supports teachers’ ability to explore certain aspects of their teaching practice and share it with a network of collaborators (Desforges, 1995). In this manner, teacher professional development, where teacher learning is explicitly connected to the context of where teaching practice actually occurs, offers great promise in promoting both pedagogical knowledge (how to teach) and pedagogical content knowledge (how to teach specific subject matter). Educational researchers like Cochran-Smith and Lytle (1996) argue that “what is missing ... are the voices of teachers themselves, the questions teachers ask, the ways teachers use writing and intentional talk in their work lives, and the interpretive frames teachers use to understand and improve their own classroom practices” (p. 93). In order to address this need, Cochran-Smith and Lytle (1993) point to a growing effort among schools to provide professional development that involves “organizational structures that enable groups of teachers to come together to talk about their work, learn from one another, and address curricular and instructional issues” (p. 89).

Online Teacher Professional Development

In an effort to meet the demands for high quality teacher professional development that is meaningful, situated within teacher practice, and convenient to teachers' busy schedules, a number of online teacher development programs have evolved (Dede, 2006). These online teacher professional development programs are generally available to teachers at their convenience and provide "just-in-time" support. In many cases, these programs provide participants access to experts in the field who would otherwise be unavailable locally as well as

access to archived educational or administrative resources that would be costly to reproduce in another fashion. According to Whitehouse, et al. (2006), a range of educational improvement objectives frame many of these online professional development programs including the introduction of new curricula and teaching strategies, addressing teachers' beliefs, enhancing instructional and assessment practices, altering school culture and school organizational structures, as well as building on school and community relationships.

Empirical research in the area of online teacher professional development has been rather limited given the relative novelty of using information and communication technologies to support skill development for practicing teachers. In 2006, Whitehouse, Breit, McCloskey, Ketelhut, and Dede produced a study synthesizing research on the subject that looked solely at empirical evidence published in scholarly journals over the past five years (2000-2005). Their analysis offers researchers a glimpse at what amounts to best practice in online teacher professional development models and sets the table for a research agenda based on these models.

The literature reviewed by Whitehouse et al. (2006) started with close to 400 articles that were eventually culled down to 40 that met their standard for rigorous data collection and analysis. Specifically, these 40 articles provided full details concerning participants, setting, methods of data collection, and research questions. The Whitehouse et al. (2006) review revealed that of the 40 studies under consideration, five major areas of concern rose to the surface:

- *Design of professional development:* These studies examined how empirical data was used as a means for improving the design of professional development management, instruction, content, and delivery.
- *Effectiveness of professional development:* These studies focused on measuring such programmatic outcomes such as satisfaction ratings, participation levels, and other intentional effects.
- *Technology to support professional development:* These studies examined the impacts of the technology and the tools used to support the delivery of teacher development or teacher learning.

- *Online communication and professional development:* These studies looked at how discourse was used to support teachers engaged in online professional development.
- *Research methods:* These studies examined the methods, measures, and issues surrounding the study of teacher professional development.

A majority of these studies examined more than one area of concern and addressed a wide range of theories concerning what researchers and teacher educators believe teachers should know, how teachers learn, the most fitting conditions for teacher learning, and ultimately how technology could be used to support learning. Of these wide range of theories applied to online teacher professional development design and pedagogy, seven studies included in Whitehouse et al.'s (2006) research looked at the ways in which a community of practice model supported by an online communications component could be used to express and integrate practice knowledge, create opportunities for cooperation and collaboration around shared objectives, and support a culture of professional learning (Barab, Barnett, & Squire, 2002; Sherer, Shea, & Kristensen, 2003; Koku & Wellman, 2004; Yang & Liu, 2004; Schaverien, 2003; Wearmouth, Smith, & Soler, 2004; and Nemirovsky & Galvis, 2004). While the desired educational goals were not always directly stated in each of these studies, their implicit intention suggests that creating such a professional learning community online is a desirable end in and of itself that will likely lead to positive changes in participants, specifically, if this community involves expressing and sharing practice knowledge, critically reflecting on member's practice, collaborating on shared goals, and engaging in meaningful dialogue.

Current research suggests that while there are a growing number of online teacher professional development endeavors serving hundreds of teachers, evidence for what entails best practices for the design, implementation, and sustainability for these models of teacher professional development has been insufficient (Dede, 2006). Consequently, online programs may be convenient for participants given individual time constraints, but they offer little to

minimize teachers' suspicions of professional development programs already regarded as deficient, regardless of their modality.

Activity Theory

To better understand how an online learning community serves its members, an activity theory framework was used to analyze how participants acted individually, collectively, and with the online learning community website itself (Engestrom, 1987). What makes this particular theoretical stance useful for this study is that activity theory is mainly concerned with “practice,” that is, the events taking place within a particular context (Nardi, 1996). As Kaptelinin (1996) notes:

Computer-supported activity of a group or organization can be analyzed along the general lines of activity theory: finding the motive, goals, and conditions of activity; identifying structural components of the subject's interaction with reality (individual activities, actions, and operations) as well as tools mediating the activity; and tracing developmental changes of the activity (p. 58).

Activity theory does not aim at providing a comprehensive description of all human phenomena. Instead, activity theory holds that the unit of analysis is/are the activity or activities under investigation.

For this study, activity consists of the ways in which participants act within the online learning community context. Participants' announcements, posts, and comments on the learning community site serve as the artifacts that mediate their thoughts and behaviors and are different from the actual participants themselves. Thus this study is concerned with the artifacts themselves and not the activities of participants outside of the site.

Purpose of this Study

Given the promise of action research/teacher inquiry to transform educators' practices and improve schools, as well as advances in thinking about professional learning communities, it is reasonable to wonder about the role of a facilitated, computer-mediated learning environment

and how computer-supported activity in such a focused learning community supports educators' understandings and practice. Consequently, the purpose of this study is to look at the ways in which an online professional development learning community as an organizational structure facilitates participants' abilities to (1) deepen their understanding of the action research process; (2) deepen their understanding of coaching action research; and (3) deepen their understanding of their own evolving stance toward their coaching practice.

The idea of learning in an organizational context such as an online professional development learning community is supported by sociocultural theorists like Piaget (1950) and Vygotsky (1978) who contend that individuals learn through joint activities and interaction with others. As such, a community weblog was chosen as an organizational structure for this study as a means for providing a collective space for action research coaches to share their voice and tacit knowledge with each other through the writing of personal narratives and responding to one another through the commenting features associated with their weblogs. This narrative activity serves as a means for examining the ways in which action research coaches use writing and "intentional talk," i.e., how coaches deliberately address topics and concerns associated with their coaching practice. The narrative affordances of weblogs also provides a space for coaches to share questions about their practice and share the "interpretive frames" they use to understand and improve their practice. Bereiter (2002) describes this type of organizational structure as a "knowledge-building community" where knowledge creation and learning take place through complementary processes of participation, where the situated interactions and shared experiences of community members support the common goal of, in this particular case, deepening the understanding of the action research/teacher inquiry process, the understanding of coaching of

teacher inquiry/action research, and the understanding of each coaches' evolving stance toward their coaching practice.

In terms of using social software to enhance school-based teacher professional development, weblogs offer a strong potential for supporting teacher learning both formally and informally. However, the use of social software such as weblogs as a structural support for teacher professional development is relatively limited, thus formal research in this area serves as a rich arena for exploration (Laferrière et al., 2006). Ultimately, this study seeks to examine and better understand the affordances and barriers associated with using weblogs as a means to support school-based teacher professional development.

CHAPTER 3 RESEARCH METHODOLOGY

Introduction

An online learning community offers an unprecedented opportunity as a research platform. Coupled with the fact that little is known about the strategies and tactics teacher inquiry/action research facilitators and coaches utilize, the purpose of this study is to look at the ways in which an online professional development learning community as an organizational structure facilitates coaches' abilities to (1) deepen their understanding of action research process; (2) deepen their understanding of coaching action research; and (3) deepen their understanding of their own evolving stance toward their coaching practices. Since this study sought to explore ways in which the computer-supported activity in an online learning community facilitated deeper understandings of practice, activity theory contributed to the theoretical framework that guided decisions about research methods. Activity theory originated in the former Soviet Union in the 1920s through the work of psychological researchers like Alexei Leont'ev, Lev Vygotsky, S. L. Rubenshtein, and Alexander Luria. It has been subsequently shaped more recently by the work of Engestrom (1987, 1993) and other researchers who study computer-supported cooperative work (CSCW) and human-computer interface (HCI) design. Methodologically, activity theory provides a means to (1) define participants' activities as a unit of study in the online learning community, (2) identify multiple data sources that draw attention to the broad patterns of activity associated with participation, and (3) analyze participant actions from their particular points of view (Nardi, 1996).

In this chapter, I describe the data sources and analysis techniques utilized. Data sources that allowed me to understand participants' deepening understandings include the postings, announcements, and online activities associated with a professional development learning

community. In addition, in-depth interviews revealed perceptions of teacher inquiry/action research and coaching by participating coaches as well the relationship between their understanding of these aspects of practice and participation in the online learning community. In addition to data collected directly from the coaches, technical data from administrative log files associated with the online learning community provide additional evidence that lends depth to the perceptions data. Data analysis was inductive, attempting to build an explanation from the data set rather than testing existing theory.

Participants and Setting

In order to understand the ways in which participation in an online learning community supported coaches' development of their practices of teacher inquiry/action research and coaching, a purposeful sampling technique (Marshall & Rossman, 1999) was employed. The strength of a purposeful sample allowed for rich information to be derived from people in the best position to provide such data. This study looks at 11 practicing educators engaged in a nine-month professional development program on coaching action research and one site facilitator employed by the University of Florida serving as a guide or mentor for the coaches. Coaches ranged in age from 40-52 with 11 being employed as full-time educators. Four coaches were reading specialists (three serving in middle schools and one in an elementary school), one coach was a curriculum/behavior resource teacher, one coach taught high school science, one coach was a self-contained Pre-K exceptional education teacher, one was a middle school curriculum coach and intensive math teacher, one served as a third grade elementary education teacher, one served as a fifth grade mathematics teacher, and one was a seventh grade reading teacher. The workshop in which each of these teachers participated in is discussed in detail in the next chapter (Chapter 4).

As with many purposeful samples, it was inevitable that a sample that intensely engaged with a phenomenon was also one that was convenient to locate and study. I made the decision that this complete group of 11 educators sharing the same common experience would provide the best data from which to induce new understandings of engagement in an online learning community.

Participants are a part of a program developed by the University of Florida's Center for School Improvement designed to educate a team of practicing teachers on how to develop and support teacher inquiry/action research. Coaches met together face-to-face with the site facilitator three times throughout the nine months with approximately 5-6 hours dedicated to each meeting. The majority of the professional development activity was devoted to better understanding teacher inquiry/action research, learning how to coach other teacher researchers through the teacher inquiry/action research process, and interacting with each other through the workshop's online learning community environment.

The online learning community environment serves the site facilitator and participating coaches as a virtual gathering space in which they were able to receive information and announcements, post questions, pose wonderings, share tips, strategies, and techniques with one another, and dialogue with the site facilitator and other coaches. The online learning community also served as the space where the coaches posted their responses to discussion prompts from the site facilitator designed to elicit deeper thinking and feedback among the coaches. Coaches also had the opportunity to pose questions and solicit feedback from other coaches as well as from the site facilitator. Since the site facilitator and coaches only met face-to-face three times throughout the entire nine-month program, the online learning community was an essential component in

keeping the coaches and the site facilitator connected. Details regarding the form and function of the online learning community are discussed further in Chapter 5.

Finally, in terms of the study's setting, it is important to point out participants' previous associations to the Northeast Florida Educational Consortium (NEFEC). The consortium is an educational service agency and was established to provide cooperative services to 15 member school districts. These services include both administrative and instructional programs designed to support the direct needs of member schools. A member district's participation in these NEFEC events is purely voluntary. The schools from which the participants in this study are drawn have a history of working together via the coordinating influence of NEFEC. In general, the setting for this study was not a community of strangers--several participants in this study have engaged in professional development activities offered through NEFEC. Not all participants, however, engaged in the same professional development activities simultaneously. The bearing of any existing networks that participants may or may not share and the impact these relationships may or may not have on the development and actions within this particular online learning community was not explored in this study.

Researcher's Role

A given in qualitative research is that the researcher is the primary instrument in data collection and analysis (Bogdan and Bicklen, 1992). As such, this study was fully influenced by my subjectivity and role as researcher. Although I was committed to generate and confirm assertions based on the data collected, I also recognized that my choices of what counts as data, how I weighed the data, and how I made sense of the data were framed by my viewpoints.

In this study, I believe it was a strength, not a concern, that I advocated use of information and communication technologies as forms of community building and group knowledge construction (Scardamalia and Bereiter, 1994). Having both a strong interest and passion in this

area allowed me to be more sensitive to the experiences of the participants. Furthermore, I was the designer of the online learning community and piloted its use the previous year with many of the same participants and for the same purpose. As such, I believe that the qualitative methodology used allowed me to better understand the phenomena under investigation, as well as “gain more in-depth information that may be difficult to convey quantitatively” (Hoepfl, 1997).

Data Sources

Multiple data sources were required in this study to assure the integrity of the findings. Data analysis was a rigorous process, requiring that the findings that emerged were a result of intensive inquiry and analysis, and not the researcher’s bias. Consequently, there was a need to assure that findings were supported by more than one data source. Referred to as triangulation (Patton, 2002), more than one data source is and was necessary to test whether emerging explanations were supported, or not, by the data set.

Online Learning Community

There are three categories for the sources of data that were analyzed as part of the online learning community for this study, and these three categories were associated directly with activity contained within the online learning community. The first category is the site facilitator activity and the subsequent responses by the coaches to them. The second category of data is the coaches’ activity. The third category is the technical data associated with the site facilitator and coaches’ activity on the online learning community site. In the following section, I will elaborate on these categories in more detail.

Facilitator-initiated discussion prompts

As part of the nine-month program, a set of guided questions was used by the site facilitator to prompt coaches throughout the workshop’s time period asking them to address

specific questions associated with their teacher inquiry/action research practice as well as their coaching experiences and processes in the online learning community. Throughout the nine month program, these prompts were designed to elicit the coaches' concentrated thoughts and feelings, to probe their own thinking, as well as to reflect on the actions she or he observed in themselves and others, i.e., the teacher researchers she or he was coaching as well as the other coaches participating in the online learning community. In so doing, these prompts attempted to draw out the coaches' voices and their tacit knowledge through the writing of personal narratives and responding to one another through the commenting features associated with the online learning community's functionality. These prompts served as a means for eliciting discussion among the action research coaches through writing, fostering "intentional talk" (Cochran-Smith and Lytle, 1996, p. 93) in terms of how coaches deliberately address topics and concerns associated with their coaching practice. The discussion prompts were also designed to encourage coaches to share the "interpretive frames" (Cochran-Smith and Lytle, 1996, p. 93) they each employed to understand and improve their practice. The data produced from these site facilitator-generated prompts served as the personal narratives recorded in each coach's personal weblogging space. Each time a participant recorded a response, it was automatically time stamped and stored in the learning community as a weblog post associated with a specific coach in reverse chronological order with the most recent entries appearing at the top of their weblog. Entries were catalogued as such by the internal technical programming associated with the weblogging software.

Participant activity

The second data source within the online learning community consisted of the posting activity, that is, the questions and discussions, initiated by the coaches themselves. As the coaches encountered site facilitator prompts, including the issues and concerns arising from their

practice, they had the opportunity to raise and reflect on these concerns with the site facilitator and other coaches by posting their queries on their weblogs in the online learning community. Each post provided a commenting space wherein other coaches, the site facilitator, or the originator of the post could provide comments or feedback that were viewable by all members of the online learning community. This type of interaction allowed for threaded discussions so members could easily follow the natural dialogic flow of conversations.

Technical data

As another way of understanding the impact of the online learning community on coaches and the site facilitator, this study also examined the online learning community's administrative log files. The log files, located in an administrator-restricted area of the online learning community site, revealed such data items as:

- Frequency of access by the site facilitator and coaches,
- Frequency of announcements by the site facilitator,
- Frequency of posting activity by the site facilitator and coaches, and
- Frequency of commenting activity by the site facilitator and coaches.

This data provided important information regarding how action research coaches acted and behaved on the site. I have further defined each of these categories as follows:

Frequency of access by the site facilitator and coaches – indicates how often numerically (i.e., the number of times) the site facilitator and coaches' log on to the online learning community. This data set was used to get a sense of how the site facilitator and coaches checked into the site revealing how active he or she was on the site. The frequency of access log file data set showed that a community member viewed a page or pages in the online learning community site and/or posted a comment and/or post to their weblog. The access data set did not indicate which pages a participant accessed. In terms of defining what counts as access, I have defined "access" as the site facilitator or coach being logged into the site for more than one

minute and no longer than one hour. The administrator log files indicated when a participant logged into the site, yet if a logged on member of the community did not physically click on the “log out” button in the site, it was impossible to tell if he or she ever logged out. In this sense, tracking access was restricted only to counting when a community member viewed a page or posted content to the site.

Frequency of announcements by the site facilitator – indicated numerically how often the site facilitator posted announcements to the online learning community. This data set was used to get a sense of how often the site facilitator accessed the site specifically to provide the coaches with information and/or prompt them to post in their own weblogs.

Frequency of posting activity by the site facilitator and coaches – captured numerically how often the site facilitator and coaches posted on the site. Posting consisted of a unique, time-stamped entry on the site. A response to a site facilitator-initiated prompt, a coach-initiated discussion post, and any community member comments was counted and categorized as participant posting activity. Posting an announcement, as indicated above, was counted as a separate activity associated only with the site facilitator. Coaches did not have the administrative authority to create announcements. This data set was collected to indicate a general level of activity and participation associated with the site facilitator and each coach on the site.

Frequency of facilitator posting activity was also important in potentially understanding how often the facilitator was prompting participants for their thoughts, comments, and critiques of the teacher inquiry/action research process, determining the participating coaches understanding of the coaching of action research, as well as each coaches’ understanding of their own evolving stance toward their coaching practice.

Frequency of commenting activity by the site facilitator and coaches – captured numerically how often the site facilitator and coaches created comments on each others’ postings on the online learning community site. This data set was also important in exploring how coaches utilized the site as a means for tapping into the site facilitator’s and other coaches for feedback and additional information.

Summary

The technical data sets associated with the online learning community activity provided a means of better understanding how the site was used by the site facilitator and coaches in sustaining an online learning community via social software. The technical data sets revealed patterns of interactivity that was used to develop additional interview questions for deepening the understanding of the online learning community itself as well as the value or barriers it created for community members.

In-Depth Interviews

A series of semi-structured, in-depth interviews were conducted, recorded, and transcribed with individual coaches during the study period in order to better understand the meanings the coaches held toward their understanding of teacher inquiry/action research, coaching teacher inquiry/action research, and understanding their own stance toward their coaching practice. As the nature of this study was to ascertain how participants acted in the online professional learning community and how that participation impacted the development of their ideas about action research and coaching it, interviews provided insight into the participants’ individual perspectives and provided a better understanding of how each coach made sense of their experience in the online learning community.

Interview questions were based on information gleaned from posts and interactions in the online professional development learning community, as well as from field notes, observations

from the three face-to-face meetings, and personal notes. Interviews occurred approximately 24 weeks into the project to ascertain the coaches' general perceptions. At this point the coaches were familiar with the online learning community and had experienced multiple face-to-face and online interactions among themselves and the site facilitator. During the interviews, the coaches were in the middle of the coaching process with their respective local teacher researcher groups in their local school districts. They were asked to share their thoughts and feelings about the online learning community itself and what role it played in deepening their understanding of the teacher inquiry/action research process, their understanding of coaching teacher inquiry/action research, as well as their understanding of their own evolving stance toward their coaching practice.

Field Notes

Since the coaches only met face-to-face three times, a set of field notes was kept in an attempt to capture a sense of what was happening among the coaches, what kinds of questions and expectations the coaches were having, and the advantages and barriers coaches might have been perceiving. These notes were considered secondary data and were used to help me reconstruct the context of the face-to-face encounters, as well as serve as a source of situational insights.

Data Analysis

Data analysis entailed organizing what I read, observed, and heard in order to make sense of what I have learned. It involved searching for patterns, interpreting data sets, creating categories, and synthesizing information from the data collected (Glesne, 1999). In the following section I describe the interpretative and analytic techniques used on the data sets described above.

Personal Narrative Analysis of Weblogging

Information communication technologies like weblogs are “compelling scholars to reexamine traditional assumptions and previously taken-for-granted rubrics of social research” (Markham, 2005, p. 794). Given that the written word tends to dominate the content of most weblogs (as opposed to photographs, diagrams, audio or video possibilities), a thorough, qualitative inquiry of participant weblog content required some form of textual or narrative content analysis. In considering the context of weblog research, Chase (2005) provides a definition that lends strong support for narrative analysis:

A narrative may be oral or written and may be elicited or heard during fieldwork, an interview, or a naturally occurring conversation. In any of these situations, a narrative may be (a) a short topical story about a particular event and specific characters such as an encounter with a friend, boss, or doctor; (b) an extended story about a significant aspect of one’s life such as schooling, work, marriage, divorce, childbirth, illness, a trauma, or participation in a war or social movement; or (c) a narrative of one’s entire life, from birth to present. (p. 652)

In Chase’s exploration of narrative analytical boundaries, she struck upon evidence of the “personal narrative,” (Chase, 2005, p. 652) a term picked up from Riessman (2002), to describe the capturing and relating of relevant, individual (topical) stories or events. This distinction was used to separate the notion of personal narrative from terms such as “literary narrative” (p. 652) or “folklore” (p. 652) to prevent crossing unrelated boundaries. Chase further qualified the personal narrative distinction by citing the Personal Narratives Group’s (1989) extended definition of the term that includes, in a more general sense, written forms of narrative such as diaries, journals, letters, and autobiographical stories.

Given the relatively nascent existence of weblogs, only a handful of qualitative research studies have used any type of narrative analysis to frame their work (van Doorn, van Zoonen & Wyatt, 2007; Makri & Kynigos, 2007; Bichard, 2006; Efimova & deMoor, 2005). While, as Angrosino (2005) argued, there are, as yet, “no comprehensive guidelines applicable to online

research” (p. 742), Markham (2005) notes that because of computer-mediated environments, researchers now could quite readily “observe how written discourse functions to construct meaning and how textual dialogue can form the basis of cultural understanding” (Markham, 2005, p. 816) regardless of any formal research guidelines.

To analyze the content actively produced by the site facilitator and coaches in the online learning environment, I chose a personal narrative lens. A personal narrative lens provided a means for understanding participants’ actions, for organizing events into a cohesive whole, and for “connecting and seeing the consequences of actions and events over time” (Chase, 2005, p. 656). In addition to describing what happened, a personal narrative approach permitted an analysis of any emotions, thoughts, and interpretations expressed by a member of the online learning community.

More importantly, a personal narrative analysis of the online learning community activity allowed an opportunity to focus on the participating coaches “voice” (Cochran-Smith and Lytle, 1996, p. 93). As Cochran-Smith and Lytle (1996) noted, “what is missing from the knowledge base for teaching are the voices of teachers themselves, the questions teachers ask, the ways teachers use writing and intentional talk in their work lives, and the interpretive frames teachers use to understand and improve their own classroom practices” (p. 93). Consequently, the personal narrative lens held tremendous promise for both participants and the researcher as a way of deepening an understanding of the teacher inquiry/action research process, coaching teacher inquiry/action research, as well as better understanding the coaches own evolving stance toward their coaching practice.

Given the personal narrative analysis framework, learning community members' conversations were analyzed with special attention given to the narrative links participants made between announcements, posts, and comments. An important question thus became:

What kinds of connections were participants making from each other's posts and comments?

Additionally, the personal narrative analysis focused on how the online professional learning community environment supported and/or hindered participants' ability to communicate with one another.

Technical Data Analysis

The analysis of the technical data sets associated with the online professional learning community, i.e., the frequency of access by participants, the frequency of site facilitator and coaches posting activity, provided information regarding how the site facilitator and coaches used the learning community site. Frequency of access by the site facilitator and coaches data indicated how often community members log on to the online learning community and were used to get a sense of how often members were checking into the site. Frequency of participant posting activity data was useful in determining how often participants were posting on the site and were important in understanding how participants utilized the community site as a means for tapping into the community for feedback and information. By themselves, these technical data sets are not terribly revealing. Yet when triangulated with personal narrative analysis and interview analyses, these technical data sets were helpful in better understanding the potential value and barriers associated with an online learning community. In Chapter 5, a breakdown of the participation data set is provided to illustrate how the site facilitator and coaches participated within the online learning community itself (Table 5-6).

In-Depth Interview Analysis

In-depth interviews provided another lens for interpreting posts and comments provided by the members of the online learning community. Interviews afforded the opportunity to follow up on coaches' posts and comments, allowing for a richer, deeper understanding of coaches' intentions, thoughts, and feelings. Interviews also permitted coaches the opportunity to expand upon ideas they initially were struggling with or felt uncomfortable elaborating on online.

Understandably, "interviewing has limitations and weaknesses" (Marshall and Rossman, 1995, p. 81). Interviewing involved a level of personal interaction where cooperation was vital between interviewer, i.e., the researcher, and the interviewee, i.e., the coaches, thus the quality of the data could be rendered suspect by outside observers. In the case of this particular study, part of its purpose was to uncover and describe coaches' perspectives of the setting and events. To get at a more objective picture, interview data was triangulated with the content analysis of community members' weblogging activities (e.g., responses to site facilitator prompts, other participant-initiated discussions, and comments made by coaches and the site facilitator) and the accompanying technical data sets.

Field Notes and Personal Notes

The analysis of field notes and personal notes contained in my research journal were used to inform my thinking and sense making as I studied the activities associated with the online learning community. Field notes were associated with observations based on what was taking place either in the three face-to-face sessions or in the online learning community environment. These notes served as representing the objective state of events. The personal notes also served as a place where I could ask questions of the data sets and the methods employed to get a better understanding of events and aspects associated with this particular research project. The analysis of these was used to inform my analysis of the project as a whole.

Summary

In this chapter, I have elucidated the research process associated with this study. I have provided a re-introduction to the research questions, an explanation and justification of data sources, and an explanation of the analysis techniques that were employed. In the next chapter, I provide a history leading up to the online learning community, and why such a history is important. An introduction of the participants in the learning community and an overview of their experiences are provided as well.

CHAPTER 4 SETTING THE CONTEXT: HISTORY LEADING UP TO THE ONLINE LEARNING COMMUNITY

Introduction

In this chapter I describe the history leading up to the online learning community, why this history is important, and how it led to the development of the online learning community that is the object of this study.

Background Information: The Center for School Improvement at the University of Florida, P.K. Yonge Developmental Research School, and the Northeast Florida Educational Consortium

The online learning community grew out of an initiative sponsored by the Center for School Improvement in the College of Education at the University of Florida. The Center's mission, stated on the Center for School Improvement's website, is "To support and promote practitioner inquiry as a primary mechanism for school improvement throughout Florida" (<http://education.ufl.edu/web/?pid=903>). The Center's focus is to assist Florida schools in their quest to improve by developing and delivering meaningful professional development programs for teachers and administrators tailored to each school site. The professional development programs offered by the Center for School Improvement advocate for teachers and administrators to take an active role in their own professional growth through the process of practitioner inquiry.

In 2004, the Center for School Improvement began a partnership with P.K. Yonge Developmental Research School (a K-12 educational research school in the College of Education of the University of Florida whose mission is to develop, evaluate, and disseminate exemplary programs of education) and the Northeast Florida Educational Consortium (a regional, non-profit, educational service agency established to provide cooperative services to its 15 member districts) to provide training and guidance in action research to a select group of teachers and

administrators working within the Northeast Florida Educational Consortium (NEFEC). This initial training in action research was introduced during the fourth year of a project NEFEC and P.K. Yonge had instituted called the Florida Reading Initiative, a research-based school wide reform effort committed to providing the professional development and follow up support necessary for Florida schools to achieve 100% literacy among its student population. During year four of this initiative, participants were to engage in action research to explore, study, and document teachers' questions regarding this initiative as well as its impact on K-12 students. The initial action research training with the first cohort of teachers and principals in the Florida Reading Initiative during the 2004-2005 school year expanded and grew over the next three years, leading up to the year of this study.

Year One Training

Year One training of practitioners in teacher inquiry/action research in support of the Northeast Florida Educational Consortium's (NEFEC) Florida Reading Initiative was characterized by a series of workshops for teachers and principals where each participant learned about the process of teacher research at an initial meeting on January 8, 2005 and subsequently met monthly as they worked on their own action research to get support in the areas of study design, data collection, and data analysis. Over sixty teachers, reading coaches, and administrators attended the January 8 workshop. Thirty-one NEFEC teachers and principals continued attending the workshop meetings monthly, working with Dr. Nancy Dana, professor and Director of the Center for School Improvement, and three additional inquiry facilitators (supervised by Dr. Dana) to complete their first inquiry projects. Finally, these thirty-one NEFEC participants presented their work in April 2005 at the inaugural annual Teaching, Inquiry, and Innovation Showcase. At the showcase, the thirty-one NEFEC participants were afforded the opportunity to network with forty-nine teachers and administrators from other

programs and districts in the state of Florida who had also engaged in inquiry, and made connections with 112 prospective teachers who had engaged in inquiry as a part of their field experience coursework at University of Florida. Over 250 practicing teachers, prospective teachers, administrators, reading coaches, and University faculty attended the first annual Teaching, Inquiry, and Innovation Showcase, providing a rich audience for NEFEC teachers and principals as they presented their research.

Year Two Training

In Year Two, the Center for School Improvement again partnered with the Northeast Florida Educational Consortium (NEFEC) and P.K. Yonge Developmental Research School to expand and offer the training in teacher inquiry/action research for a second year. During Year Two, the workshops began in October rather than January, giving teachers a longer period of time to conduct action research. Four NEFEC teachers who conducted action research during the 2004-05 school year delivered the kick-off workshop. Dr. Nancy Dana, the Center for School Improvement's director, supervised these four teachers and helped them prepare their inquiries to share as part of the introductory workshop on October 22, 2005, and worked with them before each workshop to help them become effective facilitators of teacher inquiry/action research. The workshops were held on October 22, 2005 (Introduction to Inquiry), November 16, 2005 (Developing a Plan for Your Inquiry), and March 15, 2006 (Data Analysis). Dr. Dana and the facilitators remained in email communication with participants in-between each workshop to answer questions and provide inquiry support. In addition, Dr. Dana supervised these four teachers in the design of their own second inquiries conducted during the 2005-2006 school year.

On April 29, 2006, the second Teaching, Inquiry, and Innovation Showcase was held and offered in an expanded format. The expanded format afforded five concurrent sessions, rather than four, with approximately 223 veteran and pre-service teacher inquiry/action research

presentations, up from 170 the previous year. In addition, at the 2006 showcase, program participants received a monograph publishing all of the NEFEC inquiries completed from the first annual Showcase. The success of Year Two warranted the continuation, deepening, and expansion of the teacher inquiry/action research work throughout NEFEC schools.

Year Three Training

In order to expand the inquiry work to every NEFEC district in Year Three, the Center for School Improvement designed and implemented a new model of teacher inquiry/action research professional development that relied on recruiting, selecting, and training one inquiry facilitator from 13 of NEFEC's 15 districts. These inquiry facilitators worked together with Dr. Dana to implement an Inquiry Kick-Off, and then met with 4-6 new teacher inquirers from their own districts/schools approximately six times after school to support their teacher inquiry/action research development. This new model of supporting teacher inquiry/action research included the addition of a weblog-based, online learning community where Dr. Dana and the teacher inquiry/action research facilitators were able to communicate, reflect, and share ideas and artifacts as facilitators coached teacher groups within their own school districts. In between facilitators' local meetings in which they met with their practitioner groups for instruction in teacher inquiry/action research, they returned to Gainesville four times for additional training in teacher inquiry/action research coaching strategies delivered by Dr. Dana. These face-to-face sessions for the facilitators were held on October 16, 2006 (Forming A Professional Learning Community of Inquiry Facilitators; Planning Inquiry Kick-Off; Coaching the Development of a Wondering and a Design for Inquiry; Introduction to Technology to Support Inquiry), November 7, 2006 (Inquiry Kick-Off Attended by the Inquiry Facilitators and the Teachers they were working with); January 8, 2007 (Coaching Data Analysis and Library Resources), February 9 (Preparation for Annual Showcase), and April 27, 2007 (Evaluation of the Year and Gathering

Feedback for Year IV Goal: Making Inquiry A Part of Staff Development at the District Level). In this way, the process of inquiry became seeded in every NEFEC district, and the number of NEFEC teacher researchers expanded from approximately 20 during Years One and Two to approximately eighty-one teachers, four times the original number of teacher inquirers/action researchers. With the rapid growth of the teacher inquiry/action research initiative in the three preceding years, the Center for School Improvement became concerned over the time and energies required to sustain training for practitioners, and turned to the further development of online communication tools as a possible means for supporting continued training efforts during year four, the 2007-2008 school year during which time this study took place.

Year Four Training

Year Four training in teacher inquiry/action research included a second year of work with many of the inquiry facilitators from Year Three to deepen their understandings of the action research process as well as provide additional tools inquiry facilitators could utilize to coach teacher inquiry/action research locally in their districts. Similar to Year Three, the Center for School Improvement recruited, selected, and trained one inquiry facilitator from 13 of NEFEC's 15 districts. These inquiry facilitators worked together with Dr. Dana to implement an Inquiry Kick-Off, and then met with 4-16 new teacher inquirers from their own districts/schools approximately six times after school to support their teacher inquiry/action research development. In addition, a comprehensive weblog-based online learning community, piloted the previous year, was greatly enhanced and became a critical component of Year Four training. Given that this online learning community is the subject of this study, the next chapter of this dissertation is devoted to describing its design and functionality. In the remaining section of this chapter, I introduce each of the participants who were members of the community, as well as

detail some of the experiences that complimented their participation as members of the online learning community during the year of this study.

The Online Learning Community Participants

There were a total number of 17 participants in the online learning community. 12 were practitioners working both as full-time educators in their district as well as coaches for a number of teachers engaging in the process of action research, subsequently referred to as "teacher researchers." I will refer to these online learning community participants as "coaches" in subsequent chapters. The five other participants included Dr. Dana, who served as the "site facilitator" both in the face-to-face training sessions, as well as in the online learning community, three representatives from the Northeast Florida Educational Consortium (NEFEC), and myself as both a researcher and technical support person for the online learning community. Two of the three NEFEC representatives dropped out of the training in October of 2007, with a third representative from NEFEC joining in January who actively participated in the online learning community until full participation ended in May 2008. Figure 4.1 at the end of this chapter shows a break down of basic demographic data for participants in the online learning community.

A collective look at all of the individuals who constituted membership in the online learning community indicated an average age of the coaches to be 46, with the majority being white, females. Combined, the inquiry coaches have 99 years of experience teaching with an average of around nine years in the classroom. Four of the inquiry coaches were reading coaches. A majority of the inquiry coaches work in an elementary school setting, with one coach working in a high school setting and one working in a middle school. These inquiry coaches also report having, on average, three years of experience with the teacher inquiry/action research process with most inquiry coaches (5) working with six practitioners in their group. It should also be

noted that each of the inquiry coaches is located in a different county throughout Northeast Florida; thus, face-to-face meetings required most inquiry coaches to drive up to an hour to meet centrally at the University of Florida. In addition, each of the coaches in this study was compensated financially for their participation as were the teacher researchers being coached. Financial compensation provided an incentive for participation and was developed to insure a certain level of buy-in for participants, subsequently making them feel contractually obligated to participate both in the face-to-face training sessions as well as in the online learning community.

Experiences that Complimented Participants' Online Learning Community Membership

In addition to their participation in the online learning community, the coaches attended four face-to-face sessions. Besides the face-to-face sessions for coaches, all coaches and their teacher researchers received a copy of Dr. Dana's book *The Reflective Educator's Guide to Classroom Research, 1st edition* (2003) co-written by Dr. Diane Yendol-Hoppey. This text is a how-to guide for teacher inquiry/action research that takes educators step by step, from beginning to end, through the action research process answering critical questions on developing the research plan, collecting the data, analyzing the data, writing the results, and publishing the results. All coaches received an advanced copy of Drs. Dana and Yendol-Hoppey's text *The Reflective Educator's Guide to Professional Development: Coaching Inquiry-Oriented Learning Communities*, (2008) which focuses on providing educators with strategies, activities, and tools for coaching action research within professional learning communities. Throughout the year, coaches received a number of handouts and protocols designed to support the various stages of teacher inquiry/action research during face-to-face meetings. These protocols were often demonstrated to reinforce key concepts and potential trouble spots that the inquiry facilitators might encounter as they coached their teacher researchers through their own inquiries. Finally, participants were directed to the Center for School Improvement's teacher inquiry/action research

database (<http://education.ufl.edu/webapps/csi/search/index.php?pid=905&dc>). This teacher inquiry database includes teacher inquiry/action research project summaries completed by teachers and administrators who have conducted inquiry/action research projects with the Center for School Improvement. Each summary is logged into the Center for School Improvement's Teacher Inquiry Database for easy retrieval by others interested in researching a similar topic in their own school and/or district. In this way, the Teacher Inquiry Database serves as a storehouse for knowledge about teaching and learning generated by practitioners themselves, and networks teacher researchers interested in similar topics so that they can build upon each others' work.

Summary

The purpose of this chapter was to provide a brief history of the events that led up to the development and utilization of an online professional learning community to support the coaching of teacher inquiry/action research. An understanding of these events is essential to understanding the context within which the inquiry coach online learning community was framed. In addition, this chapter provided a brief introduction to each of the members of the online learning community, as well as an overview of activities and experiences that complimented their participation in the online learning community. An introduction of these participants and an overview of their experiences is essential to understanding the content of discussions that occurred within the online learning community introduced in Chapters 6 and 7, as I share an analysis of my data. In addition to understanding the history leading up to the development of this online learning community, its participants, and the experiences that complimented their participation in the online learning community, it is also important to provide a detailed description of the online learning community itself, including its design and functionality. This is the focus of the next chapter of the dissertation, titled "The Online Learning Community." Given the number of inquiry facilitators, their geographic spread, as well as the

limited number of times these coaches were able to meet face-to-face, the need for a means to stay in touch while working with their teacher researchers was clearly warranted. In the following chapter I will go into greater detail about the online learning community site itself, its basic functionality, and how it was designed to serve the inquiry coaches.

Table 4-1. Basic demographics of online learning community participants

Participant	Role in the online learning community	County	School	Age	Race	Gender	No. of years teaching	No. of years AR experience	No. of teachers being coached in AR	Current assignment
Nancy	Site facilitator	NA	UF/CSI	44	W	F	20	15	12	Director, CSI
Angie	Coach	Lafayette	Lafayette ES	NA	W	F	NA	2	6	Curriculum/Behavior Resource teacher
Gena	Coach	Bradford	Bradford MS	52	W	F	13	2	13	Reading Coach
Mary	Coach	P.K. Yonge	P.K. Yonge DRS	41	W	F	9	4	3	HS Science teacher
Rachel	Coach	Union	Lake Butler MS	41	W	F	12	3	5	Reading Coach
Diana	Coach	Columbia	Fort White ES	52	W	F	18	4	7	Reading Coach
Jerry	Coach	Levy	Chiefland MS	52	W	M	9	4	16	Curriculum Coach and Intensive Math teacher
Tonya	Coach	Putnam	Mellon ES	50	W	F	12	2	6	Self-contained Pre-K Exceptional Education teacher
Susan	Coach	Baker	Macclenny ES	46	W	F	3	3	6	3 rd Grade teacher
Jason	Coach	Dixie	Anderson ES	40	W	M	17	3	6	5 th Grade Mathematics
Lynn	Coach	Gilchrist	Trenton MS	43	W	F	6	4	6	7 th Grade Reading teacher
Jeannie	Coach	Flagler	Buddy Taylor MS	NA	W	F	NA	NA	NA	Reading Coach
Sylvia	NEFEC admin	NEFEC	NA	NA	W	F	NA	NA	NA	NEFEC administrator
Matt	NEFEC admin	NEFEC	NA	NA	W	M	NA	NA	NA	NEFEC administrator
Betty	NEFEC admin	NEFEC	NA	NA	W	F	NA	NA	NA	NEFEC administrator
Chris	Tech support r	NA	UF	41	W	M	3	NA	NA	Tech support and researcher

CHAPTER 5 THE ONLINE LEARNING COMMUNITY

As discussed in the previous chapter, the number of teachers in northeast Florida engaging in action research as a result of the collaborative partnership between the University of Florida's Center for School Improvement, P.K. Yonge Developmental Research School, and the Northeast Florida Educational Consortium, grew tremendously over a four-year time frame. As a result of the growth in the number of teachers seeking action research training, the Center for School Improvement needed to consider other ways to support practitioner research. The weblog-based online learning community introduced in Year Three appeared to be a potential solution to support communication and interaction with inquiry coaches; hence, a new weblog-based online learning community was created (Figure 5-1) to enable and enhance the coaches' capacity to conduct, support, and promote teacher inquiry/action research (<http://csi.ufllearn.org>). Analysis of the user interface of this online learning community is not central to this study. Coaches did not indicate that the site's design effected their participation patterns or activity in the online learning community. However, in order to understand the ways participation in the online learning community supports and/or hinders participants' abilities to deepen their understanding of the action research process, deepen their understanding of coaching action research, and deepen their understanding of their own evolving stance toward their coaching practice, it is important to understand the design features and functionality of the site itself. Therefore, in the remaining sections of this chapter, I provide detailed description of the basic overview of the site's design and site elements using screen shots as figures to illustrate throughout.

Basic Overview of the Site's Design

The Center For School Improvement's online learning community was built using a computer application called Drupal (<http://drupal.org/>). Drupal is a free software package that

permits an individual or a community of users to publish, manage and organize a wide variety of content on a website. Drupal is an open source application, meaning, the internal code that powers the software is open for software application developers to download and modify without cost.

The Center for School Improvement's online learning community was constructed on what is known as a three-column layout (Figure 5-2). In a three column layout, there is a header that contains the Center's logo to remind coaches of which site they are on, two fixed-width sidebars on the left and right of the screen for containing fixed information, i.e., information that does not change much such as navigation elements, and a center column that is considered the liquid or fluid column where the content within it changes depending on the activities of the community members (for example, posts and announcements appear in the center column).

Since online navigation can be difficult for many users (Shneiderman & Plaisant, 2005), the three column layout was chosen as the format to manage the Center's online learning community content as it is considered the "Holy Grail" of online layouts (Levine, 2006) due to its wide spread use on many websites. In designing the online learning community, I made the assumption that the site facilitator and coaches may not have extensive experience navigating or using a community web portal or sites designed to support the interaction of multiple users. Thus, I attempted to limit or restrict the number of steps or actions required by community members to engage and contribute content. Below I define the basic functional elements of the Center's online learning community.

Online Learning Community Site Elements

Front Page

The front page or "home" page for the Center for School Improvement's online learning community (Figure 5-1) is comprised of several key elements designed to aid the coaches' ability

to read announcements from the site facilitator, Dr. Nancy Dana, and to view entries by the other coaches. The home page for the Center's online learning community also served as the announcement page where important messages could be posted by the site facilitator and immediately read by the coaches when logging in to the online learning community (also known as "the site"). Several navigation elements appear consistently on the front page that allow coaches to view announcements and posts created by other coaches as well as a means for posting their own content quickly and easily. These navigation elements are briefly defined below.

Tabs

Across the top of each page in the online learning community are a set of tabs labeled "Announcements," "Discussions," and "List Format." These tabs link directly to specific pages associated with the site facilitator's announcements (Announcements), all coaches' posts (Discussions), and a list of recent activity from all members of the online learning community in chronological order of appearance (List Format). The List Format page shows community members a list of posted activity by title of the post, the participant name, and the date the post was created and/or updated, and the number of comments associated with the post. These tabs were designed to provide community members the ability to quickly see what activity was taking place on the site in an effort to promote ease-of-use, as well as to provide members options in terms of how to view site activities based on personal preferences or preferred learning style.

Left-column Navigation Elements

Regardless of which tab a participant selects, information located in the left and right columns remained static providing community member's additional means for searching or viewing information. In the left column, members have four navigational options titled "My Blog," "My Account," "Recent Posts," and "Logout." The left column navigation area also

includes a list of all the community members' names (labeled "Bloggers") in the online learning community sorted alphabetically by first name. There is also a photograph of each member associated with their username that appears in this list so that community members can see each other, lending an additional personalization element to the online learning community. Each of these elements is defined in more detail below.

My Blog

Participants can view their own weblog by clicking on the "My Blog" link. This link takes community members to their personal weblog space where all of the posts they have created will appear in reverse chronological order.

My Account

Participants can click on the "My Account" link that takes them to a web page providing additional links to their "History" of posts that he or she has created as well as a link to all previous posts of other coaches. The "My Account" page also contains three tabs titled "View," "Edit," and "Track." The "View" tab is the "home" link that shows a member's history of postings and a link to other participant discussions in the online learning community. The "Edit" tab takes community members to a webpage that contains basic account information that can be updated at any time. The account information page includes editable fields where members can enter and edit their username, their email address where notifications of site activity (e.g., posts and announcements) will be sent, password information, a space for uploading a picture that will appear on the site in the "Blogger" list defined below along with their posts, and a signature field where participants can add a signature or a personal tag that is automatically appended to a posting in the site (Signatures may be short, such as the participant's name, or quite long, such as a favorite quote that will appear at the bottom of each of their posts). There is also a field in the account information area for group settings that allow community members the ability to send

email notifications to all or none of the other members whenever they add a post to the site. Finally, the "Track" tab that members can use to view all site activity. The "Track" feature shows site activity organized by the "Type" of entry that has been posted (e.g., a blog post or page/announcement), the "Post" title selected by the member who authored the post, the "Author" and number of "Replies" or comments submitted by other community members on the site, as well as when the post was "Updated."

Recent Posts

The "Recent Posts" link provides participants with a quick way to view recent activity in the online learning community. Similar to the "Track" tab mentioned above and the "List Format" tab that is static on every webpage in the online learning community, the "Recent Posts" link gives participants two tabbed options, a tab for "All recent posts" that shows a reverse chronological list of all posting activity on the site sorted by type, title, author, replies, and a last post date stamp of when the post was added to the site. The other tab in this link, "My recent posts" gives participants another option for viewing all of their own posts in reverse chronological order categorized by the type of post, the title, the author's name, the number of replies associated with a particular post, and the date and time the post was added to the site.

Log out

The "Log out" link allows participants to exit the online learning community. Participants were not required to log out of the site when they were not actively participating on it. This option was designed for participants who might be using a public computer or one shared by other people, thus restricting access to the online community to only those registered to access it.

Bloggers

The final navigational element located in the left column of the online learning community was a list of names of all community members as well as a picture of each participant. Three

members did not have a picture associated with their name--Angie, Tonya, and myself. These members, with the exception of me, were not able to attend the first face-to-face meeting in September 2007 where photographs were taken of the coaches and subsequently uploaded to the online learning community. My photograph was not included on the site by my choice. I felt that it was important for me to maintain a low profile on the site, serving primarily as a technical support agent for the participating coaches. Each community members' name was hyperlinked to their posting history so that members could quickly link to and view other members' posts. Additionally, next to each member's name and photograph was a number in parentheses. This number indicated the number of posts each member contributed to the site. This feature was designed to allow members to see how active each was in the community. This number only included the number of posts members added to the online learning community and did not include the number of comments or replies members provided.

Center-column Navigation Elements

The center column of the Center for School Improvement's online learning community was designed to contain the fluid content associated with the site, namely, for site facilitator announcements and coaches' posts and comments. The fluid content elements are defined in more detail below.

Announcements

Announcements were designed to allow the site facilitator to efficiently direct news and information to all online learning community members in one centralized location in the online learning community. The announcements feature was only available to the site facilitator. Announcements appeared on the front page or homepage of the online learning community in reverse chronological order that permitted any community member to review past announcements easily. Whenever the site facilitator posted an announcement to the site, an email

notification was sent to all coaches telling them that there was a new announcement in the online learning community. Each email notification provided a hyperlink in the body of the email message that would take members directly to that specific announcement webpage in the online learning community. Announcements could also include attached documents in the event the site facilitator wanted to share additional resources with the online learning community. There was also a comment feature associated with the announcements allowing community members to ask follow-up questions, ask for clarification, or provide feedback to the site facilitator.

Posts and Comments

Posts and post comments (or replies) served as a primary activity for coaches in the online learning community. Posts, also known as weblog entries, comprised the following elements that were required by members to include before a post was publishable to the online learning community: a title, a set of keywords or descriptions that described the content of the post, and the main body of the post which contained the news, information, or message the participant chose to communicate. Community members had three further options when composing a post: he or she could select whether to send an email notification to all site members or not, and he or she could select whether to make the post public or not, that is, available to all registered community members. All posts were public by default. The third option for members was whether they wanted to include an attachment or not. Attachments could include image files and documents, and were the primary means participants used to send important documents to the site facilitator. Attachments could be downloaded and accessed by all members in the online learning community. Posts could be "previewed," prior to being published publicly on the site allowing community members the ability to edit or see what their post would look like once published (Figure 5-3).

Comments

Comments associated with a post or announcement also appeared in the center column of the online learning community directly associated with and under the original post or announcement (Figure 5-4). Comments could be added to any post, announcement, or comment by any of the members of the community. If a member wanted to comment on an initial post, the comment feature was enabled beneath the post under consideration. Community members had the option of previewing their comment or posting it directly without previewing it if he or she so chose. Comments added to other comments appeared on the screen in an indented fashion under the comment being addressed thus indicating that that particular comment was associated with the particular comment above it. If comments were added to a post or announcement that was not a response to the comment that preceded it, then the comments simply appeared in chronological order beneath the initial post or announcement. In this regard, comments took on the look and feel of a threaded discussion where posts and comments descended the page in chronological order showing a certain level of connectivity from comment to post or comment to comment.

Right-column Navigation Elements

Navigation elements on the right static column of the Center for School Improvement's online learning community consist of keywords arranged alphabetically (Figure 5-5). These keywords are brief descriptions that community members create when composing a post. These keywords serve as a quick way for members to find information or posts on the site associated with a particular keyword. For example, if a community member were to click on the keyword "data analysis," all posts in the site that were labeled data analysis by members in the description field of their post would appear on the screen in reverse chronological order. Keywords appear larger or smaller in this column based on the number of times the particular keyword has been

used by community members. For example, the keyword "principal" appears smaller than the keyword "Kick Off" due to the number of posts labeled as such. In this case, the keyword "principal" has only one post associated with it in the online learning community, whereas "Kick Off" has thirteen posts so labeled.

The keyword feature was developed as a means for community members to be able to search and sort posts and announcements quickly and efficiently. The use of keywords, also known as categories or tags, is based on the notion of allowing members to create their own taxonomy based on the contents associated with their posts. This organic system of organization known as a *folksonomy*, a neologism of the words "folks" and "taxonomy," are the set of terms that a group of users label content with; they are not a predetermined set of classification terms or labels. The difficulty inherent in allowing community members to create their own labels or tags led to a number of limitations and weaknesses. For instance, ambiguity of the tags arises when members apply the same tag in different ways. Similarly, the lack of a clearly defined taxonomy or set of tags can lead to different tags being used for the same concept, thus inhibiting the usefulness of the tagging feature. These limitations were considered in the design of the keywords feature. I opted to allow members to create their own tags and labels since I was unsure of how members would define the content of their postings. In this regard, the folksonomies generated by members would be part of the community's responsibility, in turn placing the burden on each member to explore what others in the community were doing and investigating for themselves how they might label their content. With its uncontrolled nature and organic growth, member-generated tags have the potential to adapt very quickly to community member vocabulary changes and needs. There are no significant costs on the online learning community system or for a community member to add new terms to the folksonomy. The

difficulty with such a system is that while the different participant labels enable some interesting searching and browsing, the sheer multiplicity of tags may overwhelm the members with information that is not useful or relevant to them.

Administrator Elements

Besides the basic functional elements provided to members in the online learning community defined above, the site administrator had an additional set of tools which allowed for member account creation and deletion as well as access to a set of administrative log files that were useful for quantifying certain levels of activity on the site. The administrative log files were viewable only by the online learning community site administrator, who happened to be me. The log files allowed me to see when and how often participants accessed the online learning community and what type of content they posted (e.g., a post, an announcement, or a comment).

The data sets provide a clearer picture of when and how members were accessing the online learning community and engaging both the site content and each other. Figure 5-6 shows the breakdown of what the administrator log files revealed.

What is interesting to note is the number of times users accessed the site without providing any content. This suggests that community members were accessing the site to view content they deemed necessary in fulfilling their mission as a participant in the online learning community and as a coach of teacher inquiry/action research.

The data can be further subdivided by day, week, and month. For the purposes of analysis, I have limited my focus on the administrative log files to total activity and monthly activity. By subdividing that log file data set in this way, I was able to see when activity was greatest without getting wrapped up unnecessarily in daily activity. While daily activity is clearly important in the overall examination of participation patterns in the online learning community, monthly and total activity provides an equally clear picture of site activity that is more fitting for this study.

Monthly activity (Figure 5-7) in the online learning community shows that a majority of the member activity on the site took place around critical events associated with organizing training for teacher researchers [i.e., site initiation, Kick-off meeting, data analysis meetings, and Showcase planning].

Other administrative features of the online learning community included a page read count associated with each announcement and post. The data set from this feature of the site is not included in the overall analysis due to the fact that each time any person with access to the site opens a page, the page count is increased by one. Subsequently, every time I go to look at or analyze a post or announcement, I am increasing the number of views being counted for that page which in effect does not reveal how often participants actually view the page. This aspect of the page read feature was not discovered until several weeks into the study and has been thus discounted as a meaningful data set.

I have provided this brief overview as a means of defining the basic functionality of the online learning community to provide the reader with a better understanding of the context of analysis.

Summary

The online learning community site was designed to support communication, reflection, and the sharing of artifacts between coaches in-between scheduled face-to-face meetings with the site facilitator. In addition, the online learning community site was the mechanism by which the site facilitator and the regionally situated coaches could exchange news and information, distribute content, and engage in dialogue about the different aspects associated with teacher inquiry/action research and coaching teacher inquiry/action research. The purpose of this chapter was to provide a detailed description of the online learning community site itself to include specific site elements and functions designed to support sustained interaction among participants.

This overview of the site's design and functionality is essential to understanding how community members were able to engage one another in the online learning community. Given the number of coaches, their geographic spread, as well as the limited number of times these coaches were able to meet face-to-face, the need for a means to stay in touch while working with their teacher researchers was clearly warranted. The online learning community site provided key elements that enabled community members to view news and information, respond to site facilitator prompts, post documents and reflections on their blogs, as well as provide replies and comments on each others' posts and announcements. This functionality enabled by the site was the key means of community member engagement that make up the experiences essential to understanding the content of discussions that occurred within the online learning community introduced in Chapters 6 and 7.

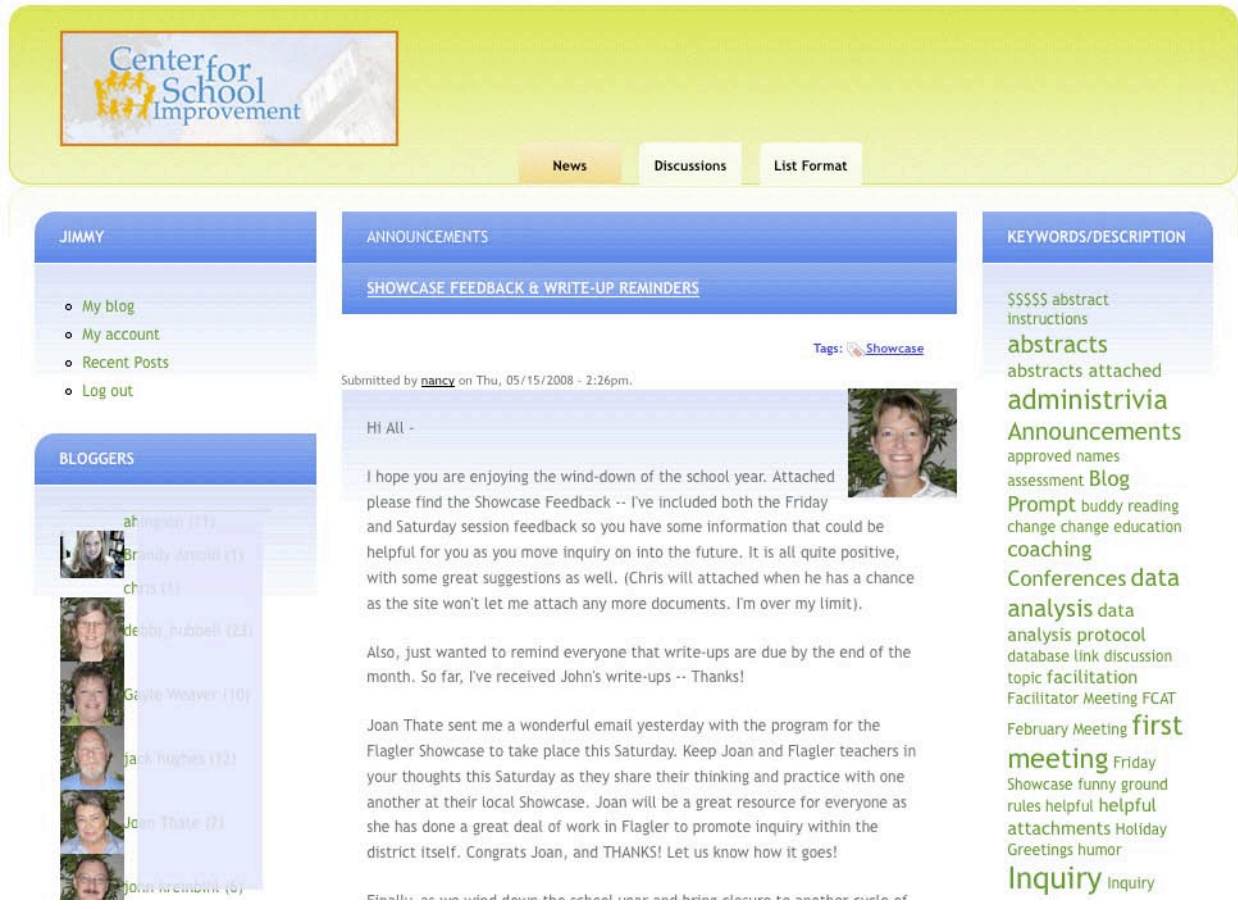


Figure 5-1. Screen shot of the Center for School Improvement’s online learning community’s homepage. (Source: <http://csi.uflern.org>. Last accessed November 2008).

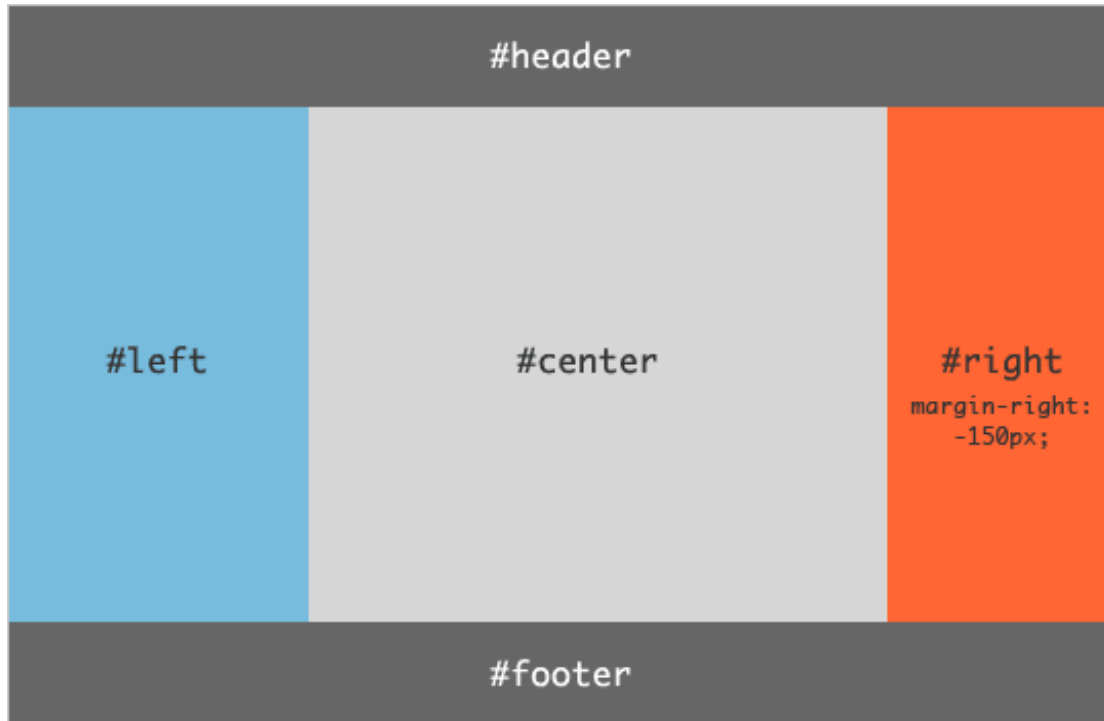


Figure 5-2. An example of a three-column layout used to support the CSI online learning community design. (Source: <http://www.alistapart.com/articles/holygrail>. Last accessed November 28, 2008).

[Home](#) > [create content](#)

SUBMIT BLOG ENTRY

Title: *

Keywords/Description: *

A comma-separated list of terms describing this content. Example: funny, bungee jumping, "Company, Inc."

Body: *

B *I* U ABC

Path:

[disable rich-text](#)

▶ [Input format](#)

▼ [Groups](#)

Audience:

Facilitator Discussions

Show this post in this group.

Public

Show this post to everyone, or only to subscribers of the groups checked above. Posts without any groups are always *Public*.

▶ [File attachments](#)

Preview

Submit

Figure 5-3. An example of elements associated posts in the online learning community.

HOW I FEEL ABOUT PARTICIPATING IN OUR ON-LINE LEARNING COMMUNITY

Tags: [Inquiry](#) [introductions](#)

Submitted by [nancy](#) on Wed, 09/26/2007 - 4:44pm.

One word or phrase I would use to describe how I feel about participating in our on-line learning community is nervous-excitement! I chose this phrase because there are so many wonderful opportunities this on-line learning community will bring to us - a place to share, reflect, help each other, and grow! I'm nervous because I like seeing everyone face to face, and will miss seeing you more often. Can our participation in our on-line learning community be as wonderful as our face-to-face participation in our learning community? Can it be better? Time will tell . . .



[nancy's blog](#)

Reply

Your name:

[jimmy](#)

Subject:

Comment: *

B *I* U ABC       

Path:

[disable rich-text](#)

- [Input format](#)

Figure 5-4. An example of a comment box feature associated with a post in the online learning community.



Figure 5-5. An example of the right-hand navigation element supporting keywords in the online learning community.

Table 5-6. Total participation data according to the online learning community administrator log files.

	Nancy	Diana	Jerry	Gena	Susan	Rachel	Tonya	Angie	Mary	Jason	Lynn	Jeannie	Matt	Sylvia	Betty	Chris
Access	61	73	73	60	47	38	30	22	21	18	17	8	11	3	14	263
Posts	7	23	12	10	11	11	12	11	6	6	4	2	2	2	1	1
Comments	50	30	21	26	8	15	4	4	8	9	6	3	2	0	8	1
Announcements	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5-7 Total participation data according to the online learning community administrator log files sorted by month.

	Nancy	Diana	Jerry	Gena	Susan	Rachel	Tonya	Angie	Mary	Jason	Lynn	Jeann e	Matt	Sylvia	Betty	Chris	Totals
September																	
Access	2	2	3	1	0	1	0	0	0	3	0	1	4	0	0	10	27
Post	2	2	0	0	0	1	0	0	0	1	0	1	1	0	0	0	8
Comment	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	3
Announce	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	6	4	4	1	0	2	0	0	0	5	0	2	5	0	0	0	39
October																	
Access	20	18	21	15	13	9	2	3	6	9	2	6	7	3	0	31	165
Post	3	3	4	2	4	1	2	1	4	2	1	1	1	2	0	0	31
Comment	16	5	6	7	3	5	1	0	3	4	2	3	2	0	0	0	57
Announce	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	51	26	31	24	20	15	5	4	13	15	5	10	10	5	0	0	265
November																	
Access	10	13	11	6	11	4	5	4	5	0	4	1	0	0	0	30	104
Post	1	6	1	1	4	1	2	2	0	0	1	0	0	0	0	1	20
Comment	14	7	4	5	2	3	3	2	2	0	3	0	0	0	0	0	45
Announce	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	28	26	16	12	17	8	10	8	7	0	8	1	0	0	0	1	172
December																	
Access	2	3	4	2	2	2	0	0	0	0	0	0	0	0	0	25	40
Post	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	4
Comment	1	2	0	1	0	2	0	0	0	0	0	0	0	0	0	0	6
Announce	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4	5	5	4	3	4	1	0	0	0	0	0	0	0	0	0	51
January																	
Access	5	10	5	6	7	4	3	4	3	3	2	0	0	0	3	28	83
Post	1	3	1	0	1	2	1	2	0	2	0	0	0	0	1	0	14
Comment	4	2	0	4	1	4	0	1	1	3	1	0	0	0	2	1	24
Announce	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	14	15	6	10	9	10	4	7	4	8	3	0	0	0	6	1	125

Table 5-7. Continued

	Nancy	Diana	Jerry	Gena	Susan	Rachel	Tonya	Angie	Mary	Jason	Lynn	Jeann e	Matt	Sylvia	Betty	Chris	Totals
February																	
Access	5	6	7	4	4	3	3	0	3	0	2	0	0	0	4	28	69
Post	0	2	2	0	1	1	3	0	0	0	1	0	0	0	0	0	10
Comment	1	1	4	4	0	0	0	0	1	0	0	0	0	0	1	0	12
Announce	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	8	9	13	8	5	4	6	0	4	0	3	0	0	0	5	0	93
March																	
Access	6	8	8	7	3	6	3	4	2	1	3	0	0	0	3	31	85
Post	0	5	1	1	0	2	0	2	2	0	0	0	0	0	0	0	13
Comment	4	3	3	1	0	0	0	1	1	0	0	0	0	0	1	0	14
Announce	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	13	16	12	9	3	8	3	7	5	1	3	0	0	0	4	0	115
April																	
Access	8	10	9	9	6	4	10	4	2	1	2	0	0	0	3	30	98
Post	0	1	1	2	0	3	2	2	0	1	0	0	0	0	0	0	12
Comment	6	6	3	2	2	0	0	0	0	0	0	0	0	0	3	0	22
Announce	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	17	17	13	13	8	7	12	6	2	2	2	0	0	0	6	0	135
May																	
Access	2	3	5	7	1	4	4	3	0	1	1	0	0	0	1	30	62
Post	0	1	1	1	0	0	1	2	0	0	0	0	0	0	0	0	6
Comment	0	4	0	2	0	1	0	0	0	1	0	0	0	0	1	0	9
Announce	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	3	8	6	10	1	5	5	5	0	2	1	0	0	0	2	0	78
June																	
Access	1	0	0	3	0	1	0	0	0	0	1	0	0	0	0	18	24
Post	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	3
Comment	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Announce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	0	0	5	0	1	0	0	0	0	2	0	0	0	0	0	30

CHAPTER 6 SITE FACILITATOR ACTIVITY

An analysis of data revealed four distinct site facilitator actions within the on-line learning community. The purpose of this chapter is to name, describe and analyze these distinct actions and these actions' relationship to the deepening of inquiry coaches' understanding of action research, the deepening of their understanding about coaching action research, and the deepening of their own evolving stance toward their own coaching practice. These four actions include: (1) Community Establishment, (2) Invitation to Post, (3) Modeling On-Line Participation, and (4) Announcements. I devote one section in the chapter to each of these four actions. Each section begins with a definition of the action followed by the provision of one or more excerpts from my data that serve to illustrate that action. After these examples, I report on the response each site facilitator action generated from the inquiry coach members of this on-line learning community and analyze these responses in relationship to the purpose of the study. This chapter ends with an overarching summary and discussion of site-facilitator actions, and their effect on the on-line learning community members.

Action 1: Community Establishment

Definition

Community establishment refers to the specific actions the site facilitator initially took to get the online learning community up and running, as well as to set the parameters for how this community would function. During the initial face-to-face meeting with the coaches (September 17, 2007), the site facilitator supplied two key components toward establishing an online learning community. These included a documented set of guidelines that expressed the site facilitators' expectations for participation in the online learning community and a protocol for establishing ground rules for participation in the online learning community.

Two Examples of Community Establishment

Example 1: Guidelines for an online learning community: The guidelines, titled "Our Inquiry Facilitator On-line Professional Learning Community" (see Appendix A), provide a rationale for why an online learning community is being used to support coaches, describes affordances associated with the online learning community as "things" the site facilitator and the coaches can do on the online learning community, offers suggestions for when to participate, as well as how often and how much to participate, and advice for being a member:

Don't be afraid to pose questions, to say 'I don't know,' to share something you are struggling with, or to say, 'I need help!' When we engage in inquiry we adopt a stance towards our teaching that says we believe teaching is complex (in a good way), and because of teaching's complexity, it is natural and normal for many wonderings to emerge. Problems are our friends -- they lead to our wonderings! Similarly, coaching the professional development of colleagues is complex (in a good way), and because of its complexity, it will be natural and normal for us all to encounter problems and/or questions in our work. Two heads are better than one and lots of heads are better than two -- our on-line PLC [professional learning community] is a way to engage lots of heads in understanding the problems we encounter and answering our questions! We engage in this community to help one another, not to judge one another. As a popular teen song from High-School Musical goes, 'We're all in this together!' (Inquiry Facilitator On-line Professional Learning Community Handout).

In this excerpt the site facilitator shows herself to be a compassionate teacher-leader for the coaches, offering advice and expectations for participation in the online learning community. She also shares a definition of an inquiry stance that she openly models as a pedagogical strategy. The modeling of such a stance provides the participating coaches with an idea of how the site facilitator thinks and how she expects coaches to understand their role in the online learning community. She further explicates her stance revealing how she sees the online learning community as a functioning space where lots of "heads" can engage in articulating and understanding the problems and solutions associated with practicing and coaching teacher inquiry.

As a whole, the guidelines provide clear directions and expectations for all participation in the online learning community. They focus on improving coaches' knowledge of supporting inquiry with each other, encourage reflective practice, and cultivate participating coaches' ability to work together to discuss and collaborate as a practice community. The guidelines provide a clear set of expectations without being overly prescriptive, and suggest ways that the coaches can engage each other in the online learning community as their context dictates. In the guidelines section titled "How often do I participate? How much time do I put into it?" the site facilitator states explicitly:

Our on-line inquiry facilitator PLC is here to help us all do our work better! If the time you are spending participating in our on-line PLC is distracting from, rather than enhancing your work as an inquiry coach and teacher, readjust how often and how much time you are participating, yet remembering that we'll only get out of our PLC what we put into it! (Inquiry Facilitator On-line Professional Learning Community Handout).

Here again the site facilitator acknowledges why the online learning community was established and offers a suggestion concerning how participants might approach spending time in the online learning community. More specifically, she reminds coaches of the importance of participating, pointing out that coaches can only benefit from the online learning community in relation to what they contribute. This is a critical point that clearly reminds the coaches that without their active participation and involvement, there is no professional learning community (PLC) with little to no benefit for anyone involved.

Example 2: Protocol for establishing ground rules for the online learning community:

Following a discussion of the guidelines noted above during the first face-to-face meeting, the coaches were invited to create a set of ground rules for participating in the online learning community based on the "Forming Ground Rules" protocol developed by Marylyn Wentworth for the Harmony Education Center's National School Reform Faculty organization (Appendix B). Each coach was given an opportunity to suggest a rule or rules, amend them, and articulate

the value of each rule. As a result of engaging in this process, the newly formed practice community then established the following list of ground rules for their online learning community:

1. Attachments need to be Office or PDF.
2. We will have a focus for post (sometimes).
3. We will use brevity in our posts (not so much blah, blah, blah – “Just say it”.) Yet, we will respect that brevity doesn’t always work. If we have a long post, we will place a warning at the top of the post that reads “Warning: This is a long post.”
4. We will use Standard English but not get caught up in spelling or grammar.
5. We will recognize learning community members’ feelings: a) when responding, think of individual; b) there will be some reply to all postings; c) remember inspiration from time to time; and d) share ideas.
6. We will not use our learning community for whining.
7. The facilitator will remind people of important dates and tasks.
8. We will keep the larger impact and big picture in mind.

Ground rules or norms are critical for groups that plan to work together cooperatively over time or on complex issues. Establishing such norms builds a sense of trust among group members permitting the clarification of individual and group expectations (Wentworth, no date, retrieved 9/9/07). This final set of rules was culled down from a larger discussion to include the eight listed above. They include procedural rules designed to alleviate any concerns about the format type for uploading documents or artifacts to the online learning community (rule 1) and the preferred structure of posts (rules 2, 3, and 4). A rule was established to recognize coaches feelings when posting, reminding them to be empathetic, to reply to one another and comment on each others postings’ from time to time, as well as to be sure to share ideas with each other (rule 5). Additionally, a rule was established to keep the conversation focused at a professional level; specifically, the rule states that the community will not whine or vent their frustrations in their

posts -- that they will avoid expressing negative feelings, especially dissatisfaction or resentment (rule 6). Rule 7 established accountability wherein the site facilitator will keep coaches apprised of important dates and tasks, essentially defining the role and expectation of coaches for the site facilitator. Finally, a rule was created to remind coaches to keep the "big picture in mind," that is to say, to keep in mind the larger world that they are all working in, as well as to not to get too absorbed or distracted by the complicated details involved in coaching others through the teacher inquiry/action research process.

Analysis

Both the guidelines presented by the site facilitator and the ground rules created by the coaches were an integral part of establishing the online learning community. More specifically, these guidelines and norms helped inform the group as a learning community (Buysee, Sparkman, and Wesley, 2003). With the clear establishment of guidelines and norms, the online learning community became a "negotiated enterprise" (Wenger, 1998, p. 78) involving mutual engagement and a shared repertoire, where the community's members could participate in a meaningful way through the sharing of voices, stories, ideas, activities, styles, and concepts. In order to function as a learning community, an agreed upon set of norms points individual coaches and the group as a whole toward a state of equilibrium (Piaget, 1950) to keep the community from drifting aimlessly without purpose or cause. In terms of organizational design, the guidelines and ground rules created fixed points around which participants could negotiate their position or stance, understand what they are expected to share, when to participate, and what to expect from others in the online learning community.

Action 2: Invitation to Post

Definition

Posting is the essential task and activity associated with participation in the online learning community. Posting in the online learning community involved the act of each coach or site facilitator entering content (text, pictures, hyperlinks, document attachments) into their weblogging space provided for them and publishing it online for the other coaches and site facilitator to read and/or respond to. Invitation to post refers to the actions the site facilitator took to encourage coaches to post in their weblogging space in the online learning community.

Examples of Invitations to Post

Example 1: Ice-breaking post: After the initial face-to-face meeting (September 17, 2007), the site facilitator posted her first announcement in the online learning community on September 26, 2007. In this first post, the site facilitator initiates activity in the online learning community by breaking the ice and calling the coaches to action:

I also thought to get everyone started, that it might be a good idea for each of us to do one, short, post (blog) to our on-line community that would serve to introduce us all in this new space (sort of like the welcome and introductions activity we did when we met face to face) . . . so, here's your prompt to get everyone established in our community:

One word (or phrase) that I would use to describe how I feel about participating in our inquiry facilitator on-line learning community is _____. The reason I chose this word or phrase is _____. Enjoy!

Here the site facilitator asks the coaches to introduce themselves to each other with a prompted phrase. This activity or intervention by the site facilitator provides a clear invitation for coaches to post to the online learning community. The site facilitator is explicit in her intentions stating that her post is intended to "get everyone started." In recognition of the transactional distance associated with online communication, the site facilitator is careful to explain why she is asking coaches to post, even going so far as to provide a prompt for the coaches that requires

them to simply fill-in-the-blank so as to reduce any anxiety they might feel about getting started in the online learning community. Here also the site facilitator establishes her role or identity in the online learning community by serving as the leader of the community calling members to action. In so doing, the site facilitator is able to begin the task of creating a supportive community of practice using the online communication technologies provided. Furthermore, the site facilitator is able to model how one might build the coaches' capacity to discuss their practice by asking them to post in a non-threatening way. Similarly, as a model of pedagogical knowledge, the site facilitator starts the group out with a low-stakes activity prompting coaches to openly reflect on their feelings about participating in the online community.

This initial post by the site facilitator generated a range of responses from coaches. Words chosen by coaches to describe their feelings ranged from "cautious" (Mary, 10/07/07), to "worried" (Susan, 10/01/07), to "nervous-excitement!" (Nancy, 9/26/07), to "committed" [sic] (Rachel, 9/26/07), to "sustaining" (Lynn, 10/15/07), to "hopeful" (Jeannie, 9/27/07) to "thankful" (Jerry, 10/08/07), to "timid but excited" (Diana, 9/26/07). Coaches' responses to the prompt clearly show a range of feelings and emotions regarding their expectations about how working in the online learning community makes them feel. Most one-word responses capture a sense of disequilibrium in the sense that the intellectual growth associated with participating in the online learning community involves assimilating and accommodating new ways of interacting into the coaches' own preexisting cognitive schemas (Piaget, 1950). Most coaches noted feeling a sense of cautiousness, worry, or timidity in response to dealing with this novel situation in which they found themselves participating. By asking coaches to share their feelings as such, the site facilitator was able to offer coaches a point of entry into the practice community. In this regard, membership is initiated and the coaches have shown that they can use the online learning

community to communicate with one another, even though they are separated physically/geographically and only communicating online.

Example 2: Important information about Kick-Off and reminders: Approximately two weeks after the site-facilitator contributed the ice-breaker post to the on-line learning community, she crafted another invitation to post as the coaches were getting ready for their second face-to-face meeting with one another that included an Inquiry Kick-Off that would bring together all of the coaches and the teachers they would work with this year to introduce the concept of action research to these teachers. In a post entitled “Important Information About Kick-Off and Reminders,” 10/09/2007, the site-facilitator offers the following invitation to the community:

Also, as facilitator of our on-line learning community, I'm asking each of you to make one post before our meeting and respond to at least one community member's post. There are a number of items you can choose to focus on in your post (as per our ground rules, you wished to have a focus for posts - sometimes), so here they are:

A. Reflections on Chapters 1, 2 or 7 of *The Reflective Educator's Guide to Professional Development* - what are your thoughts on the reading? (See pink sheet entitled, "Our Inquiry Facilitator On-Line Learning Community" for more ideas for posting about a reading).

B. Recruiting Teachers To Participate This Year - How's it going? What type of interest are you seeing from teachers? How many people have committed to the process this year? How did you go about recruiting them? How do you feel about the group you will be working with? How do they feel about the upcoming kick-off?

C. Reflection on Participating in TNLI and/or Presenting at NSDC - How do you feel about the opportunities that are being afforded to us to participate in national groups? What are the barriers/constraints to taking this work outside our schools/districts?

D. Time Management for Participating in Our On-Line Community - What personal strategies do you have for checking into our PLC, and participating? How is it working for you? Does it feel overwhelming or manageable or somewhere in-between?

Here, the site facilitator calls the participating coaches to action requesting that they each create a new post to share with the practice community, as well as encourages each coach to

actively read and respond to one another's posts. She then provides a prompt signaling coaches to assume their identities as active members of a practice community and openly reflect on specific subject and pedagogical knowledge as a means of drawing attention to or highlighting the expert skill sets that could be employed to improve participant's capacity to conduct, support, and promote teacher inquiry/action research. The site facilitator also provides intertextual references to a "pink" document, that is, the guidelines previously mentioned for participating online. The final prompting question above offers participants the opportunity to share their thinking about effective ways to participate in the online learning community, in effect offering participants the chance to voice strategies and skills they have developed to support their coaching community practice.

This announcement generated twelve responses from coaches including two from the site facilitator in response to questions posed by the coaches. Many of these responses generated ideas and discussion that show certain coaches deepening their understanding of teacher inquiry/action research as well as coaching teacher inquiry/action research. For example, Diana offers the following in one of her comments ("Reading for new facilitators," 10/16/07) in this thread:

I have found this new book very valuable to me as a coach. I love the comparison (in the preface) of listening to an outside expert share knowledge versus the teacher participating in studying their own practice. We have all sat there and politely listened to that expert, but the power that I feel when I have picked a topic that I am passionate about is so much more meaningful!

Here Diana demonstrates her understanding of how the text being used by the online learning community validates her own position and thinking as a teacher inquirer/action researcher.

On a similar note, Jeannie offers her own reflection on the ways in which she is able to deepen her understanding of teacher inquiry/action research and coaching teacher inquiry/action research through participation in the online learning community:

As an instructional coach I'm determined to make my interactions with teachers this year as differentiated as we should make our interactions with students--or, for that matter--all the human beings in our lives. But in a school situation, it is so weird to be able to explore your own needs that people feel a little lost. We're so used to putting in "seat time" for professional development that when we're asked to define and seek out the learning relevant to the subject(s) and the kids we're teaching right now, we have a tendency to sit back and say "You tell me what I need," because that's the way it has been for so long. That's why I think teacher inquiry is so great--it's a kind of intermediate step towards taking control of our profession, making it, at last, a true profession.

Here Jeannie voices a clear and sophisticated understanding of the complexities associated with teacher inquiry/action research and coaching others through the process. There is also evidence of Jeannie's stance toward coaching in this response as well. For example, in the final sentence of her comment, Jeannie notes why she believes teacher inquiry is so "great----it's a kind of intermediate step towards taking control of our profession, making it, at last, a true profession." This statement suggests that Jeannie has a strong understanding of what she believes will support teachers in their daily practice. Her voice expresses certainty and demonstrates a sense of wisdom that comes through experience and reflection. Through inviting the coaches to post, this type of response is what the site facilitator was hoping for—a clear, articulate, deep reflection on what goes on inside the head of a coach involved in supporting the teacher inquiry/action research process.

Example 3: A great Kick-Off: A third example of invitation to post follows the initial all day kick-off workshop where all of the coaches gathered with the teacher researchers they would be working with to introduce the teacher researchers to the action research process. The Kick-Off meeting is an important event for coaches. It involves an afternoon of orienting teacher researchers recruited by the coaches across the region to the teacher inquiry/action research

process. Demonstrations of past teacher inquiry/action research projects are presented by the coaches, the coaches meet with the groups of teacher researchers recruited from their district, and initial plans are discussed and laid out for teacher researchers interested in participating. It is an intense afternoon, involving the coordination of hundreds of teachers across northeast Florida, as well as an important step in the introduction of critical concepts associated with the teacher inquiry/action research process. For many teachers attending this event, this is the first time they have heard of teacher inquiry/action research, thus much planning and coordination of content and instructional strategies is required by the site facilitator, as well as by the coaches to insure events and presentations associated with the kickoff are effective. After this workshop, the site facilitator offered this invitation:

And now . . . A New Blog Prompt -- Reflections on The Kick-Off and Our Second Meeting. Take a minute to post your thoughts about yesterday - (Some questions you might want to address include: How did the day go for you and for the teachers and administrators from your district? What new insights did you gain yesterday that will be valuable to your work as a coach? How did the administration from your district perceive our work? How did the teachers from your group experience the day? What constraints/concerns/barriers do you anticipate as you coach the inquiry process this year?)

In this prompt by the site facilitator, coaches are asked to post their reflections on the events that took place during the meeting. The site facilitator also provides detailed questions to spur their thinking and reflection. Typographical errors aside, the site facilitator frames the questions to support her call to action (i.e., "post your thoughts about yesterday") as a parenthetical statement. The use of parentheses serves as a grammatical device suggesting the ideas within serve as an aside, that is, providing additional information for additional support. The site facilitator strives to be as clear as possible in her instructions in an effort to prevent misinterpretation by participants in terms of what she means by "post your thoughts about yesterday."

This site facilitator announcement generated seven response posts by the coaches focusing on the kick-off (“Kick Off Reflections,” Diana, 10/18/2007; “Putnam's Update,” Tonya, 10/19/2007; “First Local Meetings,” Jerry, 10/20/2007; “Kick-Off Reactions,” Mary, 10/21/2007; “Kick Off Reflections,” Rachel, 10/23/2007; “Kick Off Reflection,” Angie, 11/06/2007) including a post by the site facilitator herself (“Kick-Off Reflections,” Nancy, 10/18/2007). Many of these responses were evidence of the coaches deepening their understandings of action research and the coaching process. For example, another excerpt from a post by participating coach Diana, titled “Kick-Off Reflections” (10/18/2007), indicated that she was uncovering some of the complexities inherent in coaching which include garnering support from administration and negotiating different schedules of teachers:

My challenges include how to entice our county person (as well as our administrators) into thinking this is a valuable part of a teacher’s life. I would like to see substitute money made available for more people to be involved in this wonderful process. Another challenge is the idea of meeting with eight people from as far away as 25 miles. We have decided that our first meeting will be on the south end of the county and the next will be on the north end of the county. Also, my school ends at 2:15 p.m. and the high school ends at 3:30 p.m. This presents the problem of what is “after school” for one is not for the others.

Other coaches’ posts also articulated the same tensions Diana was feeling with administration and scheduling. For example, another coach’s post contained the following comments:

I shared in the disappointment in the lack of district-level participation. However, when I let my feelings be known at that level I got apologies and a recommitment from their end. We currently have at least one inquirer from all but three of our district’s schools. Thirteen at last count; and another email from the assistant superintendent to the three remaining principals might spur further inquirers to step forward. My principal is planning to suggest inquiry projects to several of our teachers . . . He has asked that I facilitate those and set up a mini showcase for our school.

Here an empathetic response to dealing with district administrators is evident. Specifically, the coach-commenter, Jerry, a veteran coach, shares how he dealt with the same problem directly by letting his “feelings be known” to local administrators critical to his cause. In so doing, Jerry

reports receiving a "recommitment" to supporting teacher inquiry/action research in his district. Jerry further relates his current coaching situation and the various details and corresponding objectives he is facing. In so doing, he is providing a model or example for other coaches in the practice community to follow if they so choose. Here the online learning community serves as a form of clearinghouse for ideas associated with facilitating/coaching teacher inquiry/action research. The activity by participants in the on-line learning community generated by this invitation to post shows how an invitation to post provides coaches an opportunity to share their mutually negotiated enterprise of coaching teacher inquiry/action research in ways that both support each other's practice as well as providing different approaches to working through many of the complexities associated with coaching action research/teacher inquiry.

Example 4: Final Reflections: One last example of the site-facilitator action "invitation to post" came at the end of the school year, after the coaches and the teachers they had worked with had completed one cycle through the action research process and shared their work with others on a Saturday morning Inquiry Showcase. In a post entitled 'Showcase Feedback & Write-Up Reminders,' 05/15/2008, the site facilitator shares a document with collected feedback received from participants in the Showcase, and invites the on-line learning community participants to make one final post to the community, reflecting on their work over the school year:

I hope you are enjoying the wind-down of the school year. Attached please find the Showcase Feedback -- I've included both the Friday and Saturday session feedback so you have some information that could be helpful for you as you move inquiry on into the future. It is all quite positive, with some great suggestions as well....

Finally, as we wind down the school year and bring closure to another cycle of inquiry, I'm asking each of you PLEASE to post one final reflection to our on-line learning community. This will be a wonderful way to bring closure to our work together. Here are some questions to help you frame your last post, and provide "food for thought" for the future of inquiry as teacher professional development:

1. What has been the most powerful component of engaging in teacher research for the inquirers you coached this year?

2. In what ways have the inquiries that you've witnessed this year and/or in the past impacted students?

3. What are some of the most important lessons you have learned about inquiry and coaching inquiry as we worked together this year?

4. What has your journey of inquiry and coaching inquiry meant to you?

5. Where do you plan to take your journey next and what will you need to do so?

I am looking forward to reading everyone's reflections as we end our year's work together. . . My very best to everyone for a wonderful remainder of the school year, restful summer, and continuation of learning and growing as a teacher inquirer!

Here we see the site facilitator prompting participating coaches to provide some final thoughts on their experiences over the past several months associated with coaching teacher researchers through the inquiry/action research process. This example of an invitation to post aims at getting the coaches to reflect on these aspects of their practice in a meaningful way. This example shows the site facilitator working to such an end by asking questions, prompting the participating coaches to seriously consider where they've been as action research coaches over the past several months.

There were four coaches' responses to this announcement and one follow-up response by the site facilitator. One of the lengthier responses comes from Rachel (05/29/2008):

You asked "what has been the most powerful component in the inquiry process this year." The whole process really validates what we do as teachers. I can't tell you how many times recently I've used examples from inquiries to get my point across about something. The inquiry process helps make things happen. Two of the research projects within my district are really helping to drive some needed changes for next year. Those changes may not have happened if it were not for inquiry. The two projects I referring to have opened our eyes for the future. I certainly hope we can come up with some creative way to keep this going. I worry that teachers will not "buy in" without the monetary incentives.

Here Rachel provides evidence of how she will use the experience she had coaching in the future and how two of the projects she helped with will be used to guide specific changes needed in her district. Rachel also shares her desire to keep the teacher inquiry/action research going

after this year, hoping that there might be some way to get teachers involved that doesn't include monetary incentives. Such reflection suggests a deeper understanding of coaching teacher inquiry/action research as evidenced by her grasp of the complexities associated with sustaining the process.

Analysis

In these four examples of an invitation to post, the site facilitator's prompts ignite activity in the online learning community as the participating coaches begin to utilize the online learning community to voice their experiences coaching teacher inquiry/action research. This act of posting one's thinking aloud in the online learning community for others to read and reflect on is a major mechanism of the online learning community intended to foster deeper thinking about teacher inquiry/action research and facilitating or coaching teacher inquiry/action research. Responses elicited from coaches served the learning community as a whole as a repository or clearinghouse of thoughts and reflections that could be accessed at any time, depending on the needs and context of individual coaches and coaching situations.

Action 3: Modeling Online Learning Community Participation

Definition

Beyond inviting participating coaches to read, write, and share their experiences as coaches, the site facilitator also used posts as a means of modeling posting behavior she hoped to see in the online learning community. This action serves as a subtle form of coaching that the site facilitator provides for participants in the online learning community. Rather than coaching participants in the process of coaching teacher professional development through teacher inquiry/action research, the site facilitator coaches community members in ways to participate in the online learning community through modeling the process herself.

Examples of Modeling Online Learning Community Participation

Example 1: Kick-Off reflections: One way the site facilitator modeled was by responding to her own invitations to post that were extended to the on-line learning community members. For example, recall from the previous section of this chapter that the site-facilitator crafted an invitation to post immediately following the second face-to-face meeting of the coaches and the delivery of the Inquiry Kick-Off. During this second face-to-face meeting, the facilitators invited administration from their districts to listen to a guest speaker on teacher research from Fairfax County Schools and later in the afternoon, were joined by the teachers they were coaching for an introduction to teacher research delivered jointly by all the coaches. The site facilitator's invitation to post read:

And now . . . A New Blog Prompt -- Reflections on The Kick-Off and Our Second Meeting. Take a minute a post your thoughts about yesterday - (Some questions you might want to address include: How did the day go for you and for the teachers and administrators from your district? What new insights did you gain yesterday that will be valuable to your work as a coach? How did the administration from your district perceive our work? How did the teachers from your group experience the day? What constraints/concerns/barriers do you anticipate as you coach the inquiry process this year?)

The site facilitator offered the following response to this post in her weblog:

Warning - Long Post - A Bit Rambly

There is a lot swirling around in my head in relationship to the kick-off, so it's hard to know where to begin. . . I guess I'll start with our 12:00 meeting with the district personell. I was pleased with the organizational structure of that afternoon, and thought Gail Ritchie did for us just what she needed us to do -- I think we were definitely at the point in our work when it was good to bring in someone from the outside with knowledge and expertise to help us think about where we are going with the next step of this work. When I listened to Gail and the teacher research practices at Fairfax County Public Schools, two things happened for me. First, the work we have been doing as a NEFEC group was reaffirmed! I saw so many parrallels between the organizational structures Fairfax County has in place, and the ways our work has evolved with NEFEC. Both my intuition and the data we've collected over the years has led me to believe we have been on the "right track," but it is always good to get affirmation from an outside source.

Second, when I listened to Gail and the teacher research practices at Fairfax County public schools, I was reminded of the importance of teacher incentives when introducing teachers

to the process. I liked her use of the word "WIIFM," standing for "What's In It For Me?" I do believe that another important point for your districts to be thinking about as they strive to embed inquiry into their normal staff development practices is "What will constitute an effective incentive to draw teachers into this professional development process?," and "How can we creatively fund whatever incentives we come up with?" I thought the provision of 3 days of a substitute over the course of the school year so that teacher researchers can meet 6 times during the school day was a brilliant incentive that Fairfax County Public Schools provided. I think, more than anything, teachers need time! 6 meetings over the school year also coincide nicely with the critical junctures teachers face in the inquiry process. I also liked the differentiation for earning professional development points that Fairfax used (So many points for engaging in the process, so many additional points for presenting at their conference, and so many additional points if teachers write-up their work). Also, the points Fairfax County teachers received appeared to be fairly significant! Like NEFEC, they also provided a stipend for coaches. These are all points to be thinking about this year, and sharing with one another so we can learn from each other about how individual districts are tackling the "WIIFM" question.

Also, when I heard Gail speak about points, a random thought came into my mind -- can we provide points for others just to attend the showcase? If we do this, we'll accomplish two things - One, we will get more people from your districts to the Showcase so we potentially will have larger audiences for each presentation. Two, we will get potential inquirers to experience the Showcase, and they might be inspired to engage in the process themselves the following year. I'd really like to investigate this notion with Sabrina, and make a number goal for each district to bring other attendees besides the presenters themselves this year. If this is going to work, we've GOT TO START NOW, organizing the incentives for others from your districts to come, even if they are not presenting. I'll have to follow up with Sabrina on this . . .

OK, I'm off topic, but another thought swirling in my head after we met yesterday is the Showcase itself. I'm anxious to get a final count of how many teachers each facilitator is working with so I can begin to rethink the structure of the Showcase to adjust for our rapid growth over the last few years. . . this will come with time, and I'm sure we'll figure out a great plan.

Back to my reflections on our 12:00 meeting. I was glad to see so many district representatives in attendance, but of course, I also wished that every facilitator had representation from their districts with them. I worry some about the ways inquiry/action research might be interpreted by district administration if they do not have a knowledge base about the process. Two facilitators shared concerns that they think the way their districts might be going is that everyone has to action research on an assigned topic. This made me think a little more about the tension between the critical importance of the inquiry process being the teacher owning his/her wondering, and exploring something that he/she is really passionate about, and the power inquiry can hold for larger school improvement efforts, where wonderings might emerge from school improvement plans, or larger district efforts. I don't think the later is inherently a bad thing, but it certainly has the potential to become bad if the way it's translated into practice is district mandates that

require teachers to do inquiry on a "canned" question. I am going to keep thinking about this and how we can effectively head-off the "canned question" approach.

Even though I'm fatigued, so many thoughts keep swirling around in my head about the kick-off . . . this blog helps me keep track of them and gives me a space to get them out of my head and lay them aside to come back to later.

In this post, the site facilitator's model provides thick, rich descriptions of what she's thinking, what concerns her, and how she copes with managing the facilitation process. Sharing her thinking aloud in her weblog allows the site facilitator to show the coaches how she mentally works through her own wonderings and how she frames questions to hopefully deepen her own understandings of teacher professional development through action research. She further models posting for the on-line community members by labeling the top of her post (as suggested in the ground rules negotiated by participants) letting the coaches know that this post is long and even "a bit rambly." By following the ground rules, the site-facilitator demonstrates that she is cognizant of the rules formed by the group and is willing to accept them and act accordingly as a member of the online learning community. Finally, through modeling, the site facilitator provides a subtle message about the potential value of blogging by sharing how she plans to use her weblog space in the online learning community:

Even though I'm fatigued, so many thoughts keep swirling around in my head about the kick-off . . . this blog helps me keep track of them and gives me a space to get them out of my head and lay them aside to come back to later.

The site facilitator ends her blog by saying, in essence, "I plan on coming back to what I have written." She does not tell the coaches that she will write another post again expanding upon her initial thinking privately or publicly, but she does present the idea that this is a space she plans to return to. The site facilitator is showing the coaches how she plans on behaving in and utilizing their shared online community space. She is also indirectly sharing her expectations of how she would like to see the coaches use their space in the online learning community.

In this post, the site facilitator goes deep into her thinking. She shares many important items, ideas, and decision-points associated with participating in the online learning community. The coaches are able to see the facilitator model and discuss her thinking strategies. The coaches are then afforded the opportunity to discuss her approach or stance in greater detail. As a result of this post, five comments were generated; four from participants and one follow up response from the site facilitator. One of these responses from Jeannie, is an outstanding example of the ways this on-line learning community served to deepen the coaches' understandings of the action research process:

Thanks for the careful overview, Nancy. I know it helped add perspective for our administrative representative. This came out in the discussions we had during the break and subsequently. And it was important for me to hear Gail Ritchie speak about a longer term implementation of inquiry. I was glad to hear that they have been able to maintain interest and enthusiasm over years without making research a requirement. As you have mentioned in your reflections, mandatory research or specifically required projects will kill the spirit of inquiry, and the spirit is what drew me, at least, and I think most people, to the idea initially. I understand that there must be parameters for bureaucratic "necessities" as in-service points or stipends, but the always precarious balance between freedom and discipline is particularly sensitive here. Teachers have for so long had perfunctory or no influence on school policy, on curriculum frameworks, on time use, on professional standards--or pretty much anything involving their work experience--EXCEPT in the privacy of their own classrooms. I think this is why the deadly and stifling isolation has become such an intractable monolith. We're all trying to preserve the one area in which we have some choice. But I have long known--gut knowledge eventually found words--that in preserving isolation we were doomed to forever have the locus of power stay in other hands than ours. And real power could only come when we could justifiably say: we know what's best because we have tested the possibilities and have found what works. Inquiry is exciting because it allows for the testing of ideas in real life, and begins to give us the concrete support for insisting attention be paid to what we have to say. If the powers that already be are mandating it with preconceived ideas about what will result--well, once again we will have lost this promising potential for real and enduring and constantly evolving change for the better.

Through this post, the coach-commenter, Jeannie, provides a particularly sophisticated reading of the issues associated with mandating research and allowing individual teachers to select their own. Here Jeannie's voice and thinking are clearly on display. She not only shows that she has actively listened to and reflected on the site facilitator's thoughts in the original post

(i.e., issues associated with organizational structures, teacher motivation, stipends, in-service points), but that she then gives coaches in the online learning community a glimpse into how she perceives the situation from her perspective.

Jeannie articulates the issues thoughtfully and concisely demonstrating her knowledge of educational leadership issues, curriculum alignment, and the tensions that exist between teachers and administrators who both want to effect educational change for the better. Her comment demonstrates her skill and knowledge in being able to discuss complex issues with sensitivity to all stakeholders' views. In this sense, this comment is thick with meaning for those involved with getting inquiry projects and programs like the one all participants are currently engaged in to gain footing within their local school districts. While the comment does not call for any action, it does provide a thoughtful analysis of the situation most coaches find themselves in, providing a deeper understanding of the ideas originally broached in the site facilitator's post. More importantly, Jeannie seems to be responding in a manner similar to the site facilitator. Specifically, Jeannie seems to have internalized her modeling, and externalized it in a way that is both unique to her and representative of an online learning community site facilitator. In this sense, Jeannie's comment reveals a deeper understanding of coaching teacher inquiry/action research.

In contrast to Jeannie's post, a response to this site facilitator's posting by Jason has a different tone:

Wow Nancy, your posting wore me out just reading it. The speed at which your brain works overwhelms me. WIIFM is definately a concept all of us can relate to. If we don't then I think we are just being dishonest. In this era of applying the "business model" to education it is a little ironic to expect teachers to function on pure altruism.

Grant Duchess (my c.c.) has gotten approval for us to use our early release days for inquiry meetings. Not all will fit the schedule but I'm all in favor of killing two or three birds with one stone. Additionally we are giving points to the teacher inquirers for attending our local meetings . . . I think the idea of giving points for attending the Showcase is a great

idea. Spend a Saturday watching other people and get inservice points for it, what a great idea. What does this entail and are there rules about it?

Here Jason voices his way of thinking with the group letting the online learning community coaches know what he gathered from the site facilitator's post. Jason reports that it took him some effort to read the initial post. He shares a sense of feeling overwhelmed, and perhaps intimidated by the site facilitators' initial post ("Your posting wore me out just reading it.") This could also be seen as a way for Jason to off-load his feelings of anxiety associated with managing such a complex endeavor as coaching and managing other teachers through the teacher inquiry/action research process. Jason also points to the WIIFM (what's in it for me) phenomena mentioned in the site facilitator's post, a concept that initially surfaced in a face-to-face kick-off meeting. Jason suggests that if people cannot relate to the idea, then "I think we are just being dishonest." Jason's voice, his stance, are also revealed in the following line:

In this era of applying the "business model" to education it is a little ironic to expect teachers to function on pure altruism.

Here we catch a glimpse of Jason's stance toward education. While it is difficult to gauge his intent, he implies that teachers need economic incentives to do their jobs and that altruism, that is, the selfless concern for the welfare of others, is ironic or incongruent in light of the economic needs all teachers have. While this quip reveals several components of Jason's stance, it gives other coaches an opportunity to see what Jason is like both personally and professionally. In the following paragraph of his comment, Jason shares his experience with a local administrator in getting release time for his teacher researcher group from their official teaching duties to attend organizational meetings for their inquiry projects. Jason also notes he is "in favor of killing two or three birds with one stone" when working with his administration in organizing his teacher researcher team, thus demonstrating the efficient management and negotiation skills

to the other coaches. Jason then goes on to second the notion of granting requisite in-service points for teacher researchers around the region who attend the culminating showcase event:

I think the idea of giving points for attending the Showcase is a great idea. Spend a Saturday watching other people and get inservice points for it, what a great idea. What does this entail and are there rules about it?

Here online learning community coaches are able to catch a glimpse into Jason's stance.

While the paragraph starts with a positive affirmation, his tone appears to be a tad sardonic as he implies that attending a showcase session requires little effort and would appear to be an efficient, yet possibly a cognitively ineffective way to gain needed in-service points. He then follows with a question that seeks to clarify the rules associated with awarding in-service points for showcase attendance. Overall, the comment is rich in an orientational aspect—one can hear Jason's voice, his tone, his choice of words, all of which give form to his beliefs, his orientation, and his stance as a coach of teacher inquiry/action research. One can see how Jason approaches the issues outlined by the original site-facilitator's post, what items stood out in his mind. There is not much evidence of pedagogical knowledge or coaching knowledge, but there is evidence of his skills in working with administration, his leadership abilities in getting tasks accomplished, and his ability to collaborate with his own practitioner group and school officials. Knowledge of these factors, coupled with the contrast of tones and positionality between Jason and Jeannie's postings, contributed to the dialogue that occurred in the on-line learning community by providing alternative perspectives for all members of the community to consider.

Example 2: Thoughts about facilitating a professional learning community: In addition to responding to her own post, the site facilitator also modeled by reflecting on her own coaching of the participants in this community. For example, in a post titled “Thoughts about Facilitating a Professional Learning Community” (10/09/07), the site facilitators shares:

I thought I'd use my post to reflect on and share a little bit about my thinking about professional learning communities.

To me, a tremendous amount of knowledge about teaching and learning resides in the heads of teachers, but unfortunately, because of the ways schools are set up, teachers don't have the opportunity to share that knowledge with one another, and collaboratively build on what they know to create new knowledge about teaching and learning and make schools better places for those who inhabit them (students), and those who work in them (teachers and administrators). To me, professional learning communities (affectionately referred to as PLCs) are a wonderful way to tap into the knowledge that teachers have, and foster collaboration among professionals so everyone learns and furthers the work of teaching together. PLCs are groups of 6 - 12 individuals that meet on a regular basis to discuss teaching, often using protocols (specific, timed steps for fostering discussions). I have been a member of many learning communities in my professional lifetime, and have enjoyed facilitating them as well!

All of the PLCs I've facilitated to date, however, have met face-to-face. It seems like what I know about PLCs and their facilitation ought to be able to be translated into an on-line environment. The on-line space affords "flexibility" for meeting, as members can check into the community at different times. The on-line space affords a record of the learning community - what's been discussed, what we've discovered, etc., that would seem to be valuable to have. The on-line space helps make the literal distance that separates us geographically less of a hurdle to gathering a group of committed, dynamic educators together. The on-line space connects us to others outside our immediate vicinity, so we get fresh and new perspectives from others. Finally, I'm finding the on-line space to be just plain "cool," as my 11 and 14 year olds might say - it seems to be the wave of the future and it feels to me like when we're using the on-line space we're "on the cutting edge."

Intellectually, I know there are good reasons to be charting new waters and trying to facilitate a PLC on-line, but I find myself vacillating between the thrill of trying something new, and the agony of not knowing how it is working, what I should be doing as a facilitator, and what value it will add to our work together!

When I facilitate a face-to-face learning community, I can read the members' facial expressions and body language, and these often give me good clues as to where to move the group next. When I facilitate an on-line learning community, I can pose questions and I get immediate feedback from members of the group, and this helps me determine where to go next. In the on-line community, I am not getting these clues and so I am constantly questioning, "I wonder if members of our community read a post," "I wonder what they're thinking," and "What should I do next?"

This is really hard for me. I guess this is all a part of working through something new, but there are sure plenty of things I am worried about as I attempt to be the facilitator of this group. I'll keep at it though, and with your help, we'll all learn together!

Here the site facilitator is showing, not telling, coaches what she is thinking. By taking this stance, the site facilitator is once again modeling the type of behavior she expects from other coaches. Evidence is presented not only of her stance in the personalization of the concepts being presented (e.g., "To me,..."), but also evidence of her sharing subject knowledge related specifically to supporting the learning communities, defining them in such a way as to show how these communities can be utilized and structured. By presenting this information in such a fashion, the site facilitator provides participating coaches with basic subject knowledge about supporting groups of teachers for the purpose of deepening subject and pedagogical knowledge similar to the way she is supporting participants.

In this post, the site facilitator shows her orientation as a problematizer/problem-solver as she takes the time and effort to show coaches how she is thinking about facilitating coaches in a learning community. This metacognitive approach (or thinking aloud about one's thinking) is a powerful instructional strategy designed to give coaches a clear opportunity to see the ways in which an experienced coach organizes her thinking and the strategies she employs when presented with a problem within a given context (in this case, facilitating a learning community face-to-face and facilitating one online). Three important ideas surface in the site facilitator's thinking as the lead coach in the online community: (a) she is feeling a sense of disequilibrium as she tries something new (i.e., facilitating an online professional learning community) and not knowing whether it is working properly or not; (b) she shares a sense of not truly understanding her role as a site facilitator in this new environment; and (c) she shares a concern over the value this community provides all coaches, including herself.

Given the significant weight and depth associated with the subject and situation she is describing, what is important here, in terms of deepening the understanding of participant's

knowledge of coaching, is the orientation or stance the site facilitator models -- the struggle between the personal and intellectual forces inside her. In essence, the site facilitator is holding up a mirror to look at herself wherein you can see both her and the coaches in her reflection.

By candidly offering her thoughts and feelings in this post, the site facilitator is modeling her thinking and providing an example for the coaches to follow--one that is deeply insightful and reflective of the coaching process. In this sense, the site facilitator is setting the bar not only for participation expectations by the coaches, she is also creating a benchmark that the coaches can use to gauge their own participation.

The next day after this post was published in the online learning community, two comments were made. The first comment, again by Jason, provides several extensions worth examining more closely:

This is the only PLC of which I have ever been a part. So I can't really compare it to anything else. However, I agree with the statement that it is so important to read body language. We are always told that over 50% of our communication is non-verbal. So where does that leave us for our online community? I don't know, BUT I think we are more of a hybrid (real life/online) as we have developed community by meeting face to face before jumping into the online world. I would think that a totally online community would not be viable. In fact on the radio a few days ago there was a report stating that "online friendships" are generally not as close/real as real life friendships. Having said that I need to say that I am a guy who met his wife "online", and that is the closest friendship I have ever had.

This comment by Jason starts by sharing how he has no other professional learning community experience to compare to this one. He agrees with the site facilitator about the importance of body language, yet also poses a provocative question--"We are always told that over 50% of our communication is non-verbal. So where does that leave us for our online community?" This question suggests an understanding of the complexity associated with facilitating or managing a practice community online. He then provides a picture of how he views the online learning community not as being completely devoid of non-verbal

communication as he reminds the site facilitator and the other coaches that this particular community is a "hybrid," that is, it is both a face-to-face practice community given the past face-to-face meetings associated with the workshop, as well as an online practice community. He suggests that based on his understanding, a completely online community would be untenable. He then draws his evidence for this belief from a radio program he heard recently that suggested that online friendships are not as close as "real life relationships." While not directly going into the significance of such a statement or providing additional reasons to back up such beliefs as the site facilitator had done in her post, Jason almost discounts his aforementioned analysis by revealing that he met his "closest relationship" online. While it is difficult to say that this comment reveals clear evidence of a deeper understanding of teacher inquiry/action research, it is fair to say that evidence of a deeper understanding of the complexities associated with facilitating an online professional learning community is offered.

Following Jason's comment, a comment by Susan, a relatively quiet coach in terms of participating in the online learning community, provides additional insight into her thinking about the subject of facilitating a professional learning community online:

Jason, I think online PLC's are what you put into them. Just like your relationship turning out to be forever. You were honest, and you communicated with each other. We will need to do the same for it to work. :O) How awesome you met your better half online!

While Susan offers only a handful of words, they pack plenty of punch. Susan notes that, based on her orientation and understanding, professional learning communities are what people make them. While there is no additional evidence to support such a statement, Susan seems to understand that communities are only as valuable as the contribution of its members. This comment appears not only directed to the previous comment, but it also suggests that Susan relates to a comment made in the original facilitator post where the site facilitator wonders aloud about the value of this online learning community for the coaches. Susan takes on a teacher-

leader identity by suggesting that, similar to Jason's' relationship needs, the online learning community needs the same level of honesty and communication for it to work. Susan then adds levity to such an assertion by providing an emoticon, a short sequence of typeface letters and symbols that signify a facial expression or emotion, resembling a smiling face with a large clown-like nose: ":O)". Susan ends her comment with a supportive phrase as a means of both diffusing any animosity that her comments might construe as well as sharing a sense of awe and surprise in the fact that Jason met his wife online. While evidence of a deepened understanding of teacher inquiry/action research is not apparent in Susan's comment, evidence of a deeper understanding of coaching and her stance as a coach is. Susan shares an understanding that a professional learning community requires active, honest participation and communication skills by all members for it to be effective.

Analysis

In these two examples of the site facilitator action “modeling on-line learning community participation,” the site facilitator uses posts to demonstrate the reflective and metacognitive power of the online learning community as a medium for sharing aloud participants' thoughts and feelings. This leads to the idea of the site facilitator as a model for adaptive expertise (Hatano and Inagaki, 1986) as she works on moving away from routine ways of engaging coaches in a face-to-face professional learning community to the new, online learning community notably outside of her comfort zone. In addition, these postings by the site facilitator are in many ways framed by the guidelines handed out and discussed by coaches during the first face-to-face meeting (see Appendix A). In this regard, the site facilitator stays true to the guidelines by modeling her thinking, sharing her thoughts and expectations, raising concerns, and seeking input from the community.

Both examples indicate that the site facilitator was able to use the online learning community's weblogging space as a place to share her thinking and model the way in which the online learning community can be used to share and express the deeper thinking and feelings associated with facilitating teacher inquiry/action research. While not all coaches see this as evident, based on their differing levels of response and reflection, there is a concerted effort by the coaches to engage in a deeper conversation around the issues associated with facilitating teacher inquiry/action research.

Action 4: Announcements

Definition

Besides engaging coaches in the establishment and membership in the online learning community, inviting them to post and modeling the type of activity and behavior she wishes to see in the online learning community, the site facilitator used her posts simply to announce important reminders and share other information relative to the coaching experience. Given the number of tasks associated with managing a job-embedded teacher professional development program across many different districts, the site facilitator activity termed “Announcements” refers to the specific post made by the site facilitator to keep coaches informed and on-task.

Examples of Announcements

Example 1: Eight days and counting: Many of the reminders and information posted by the site facilitator were related to Showcase planning (e.g., “Showcase Count-Down Ready to Begin!” 04/02/08; “Showcase Program Ready to Roll! (Or At Least Edit!),” 03/21/08; “Technology For Showcase,” 03/12/08; “ABSTRACTS/TITLES DUE IN ONE WEEK,” 03/10/08; “Important Information About The Showcase,” 02/28/08; and “Abstract Instructions, 02/06/08”). For example, in a post titled “Eight Days and Counting...” (04/01/08), the following announcements were made:

Eight days to go until the Showcase! We are busy, busy, busy . . . handling all the details - name badges, programs, certificates, pins, handouts, schedules, signs, etc., etc., etc. It is all coming together slowly but surely and it is clear that with all of your hard work and awesome inquiry facilitation skills, the 2008 Showcase is sure to be the best ever! We have approximately 200 people attending on Friday evening and 350 attending on Saturday!!

Here's some important reminders and details....”

Here the site facilitator shares with the coaches’ important logistical information for the upcoming showcase. Since the showcase was the culminating experience for the coaches and their teacher researchers, hundreds of details were in need of attention. The site facilitator used the on-line learning community to push out important information to the coaches as a way of keeping them informed as well as soliciting them for additional support. While the on-line learning community was used for this purpose extensively, there were rarely any responses from coaches to posts that contained logistical information, and the little activity that was generated by such logistical announcement posts by the site facilitator were for the purpose of clarifying procedures and events, rather than focusing on the content of the action research process and the value of action research as a mechanism for teacher professional development. Therefore, there is no evidence that logistical information posts contributed to a deepening of the coaches’ understanding of action research and/or coaching.

Example 2: Important reminders: Besides Showcase-specific announcements, the site facilitator used announcement posts to directly guide coaches in the coaching process itself. One example of such a post followed this on-line learning community’s third face-to-face meeting in January, a time where this community tackled the topic of coaching teacher researchers in the process of data analysis. Shortly after this face-to-face meeting, the site facilitator contributed a post titled “Important Reminders,” (01/28/08):

Just a couple important announcements to follow up on our great meeting last week --

1. Remember to read Chapter 5 of *The Reflective Educator's Guide to Professional Development*. This is a GREAT resource for preparing for and planning your data analysis meetings that will be coming up soon. I think you'll enjoy the "scrap booking" metaphor that opens the chapter, and this analogy for data analysis can help you help your inquirers think about what data analysis is all about! Also, remind your inquirers to read Chapter 5 of their book, *The Reflective Educator's Guide to Classroom Research*. This chapter will take them through the process of data analysis step-by-step.
2. As your inquirers continue on with their work, remember the importance of literature as data (pp. 81 in *The Reflective Educator's Guide to Classroom Research*). As last year, CSI will utilize the UF Library and do literature searches for each one of your inquirers to help support them in figuring out which pieces of literature connect to their wonderings and will give them insights as their study is unfolding. We'll search for you and forward to you the top few resources we find. We've done this already for a number of facilitators. If you haven't yet submitted your list of inquirers and their topics/wonderings ... and would like to take advantage of this service, please do so as soon as possible....
3. At our last meeting, Jason asked me to post a resource on questions you might want to ask during data analysis . . . I think he might have been thinking about the probing questions figure that actually was created to help coaches probe during wondering development, but I've attached it here in case you think it might help with the data analysis meeting. (See Appendix C)

Direct information provided by the site facilitator in a post such as the one above were clearly designed and offered by the site facilitator for the explicit purpose of fostering a deepened understanding of the action research process, as well as a deepened understanding of coaching action research. Yet, given that there were no calls to action in this posting and no direct requests for coaches to reflect in their weblogs on these specific items, unlike the previous actions taken by the site facilitator (invitation to post and modeling), there is no direct, explicit evidence offered by the coaches in either their posts or comment replies that these actions by the site facilitator actually led to a deepening of their own evolving stance toward their own coaching practice. There were no comments associated with this post or other similar postings by the site-facilitator.

Analysis

In these two examples, the site facilitator utilized the online learning community to provide coaches with useful information regarding logistics of coaching as well as interject direct interventions associated with deepening participants' understanding of teacher inquiry/action research, and coaching the process. Interestingly, the direct information-giving style of these types of posts generated little response from members of the online learning community, and hence, we do not know if the intent of these posts were useful for the coaches. During the in-depth interview process, several coaches indicated that, while they did not always feel the need to respond online to informational announcements, they still found value in informational or direct instruction-type announcements by the site facilitator. Tanya (23 May 2008) reported that informational posts “kept you on track. And so I think it relieved ... frustration.” Similarly, Rachel noted (13 March 2008) that she did not “write anything down because” she recognized that she could “go back and find the critical dates or critical information” that she needed anytime.

Summary

In this chapter I have described and analyzed four distinct forms of site facilitator activity within the online learning community and these activities' relationship to the deepening of participating coaches' understanding of action research, the deepening of their understanding about facilitating action research, and the deepening of their own evolving stance toward their own coaching practice. These four forms of activity include: (1) Community Establishment, (2) Invitation to Post, (3) Modeling online learning community participation, and (3) Announcements.

In summary, community establishment referred to the specific actions the site facilitator initially took to get the online learning community up and running, as well as to set the

parameters for how this community would function. Invitation to post was defined as the actions the site facilitator took to encourage coaches to post in their weblogging space in the online learning community. Modeling on-line learning community participation referred to the site facilitator using posts as a means of modeling posting behavior she hoped to see by the coaches participating in the online learning community. Finally, Announcements were defined as posts designed simply to announce important reminders and share other information relative to the coaching experience.

A major finding in relationship to these four site facilitator's actions is that these actions were all critical to the functioning of this on-line learning community. Very little activity was initiated by coaches themselves (participant activity is discussed in greater detail in the following chapter). Hence, in this on-line learning community, the site facilitator emerges as the driving force in the community, or as poet Dylan Thomas puts it, "The force that through the green fuse drives the flower" (Thomas, 1934). This occurs as the site facilitator invites participating members to examine and reflect on their coaching practices with an eye towards improving or changing them.

The site facilitator was a central factor in addressing issues of community membership identity, interaction and site activity, as well as modeling community activity, and providing relevant information in support of community activity-- "the glue...connecting everyone" as one coach (Lynn interview, 21 May 2008) described it. This chapter highlighted the site facilitator activity as it is distinct from traditional forms of organizational (e.g., department chair, principal, district staff) and academic (e.g., instructor-student) leadership. In the case of this particular online learning community, the site facilitator performed a number of services including organizing, governing, networking, brokering, and socially supporting community members. In

this community, evidence suggests that the site facilitator modeled and reinforced community rules and norms of practice, but also encouraged and supported the growth of coaches toward becoming leaders themselves. While there are typically no designated roles and hierarchies in communities of practice (Schlager & Fusco, 2004), this particular online learning community would not have been able to exist or survive without the efforts of the site facilitator. As a result of this essentially task-based community design, that is, a learning community designed with an explicit intention to assemble a set of people focused on a shared goal, an interesting question emerges around the level of input and guidance associated with community facilitation. Since it was critical for the site facilitator to oversee the operations associated with the online learning community and its members, a tension arose in terms of the ways in which the site facilitator's actions sparked or ignited participation and the ways in which the site facilitator's actions inhibited members' participation. For example, did the length of the site facilitator's posts inspire coaches to write equally lengthy responses or did the site facilitator's posts inhibit and/or possibly frighten coaches in their depth, complexity, and richness? In reviewing the posting activity of the coaches, on average, most coaches typically wrote two paragraphs in a post. The site facilitator, on the other hand, typically posted five to six paragraphs in her personal blog postings, sometimes posting as many as nine paragraphs. The site facilitator generally used her personal blog posts as a way of thinking aloud where you can trace the evolution of her thought and literally watch her think. The question becomes, does this level of posting activity inhibit the coaches or inspire them? There is also the example cited earlier in this chapter under Action #3 where coach Jason suggests that Nancy's post "wore" him out "just reading it." While Jason's comment could infer simply some collegial, good-natured ribbing, it also suggests that the site facilitator's actions were possibly inhibiting him from responding in kind.

The role of the facilitator in online teacher professional development is "new and emerging" (Feger & Zibit, 2005, p. 10). Wallace (2003) notes particular aspects of teaching, learning, and interacting in online environments is neither well "described or researched" (p. 272). Subsequently, research in the area of teaching, learning, and professional development reveals little to no evidence of the way site facilitators in online learning communities function. Clearly the fields of e-learning, distance education, and online teacher professional development would benefit from discussions around the tensions that exists for the site facilitator as well as the conditions and evidence of what happens in a learning community in response to the way a site facilitator manages members and activity.

For Palloff and Pratt (1999), the role of the site facilitator is seen as one who utilizes strategies for offering guidance, as well as synthesizing comments posted in discussions. Bonk, Wisner, and Lee (2004) suggest that instructors engaged in managing learners in online environments need to know when to push participants further in their thinking and when to step back to allow participants to work through issues on their own. Although such an awareness seems relatively clear, how, when, and how often facilitators need to push and back off is not evident. Clearly facilitator content knowledge, pedagogical competency, and contextual factors are important; however, there is little research or literature on this topic to suggest particular best practice models online learning community site facilitators might want to follow. This study sets the groundwork for additional research that must indeed follow in the years ahead.

The online learning community as a social software application permitted the site facilitator and coaches to work cooperatively utilizing an online setting that not only facilitates the aggregation and organization of knowledge, but also permitted a diversity of individual research interests to enhance learning for the entire community. In this regard, the site facilitator,

in concert with the affordances of the online learning community application, was able to create a knowledge building network by providing a space to record and document participant's thinking about teacher inquiry/action research as well as fostering collaboration and interactivity between members of the community. How deep coaches chose to go was truly in their hands and could not be completely managed by the site facilitator. In this regard, it was the site facilitator's job to establish a safe and inviting community space, invite others to join, and provide each member a space to think and grow. Beyond this, the site facilitator could only model the behavior she sought by the community's members and prompt and support participants to work together to share and build upon their knowledge and practice associated with teacher inquiry/action research. Clearly, there were no guarantees that participating coaches in the online learning community would be able to deepen their understanding of teacher inquiry/action research, their understanding of facilitating or coaching teacher inquiry/action research, or to deepen their understanding of their own stance toward coaching teacher inquiry/action research. Perhaps the true potential of the site facilitator resided in helping the participating coaches figure out how to integrate their online and offline social experiences associated with participating in the online learning community. In this chapter, examples of integrating online and offline social experiences were discussed, prompted, and modeled by the site facilitator in the hopes of creating a cognitive apprenticeship for coaches.

Throughout this chapter I have shared examples of how the site facilitator carefully nurtured participating coaches in the online learning community based on organizational strategies designed to engage them at multiple levels. While maintaining a conventional hierarchical structure, i.e., the site facilitator was clearly in charge, the site facilitator was able to create and maintain conditions that enabled productive relationships. She was able to do this by

helping to establish the norms for how coaches engaged in interactions as well as acknowledging the contributions of others in the online learning community. The site facilitator was able to model the type of behavior she was seeking in coaches that in turn lent coaches the power to voice their own experiences that gave each coach an opportunity to have an equal voice in the online learning environment. By permitting each coach an equal voice, the site facilitator was able to build social capital with participating coaches that emphasized an environment of trust and reciprocity while generating cooperation through dialogue and discourse. Ultimately the site facilitator was able to build upon participating coaches' skills for communicating, collaborative problem solving, project coordination, and using the collaborative tools that made up the online learning community itself.

CHAPTER 7 COACH ACTIVITY

An analysis of data revealed three distinct coach actions within the online learning community. The purpose of this chapter is to name, describe and analyze these distinct actions and these actions' relationship to the deepening of inquiry coaches' understanding of action research, the deepening of their understanding about coaching action research, and the deepening of their own evolving stance toward their own coaching practice. These three actions include: (1) Responding to site facilitator prompts, (2) Commenting, and (3) Peripheral participation. I devote one section in the chapter to each of these three actions. Each section begins with a definition of the action followed by the provision of one or more excerpts from my data that serve to illustrate that action. After each example, I analyze these actions in relationship to the purpose of the study. This chapter ends with an overarching summary and discussion of coach actions, and their effect on the online learning community members.

Action 1: Responding to Site Facilitator Prompts

Definition

Responding to site facilitator prompts refers to the actions the coaches took when prompted by the site facilitator. At regular intervals the site facilitator posted specific prompts, cues, and/or calls to action she intended for the coaches to respond to in the online learning community. These calls to action were often intended to get the coaches to think and reflect about teacher inquiry/action research or coaching teacher inquiry/action research. Towards the end of the workshop as the Showcase neared, the site facilitator prompted coaches for specific logistical and organizational information related to organizing and managing the Showcase event.

Examples of Responding to Site Facilitator Prompts

Example 1: Reflecting on the teacher inquiry/action research process: In a response to a prompt by the site facilitator (*Important Information and Updates*, 11/13/2007) that specifically asked participants to post to their weblogs regarding

One aspect of my first local meeting (Developing Your Wondering) or my second local meeting (Designing Your Inquiry) that went well was . . . One question about teacher inquiry or about coaching teacher inquiry that emerged for me or for members of my group as a result of our first two meetings is . . .

Angie, a first time coach, responded as follows:

One aspect of my first local meeting, (developing your wondering), is that I was pleased that all of my teachers came ready with a concern and a wondering. We took turns sharing our wonderings and the group helped fine tuned the wording of the wonderings. We also discussed directions for the teachers to take in putting their inquiry into action and how to appropriately collect data. I was tickled when a few days later one of my teachers came to my office and said, "I am changing my inquiry." Her reading class had changed a few students and she said that she now saw a larger need. We talked about that is what a good teacher does, they inquire on the biggest need of their students. As their students change or grow, our methods have to change or grow.

One question about teacher inquiry that emerged for members of my group as a result of our first meeting is if a teacher is using a program or teacher material that has already been researched and proven is that really teacher inquiry?? For example, one of my teachers wants to use poetry to increase her students' fluency. She was going to use a book, "Poetry Partners." Can she use this book as part of her inquiry?? We discussed that teacher inquirers are not required to reinvent the wheel, but we are still fuzzy. Please give us your thoughts.

In this example, evidence of an understanding of teacher inquiry/action research and Angie's stance as a coach is revealed. Angie shares a brief recounting of events that took place at her meeting and how participants worked together to fine tune their wonderings, that is, their teacher inquiry/action research project objectives. She then shares that, to her chagrin, one of her teacher researcher's came to her to discuss the teacher researcher's inquiry/action research project in more detail. Angie shares her delight at being seen as a coach and not just another teacher. This is an important step in the development of a coach and teacher leader -- to be recognized by

your peers based on your new authoritative/leadership role. The final two sentences in this opening paragraph convey a tone of seasoning and experience, one associated with expertise,

We talked about that is what a good teacher does, they inquire on the biggest need of their students. As their students change or grow, our methods have to change or grow.

Angie demonstrates a stance and voice in her discourse reflecting that of a teacher leader, one open to change and growth. In the second paragraph, Angie acts as a medium for her teacher researcher group. As the group's leader she notes a question that emerged from her group that she was not sure how to answer. Given this response, it is clear that her knowledge of teacher inquiry/action research was insufficient to address the question of whether or not to allow a group member to study the effects of a particular intervention "that has already been researched and proven." Angie restates her question using a specific example from her group, then emphasizes her groups' shared desire not to create more work for themselves than necessary, that is, not "to reinvent the wheel." She concludes by sharing a feeling of fuzziness, or lack of clarity, and requests feedback.

From this example, there is evidence to suggest that Angie has certain level of understanding associated with teacher inquiry/action research that she is both comfortable and uncomfortable with. Angie uses her weblogging space in the online learning community to share what her experience of coaching in response to the prompt provided by the site facilitator. What makes this post special is that Angie then turns her sense of discomfort over to the community and asks members of the community (that is, the other coaches and the site facilitator) for assistance. In this respect, Angie becomes a help-seeker, hoping to be able to deepen both her understanding of teacher inquiry/action research as well as coaching teacher inquiry/action research to better support her local teacher researchers. By sharing her ignorance or seeking help, as it were, Angie reveals a deepened sense of her evolving stance toward her coaching practice

as she willingly shares the fact that she does not have all the answers and recognizes that if she wants to learn more, she must share her sense of disequilibrium (Piaget, 1950) and discomfort to better understand her practice. Similarly, Barkley (2005) notes that

Discomfort is key to growth and change. When good teachers become uncomfortable, that discomfort gives them impetus to improve, to wake up and get out of their box; it stimulates positive change. (p. 21)

By openly questioning and problematizing her situation, Angie voices a desire to deepen her knowledge of teacher inquiry/action research, coaching teacher inquiry/action research and a desire to deepen her understanding of her evolving stance toward coaching teacher inquiry/action research.

Example 2: Reflecting on the teacher inquiry/action research process: In a response to a prompt by the site facilitator (Remember to post, 11/16/2007), that specifically asks participants to post to their weblogs regarding

One aspect of my first local meeting (Developing Your Wondering) or my second local meeting (Designing Your Inquiry) that went well was . . . One question about teacher inquiry or about coaching teacher inquiry that emerged for me or for members of my group as a result of our first two meetings is . . .

Rachel, a seasoned coach, responded as follows:

Hi everyone! I'm going to use some of my Thanksgiving time to catch up on all the blogs. I feel sorry for you guys who only have 2-3 days off & we have the whole week. I've held two local meetings so far and have another planned for the week after Thanksgiving. My group is smaller than I had originally thought. Unfortunately, the showcase falls during our spring break so that created some conflicts for several participants. It also falls the same weekend as the Secondary Reading Conference in Panama City Beach. I don't know if any of you other coaches have noticed that conflict. Although our group is small we have some great ideas being developed. One of the elementary teachers plans to focus on fluency. Diana, I thought of you and referred her to your previous inquiry. Lake Butler also received a huge science grant this year. Therefore, another teacher plans to center her inquiry around some the developments through the grant. A guidance counselor at the middle school had a hard time deciding on her topic, but she has narrowed it to "How can we support teachers with a non-education background in a timely fashion, and what are the effects of that support?" I'm really excited about this inquiry because she is at my school and we have several new teachers that fall into this category. I also think it's an issue that's becoming very prevalent in education. Therefore, this inquiry will be helpful to everyone

who has the privilege of hearing her presentation. A new math coach at my school plans to focus her inquiry around how to encourage students to perform their best on extended and short response questions. This also goes along with our school wide goal for this year. She has many great ideas already in place to make this happen. My inquiry will be an expansion of last years. I want to try some other ideas based on mentoring, so I'll be taking it a step further. I hope this is acceptable. Nancy, maybe you can reply to this question....

In this post, Rachel shares aspects associated with teacher inquiry/action research and coaching her teacher through the inquiry/action research process. She voices the conflict associated with the logistics of the final showcase presentation for two of her local teacher researcher group members and wonders aloud if any other online learning community members have similar concerns ("Unfortunately, the showcase falls during our spring break so that created some conflicts for several participants. It also falls the same weekend as the Secondary Reading Conference in Panama City Beach. I don't know if any of you other coaches have noticed that conflict.") Rachel then shares the ideas being developed by her local teacher researcher group. In the process of doing so, she addresses a fellow coach in the community directly, sharing how she was reminded of a similar inquiry project by the coach, Diana, when she was working with one of the local teachers in her local group ("Diana, I thought of you and referred her to your previous inquiry"). This intertextual reference demonstrates evidence of Rachel's stance as a coach as she is able to recall and connect to the work of an online learning community coach. This level of recall clearly indicates a level of understanding of teacher inquiry/action research indicative of a knowledge-of stance (Cochran-Smith, 1999) associated with a deeper level of pedagogical understanding. Rachel's stance is also demonstrated in her ability to describe potential implications for each of her local teacher researcher's inquiry/action research projects. This stance serves the online learning community well as it directs attention to subject and pedagogical knowledge that could be useful in coaching others through the teacher inquiry/action research process. While Rachel does not share the details of her own teacher inquiry/action

research project, she hints at what she would like to do and seeks guidance and feedback from the site facilitator. In this sense, Rachel's discourse shows an identity switch from a teacher leader, to a help-seeker, turning to both the coaches and the site facilitator for feedback.

This example of responding to a site facilitator prompt shows how even a seasoned teacher inquiry/action research coach used site facilitator prompts to reflect on and share her understanding of teacher inquiry/action research and coaching teacher inquiry/action research, as well as seeking assistance from members of the online learning community. In this sense, the post shows how Rachel is still in the process of deepening her own stance toward coaching as she seeks further help and feedback from the site facilitator. Her willingness to openly ask for help suggests that she is still learning, which is a fundamental tenant of the inquiry stance being discussed and modeled by the site facilitator both in the face-to-face meetings and in the online learning community.

Analysis

These two examples of coaches responding to site facilitator prompts provide a generalized sense of how coaches acted when prompted by the site facilitator in the online community. These posts show how coaches used the online learning community to both share and reflect on their coaching activity as well as turn to the community for assistance when confronted with questions of their own. This willingness to openly share their uncertainties about their coaching practice indicates a level of trust, comfort, and respect the coaches held for one another as well as the site facilitator. This notion of trust was confirmed in the in-depth interview process wherein participating coaches agreed that they clearly felt a sense of trust among members of the online learning community. In reference to feeling a sense of trust in the online learning community, Lynn (05/21/2008) responded by saying "I never felt like I had to be guarded." Similarly, Rachel (03/13/2008) suggested that "Part of that I think is because we've been together for a couple of

years now but even the new people that have joined on have jumped right in. I think we've been supportive of each other, so yes, I would feel comfortable going to anybody in the group with a question.”

Given this trusting environment, coaches were able to build a community that fostered their ability to collaborate around the task of deepening their ability to understand and coach teacher inquiry/action research as well as deepen their understanding of their own individual stances toward their coaching practice. Rachel noted in her interview (03/13/2008) an idea echoed in multiple interviews with the other coaches that “by reading the different ideas that the other facilitators are doing” she was able to build on her own coaching practice:

[T]here's things all the time that pop up that people share that they're doing with their group and I'm like okay so that helps me, it helps all of us gain new ways to spark interest in the group or like I said earlier any time we have a problem or whatever an issue you know somebody always somebody comes back with a suggestion or whatever so it makes it easier to be a part of the group I guess I mean you're not by yourself you have that support there (Rachel interview, 03/13/2008).

In this sense the prompts by the site facilitator provided an avenue to get participating coaches to share and reflect on their practice in ways that ultimately supported members of the online learning community as a whole.

Action 2: Commenting

Definition

Commenting refers to the act of responding to a post using the reply feature in the online learning community. Through commenting, members of the community offer remarks, observations, reactions to, and expansions of thought based on the content of the original post. Commenting was a way that community members could engage one another in dialogue in the online learning community, in truly meaningful exchanges. Comments regularly evolved out of questions posed in a post of either a coach or the site facilitator.

Examples of Commenting

Example 1: Providing meaningful feedback: Going back to the first example of responding to a site facilitator prompt, Diana, a seasoned teacher inquiry/action research coach offered some follow up thoughts to Angie's original post (see Example 1: Responding to a site facilitator prompt above):

If A teacher is trying something different in her room, it is HER inquiry into what happens with her students. So I would say a big YES to your question of "Is that really teacher inquiry??" We are supposed to use research-based programs - so she can feel good about using the poetry. One of my teachers is using "Poetry Partners" at my school and I was so excited. I asked her to let me come into her room when the students are doing this. If she needs a good resource to use, Tim Rasinski's Fluent Reader is a great one! This is just my view, but I think I am on the right track...any others have a comment?

Here Diana, a veteran inquirer and coach, has a go at being the teacher leader, the expert, providing feedback and counsel in this situation. Her response to the question posed by the novice coach Angie offers a clear answer. Diana provides an example of her own to demonstrate the logic in her thinking by suggesting "If A teacher is trying something different in her room, it is HER inquiry into what happens with her students." In other words, Diana is saying that trying something different, something new, in a classroom is a form of inquiry whether it is research-based or not. By modeling her thinking, Diana serves as an example, a model, in both her stance as a teacher inquiry/action research coach as well as in her thinking about teacher inquiry/action research. As a model of an inquiry stance, Diana shares how she asks for an invitation to observe another teacher in her building who is modeling a specific intervention. Similarly, in an extension of her subject knowledge, Diana recommends another text (Tim Rasinski's Fluent Reader) that could be useful for Angie's teacher researcher who is considering studying "Poetry Partners" impact on reading fluency. Diana concludes that while she believes she is offering the correct advice, she too offers the question to the rest of the practice community offering, "any

others have a comment?" extending the discussion, validation, and adjudication to the online learning community at large.

Eleven days later, the original post author, Angie, leaves the following comment on Diana's comment:

Thank you so much for the response, Diana. This is exactly what I needed to hear. This is the TEACHER's inquiry for their students. You worded it perfectly for me to understand and to explain to my teachers.

There is clear evidence in this comment of a deepened understanding of teacher inquiry/action research and coaching teacher inquiry/action research by Angie. Angie makes it explicitly clear that she better understands the notion of inquiry as explained by Diana in her comment. Angie externalizes her understanding by restating the issue in her own words ("This is the TEACHER's inquiry for their students."), stating that she understood what Diana meant and can now take this new knowledge back to her teacher group with a strong rationale. Seeing this transfer of new knowledge and understanding, the site facilitator follows up the next day with a comment of her own to Angie's response to Diana's comment:

Hi Angie - So glad Diana responded to you and that her response was helpful! The more we get interactions like these in our on-line learning community, the more valuable it will become. My thoughts about this teacher and her proposed inquiry - I'm not sure how her wondering is worded, but it seems to me like the inquiry process would be a wonderful way to discover the ways a particular research-based program "plays out" in her own classroom. How does it work with different learners in her room? You are exactly on the money when you say that teacher inquirers don't need to reinvent the wheel - this is one of the reasons it's important to look at literature - what do we already know and what have others' thought about this topic? Sometimes I fear that there is more reinventing the wheel happening than needs to be . . . but at the same time, sometimes a learner (teacher) needs to come to his/her own discoveries in his/her own classrooms, even if that means there's some reinventing of the wheel happening! In this case, a teacher's inquiry is contributing to her own professional development, but not necessarily contributing knowledge to the field of teaching. (Both are valuable!) Diane [Yendol-Hoppey] and I have been thinking a lot more about this and we are going to try and discuss this in the second edition of *The Reflective Educator's Guide to Classroom Research*. If you (or anyone in our community) is interested, I could post a draft of the chapter that will be in the second edition of the book. Sounds like things are well underway with your group, Angie! So glad to have you on board as a facilitator this year!

In this comment associated with Angie's post, the site facilitator notes the value such exchanges between coaches provide. She goes so far as to directly remind coaches that "The more we get interactions like these in our on-line learning community, the more valuable it will become." The site facilitator then shares her thinking about the question originally posed by Angie regarding inquiry into research-based programs. Here the site facilitator demonstrates the way she goes about framing a question, then shifts focus to addressing Angie's initial concerns about doing more work than necessary (i.e., re-inventing the wheel), a common experience for many inquirers/action researchers. Instead of offering only a superficial response to this notion of re-inventing the wheel, the site facilitator goes on to show how re-inventing the wheel can be valuable in terms of allowing teacher researchers to come to their own discoveries. The site facilitator notes that while a study that utilizes research-based materials will be valuable to the teacher researcher completing the study, it might not be useful for other practitioners in the field, that is, since research already shows that the particular intervention under investigation has a research-based track record that has led to student gains. The site facilitator extends her thinking more by then sharing that she and her writing partner, Diane Yendol-Hoppey would like to discuss aspects of this situation in more detail in the next edition of their book on the subject of conducting classroom research ("the second edition of *The Reflective Educator's Guide to Classroom Research*"). She then offers to post the new chapter for the group to use, reaching out to the practice community for feedback on how they would like to proceed in this regard. The site facilitator ends her comment with a strong pat on the back, "Sounds like things are well underway with your group, Angie! So glad to have you on board as a facilitator this year!" with each of the two closing sentences ending with exclamations in an effort to convey excitement and pleasure with the engaged behavior she has witnessed from the new coach.

Commenting in this example provides a way for participating coaches to deepen their understanding of action research and coaching action research. The dialogic exchange made possible through the commenting feature associated with the online learning community provides a way for coaches and the site facilitator to engage each other in discussion that can lead to a fuller, more complete understanding of action research and coaching action research. While there is no direct evidence of a deepened understanding of either the coaches' or the site facilitator's stance toward their coaching practice, it appears that this particular post was important for the site facilitator in that it provided evidence for a misconception held by many novice practitioners of teacher inquiry/action research, namely that of re-inventing the wheel. In this sense, the site facilitator was able to deepen her own understanding of coaching the teacher inquiry/action research process as the information afforded her through Angie's initial post and the associated discussion provided additional evidence of the trouble spots new coaches and teacher researchers can experience.

Example 2: Extending thought: The following example of how commenting deepened coaches' understanding of action research and coaching action research, started with a post by seasoned coach Tonya (*Putnam's Progress*, 11/27/2007) in response to a site facilitator prompt (*Remember to Post!* 11/16/2007). The post describes some of the issues surrounding the management of Tonya's local teacher group:

Putnam is finally making some true progress. We had our second "formal" meeting on Monday, the 26th. We are finding it extraordinarily difficult to have group meetings because one of us is in the other end of the county some 40 miles away and the rest although we are located at the same school- it is one undergoing reconstruction so the meetings are endless. We have agreed to meet bimonthly as a large group and to utilize email and "drive-bys " for the other meetings. I think this will work ok. We spent the the first large group meetings working on our wonderings. We now have those finalized. Everyone is now working on beginning to tweak them as they put them into action. We are excited.

While this post offers little substance in terms of a deeper understanding of teacher inquiry/action research, coaching teacher inquiry/action research, or a deepened stance toward coaching teacher inquiry/action research, the comments that follow tell another story. The first comment by the highly engaged coach, Diana, offers specific advice for coaches experiencing similar organizational issues noted in Tonya's initial post:

I have also found it extraordinarily difficult to have group meetings because my teachers are spread out across a large county as well. I never thought I could pull it off last year because of this, but I was so excited with the results when I tried a few alternatives. I have to do many of the same things this year as well. It was so worth it last year because the ones who could not attend the “regular” meetings were so pumped up to meet with me and get inquiry going at their school that I felt the extra effort was well worth it! Things that have worked well in the past for me are: (hope they can help you)

1. Try to have a constant (weekly) dialog with everyone via email (or if that doesn't work – the telephone).
2. If you set a date and some cannot come, offer a phone conference, email dialog, face-to-face at their school or some other location, or a second meeting date if it involves more than one teacher
3. Share the group's work so far with the ones who could not attend and visa versa.
4. Encourage them to find ways to attend (Sabrina said we could use the sub day in hours at a time if we wanted to be creative). With my secondary schools, that dismiss students at least an hour later than the elementary schools do, we were given permission to have a sub cover the last hour of the day on the days we met.

This comment reveals a great deal about the stance developed by Diana in the online learning community. Rather than offer a short, empathetic comment, Diana offers specific strategies that she has used in the past to keep on top of her local teacher researcher's group. Diana adopts a teacher leader stance demonstrating her understanding of coaching teacher inquiry/action research, not just talking about the subject. Discursive evidence of how Diana's knowledge of coaching teacher inquiry/action research has deepened as a result of experimenting with these strategies (“It was so worth it last year because the ones who could not attend the “regular” meetings were so pumped up to meet with me and get inquiry going at their school that

I felt the extra effort was well worth it!") is made clearly evident. In a follow-up comment by Rachel posted eight days later, Diana's advice is acknowledged and clearly appreciated by another member of the online learning community:

That was great advice. Thanks for sharing your tips for keeping everyone connected. It is very difficult to find time that works with everyone's schedules.

While this comment does not offer the depth or extension of Diana's comment, it does offer appreciable social and moral support. Such "attaboy" type comments are important for members of the community given the transactional distance associated with dialogue and engagement in the online learning community. Such a comment provides a simple form of recognition that acknowledges that the coach's response was both received and appreciated in some respect. In the initial ground rules developed by the coaches, it was clear that members of the online learning community desired to be recognized for their contributions (rule 5) and that there would be an agreed upon attempt to provide some form of reply to all postings. Thus, while all comments were not deepening agents, that is, providing evidence of an enlightened understanding of action research, coaching, or a deeper understanding of coaches' stance toward their coaching practice, simply responding in some form was seen as an important aspect to sustenance of the online learning community. In Diana's interview (03/26/2008) she noted that deepening aspects of the online learning community involved "just listening to the conversation people are having." She continued, adding, "Anytime you communicate with somebody it seems like it helps you understand what you're doing more." This notion of just listening is explored in more detail in the next section of this chapter.

Analysis

Commenting in the online learning community was a form of what Vygotsky referred to as a *zone of proximal development* (Vygotsky, 1978, p.86), that is, a space where capable peers

were able to assist one another in working through the demands of and disequilibrium associated with coaching and collaboration. The exchanges of comments by the coaches with one another and between the coaches and the site facilitator often provided evidence of a deepened understanding of teacher inquiry/action research and the coaching of teacher inquiry/action research. The voices and discourse within comment threads revealed coaches and the site facilitator seeking help or advice, providing answers, advice, and ways of extending their thinking about teacher inquiry/action research, coaching teacher inquiry/action research, and/or deepening their own understanding of their stance toward coaching. Sometimes comments provided a small but important amount of moral support that the coaches deemed important enough to include in the ground rules associated with the management and participatory obligations associated with online learning community membership.

Action 3: Peripheral Participation

Definition

Peripheral participation in this context stems from the notion of situated learning supported by Lave and Wenger (1991) in their seminal text *Situated Learning: Legitimate Peripheral Participation*. In this context, Lave and Wenger explore how newcomers become integrated into a community of practice through what they describe as *legitimate peripheral participation*. This construct focuses on the ways in which learners authentically engage in the practice of an expert. In the context of this study, peripheral participation refers to the ways in which coaches observe the interactions of each other at the periphery as opposed to directly engaging one another. Subsequently, based on in-depth interviews and the administrative log files, it was clear that coaches spent a good deal of their time in the online learning community observing each other online, that is, reading over each others' posts and the site facilitator announcements, rather than actually creating posts and providing comments.

Examples of Peripheral Participation

Example 1: The online learning community as a coach: During the in-depth interviews, coaches readily shared that while they may not have been writing a lot in their weblogs or providing a great deal of comments to one another, they did check the online learning community regularly to see what was taking place. For example, Susan noted (20 March 2008) that “Even if I didn't get on and actually say anything, I could go on and look back at what we already talked about.” Similarly, Lynn suggested (21 May 2008) that although she “didn't write as much as I could have,... that doesn't lessen the value of the tool [the online learning community].... Just because there's not something written back doesn't mean that it hasn't had a value, that it hasn't had an impact. I know that, I know that feeds it, but you, you can't judge the value of it by the number of responses.” This statement by Lynn demonstrates how she saw the online learning community as a tool, as a resource, where all members of the community could share strategies, techniques, interventions and information. This, in her eyes, was where the value of the online learning community resided. Along these same lines, Diana (26 March 2008) added that, “The online community is like a coach also,” in that the community itself served as the collective mind of the community members, that is, the sum of everybody's contribution that could be accessed whenever information or assistance was needed.

For Tonya, the online learning community served her as a guide as well. Here, in her own words, she describes how the online learning community kept her on track and on-task:

I think it relieved that frustration level that of, "I don't know what I'm doing," and "I don't know how to find this answer," and "I don't have time to track this person down." A lot of the times, most of the time, it was there if I would just take the time to dig and say, "Okay, this person didn't have it. Okay, let me scroll down to the next person, Okay," until eventually you found somebody that had the same or something similar that, "Okay, I can adapt that to how it fits my situation." So I don't think I could have done that without it [the online learning community].... [I]t provided a lot of information....

Tonya benefited from being able to access the online learning community and find and adapt the information she needed for her specific coaching purposes. In each of these quotations, it appears that the online learning community helped deepen coaches' knowledge of teacher inquiry/action research and coaching teacher inquiry/action research by simply being there for coaches as a clearing house or repository of the collective work of the community as a whole. While participation of the coaches was required to create the content that was found to be useful, the site itself served as a means for coaches to deepen their understanding of teacher inquiry/action research and coaching teacher inquiry/action research since it was always there for coaches to turn to when they needed it, providing a connection to questions, answers, and examples, as an actual coach or as the site facilitator might.

In terms of deepening the evolving stance of the coaches as coaches of teacher inquiry/action research, the online learning community provided several benefits noted in the in-depth interviews. The online learning community itself provided a space where coaches could see each other in action, that is, voicing how they responded to situations in their practice, which in turn "made me feel more confident that I could do it just like anybody else could do it" (Mary, 21 May 2008). Similarly, Lynn noted (21 May 2008) that she adapted the online learning community site contents in a way to "mirror the approach and the tone and the openness that's been shown" in the online learning community. In other words, for many coaches, the online learning community provided a space where they could benchmark themselves with the other coaches to determine how well they were coaching others. In this sense, the online learning community provided a space where coaches could develop self-efficacy regarding their coaching practice and in turn deepen their understanding of their own stance toward coaching others through the teacher inquiry/action research process.

Example 2: Administrative log file data: Taking a look at Table 7-1 (based on the total participation data according to the online learning community administrator log files minus the data of the NEFEC personnel and the researcher), overall coaches spent more of their time looking at content in the online learning community than creating it.

Table 7-1. Total participation data of participating coaches according to the online learning community administrator log files.

	Diana	Jerry	Gena	Susan	Rachel	Tonya	Angie	Mary	Jason	Lynn	Jeannie
Access	73	73	60	47	38	30	22	21	18	17	8
Posts	23	12	10	11	11	12	11	6	6	4	2
Comments	30	21	26	8	15	4	4	8	9	6	3
Announcements	0	0	0	0	0	0	0	0	0	0	0

This data suggests that, as noted above, the value of the online learning community was its resourcefulness, that is, in its ability to capture, retain, and redistribute information necessary for coaches and the site facilitator to support their practice of coaching teacher inquiry/action research.

Analysis

The in-depth interview of participating coaches suggest that the online learning community helped deepen coaches' understanding of action research and coaching action research by serving as a repository or clearinghouse of important information associated with the practice of coaching teacher inquiry/action research. The online learning community site itself permitted coaches to participate in a professional learning community peripherally, without always having to contribute content in order to gain a deeper knowledge or understanding of their practice. The accompanying administrative log files data shows that coaches did spend more time looking at each others' content than creating it. The power log trend implied by the participation totals in Table 7-2 indicates that fewer users participated more often. While the participation data helps to see quantitative trends over the course of the study, it does not shed light on the evolving, organic dynamics of the online learning community. As noted in the in-depth interviews, coaches

found value in the online learning community as a communication tool that supported collaborative learning and knowledge production.

Summary

In this chapter I have described and analyzed three distinct forms of coach activity within the online learning community and these activities' relationship to the deepening of participating coaches' understanding of action research, the deepening of their understanding about facilitating action research, and the deepening of their own evolving stance toward their own coaching practice. These three forms of activity include (1) responding to site facilitator prompts, (2) commenting, and (3) peripheral participation.

In summary, responding to site facilitator prompts referred to the actions (e.g., the prompts, cues, and/or calls to action) the coaches took when prompted by the site facilitator in the online learning community. Commenting referred to the acts of responding to a post (e.g., offering remarks, observations, reactions to, and expansions of thought) using the reply feature in the online learning community. Finally, peripheral participation referred to the ways in which coaches observed the interactions of each other at the periphery as opposed to directly engaging one another.

The online learning community was only as valuable as what the participants (the coaches and the site facilitator) were able to contribute to it. This was noted by the site facilitator from the start of the workshop and was reiterated by coaches in the in-depth interview process. If coaches did not respond to prompts, did not supply evidence of what techniques and strategies were working for them in either their own posts or in their comments to one another, then there was indeed no benefit to the members of the online learning community.

While contributing to the community via responding to prompts and commenting was critical to the value associated with the online learning community, coaches also derived value

from observing each others' content on the site without directly adding anything to the conversation. This form of eavesdropping or peripheral participation is also important to note in terms of how an online learning community can support online teacher professional development.

It is important to note that the success of the online learning community was also greatly dependent on the attitude, spirit, and the willingness, that is, the social capital, of the coaches to engage each other in the shared goal of coaching teacher researchers through the teacher inquiry/action research process. Without this level of trust and support, the coaches would have found little value in participating in the online learning community.

While not stated directly by many coaches in their in-depth interviews or in their online contributions to the online learning community, the training sessions and online learning community provided coaches an opportunity to network with like-minded educators across multiple school districts. In her interview, Diana noted that through the online learning community she was able to "talk to other people" that were knowledgeable about what she was doing:

There's some teachers here who have participated in inquiry but they've never facilitated it. So going through the process with somebody helping you is different than going through the process your self and helping others. So the online community has been very valuable to me. It has helped me.

Diana's example here points directly to the importance of teacher talk or teacher's voices and how critical they are in understanding and improving their own classroom practices (Cochran-Smith & Lytle, 1996). It would appear based on the findings associated with the ways in which coaches behaved in an online learning community, more research is necessary to continue exploring the ways in which information and communication technologies can be used to provide organizational structures that enable teachers to join together in a discussion of their

work, learn from each other, and address important "curricular and instructional issues"
(Cochran-Smith & Lytle, 1993, p. 89).

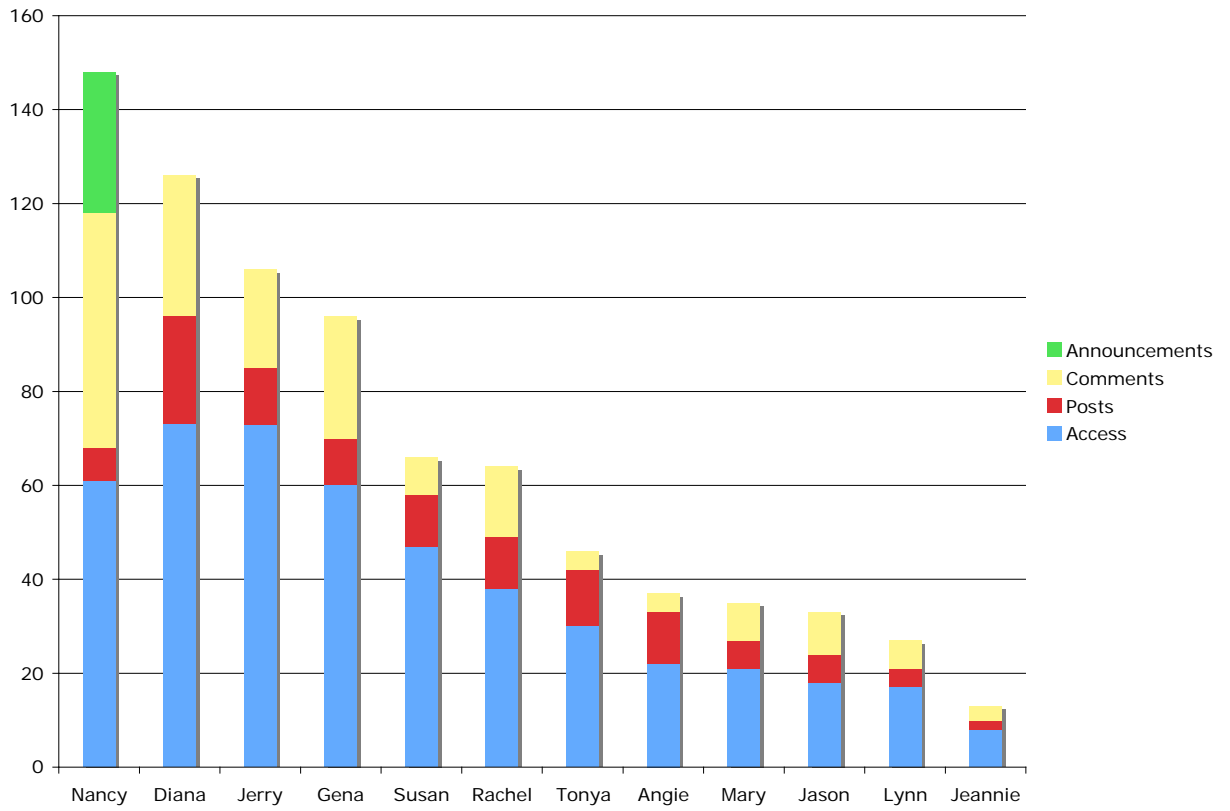


Figure 7-1. Power log trend based on participation totals of the site facilitator and coaches in the online learning community.

CHAPTER 8 CONCLUSIONS

The purpose of this chapter is to look across the findings that were generated through the careful analysis of the site facilitator's and coaches' actions reported in chapters 6 and 7. In order to accomplish this goal, I provide a brief summary of the entire study. Next I report one assertion that cuts across the analyses of both the site facilitator's and coaches' actions. This is a process that Erickson (1986) likens to pulling "strings of data" from a "large cardboard box:"

A report of fieldwork research contains empirical assertions that vary in scope and in level of inference. One basic task of data analysis is to generate these assertions...An appropriate metaphor for this kind of pattern discovery and testing is to think of the entire data set (field notes, interviews, site documents, videotapes) as a large cardboard box filled with pieces of paper on which appear items of data. Up and down a hierarchy of general and subsidiary linkages, some of the strings attach to other strings...When one pulls the top string, one wants as many subsidiary strings as possible to be attached to data. The strongest assertions are those that have the most strings attached to them, across the widest possible range of sources and kinds of data (p. 146, p. 148).

After identifying the top string, an assertion, I present a summary of the evidence that supports the primary assertion of this study that online teacher professional development requires participants to take certain actions to facilitate a powerful learning community. Finally, I end the chapter with the implications of this study for the members of this online learning community, staff developers, and educational researchers.

Summary of the Study

Advances in web-based technologies as a form of teacher professional development is an emerging area of study, with a base of published research that can be considered thin (Borko, Whitcomb, and Liston, 2009). This study examined community member interactions within an online learning community to determine the ways participation in an online learning community influenced participants' abilities to (1) deepen their understanding of teacher inquiry/action research, (2) deepen their understanding of coaching educators in the process of teacher

inquiry/action research, and (3) deepen their understanding of their own evolving stance toward their coaching practice.

A review of recent and relevant literature associated with teacher professional development, professional learning communities, teacher inquiry/action research, and online teacher professional development was created to situate the study in the extant literature. To narrow the search for studies that offered representative empirical research, each of these constructs was selected as a way of framing this study. An analysis of the literature suggests that given the promise of teacher inquiry/action research to transform educators' practices and improve schools, as well as advances in thinking about professional learning communities and online learning, it is reasonable to examine the role of a facilitated, online learning environment and how participation in such a focused community of practice can enhance educators' professional knowledge and skills.

To better understand how an online learning community deepened participants' understanding of teacher inquiry/action research, coaching teacher inquiry/action research, and a deepened participants' evolving stance toward their coaching practice, I conducted in-depth interviews with participants, thoroughly analyzed the content of participants' interview transcripts and published learning community posts, and triangulated these data sets with the administrative log files associated with the activity on the learning community site in an effort to see what types of patterns of evidence of participant understanding might emerge from these data sources.

The online community examined in this study emerged from ongoing work between the University of Florida and the North East Florida Educational Consortium. Chapter 4 described the history leading up to the online learning community, why this history was important, and

how it led to the development of the online learning community that is the object of this study. An understanding of these events is essential to understanding the context within which the online learning community was framed. In addition, this chapter provided a brief introduction to each of the members of the online learning community, as well as an overview of activities and experiences that complimented their participation in the online learning community. An introduction to these participants and an overview of their experiences is essential to understanding the content of discussions that occurred within the online learning community.

The results of this study are reported in three chapters. Chapter 5 provided a detailed description of the online learning community site itself to include specific site elements and functions designed to support sustained interaction among participants. This overview of the site's design and functionality is essential to understanding how participants were able to engage one another in the online learning community. Given the number of inquiry facilitators, their geographic spread, as well as the limited number of times these coaches were able to meet face-to-face, the need for a means to stay in touch while working with their teacher researchers was clearly warranted. The online learning community site provided key elements that enabled participants to view news and information, respond to site facilitator prompts, post documents and reflections on their blogs, as well as provide replies and comments on each others' posts and announcements. This functionality enabled by the site was the key means of participant engagement that make up the experiences essential to understanding the content of discussions that occurred within the online learning community introduced in Chapters 6 and 7.

In Chapter 6 I described and analyzed four distinct forms of site facilitator activity within the online learning community and these activities' relationship to the deepening of participating coaches' understanding of action research, the deepening of their understanding about facilitating

action research, and the deepening of their own evolving stance toward their own coaching practice. These four forms of activity included: (1) Community Establishment, (2) Invitation to Post, (3) Modeling online learning community participation, and (3) Announcements. The site facilitator emerged as the driving force behind all activity in the online learning community, i.e., "the glue" that connected all participants and actions on the site. A tension was noted regarding the ways in which the site facilitator's actions both sparked and inhibited coaches' engagement in the learning community. Given that the role of the facilitator in online teacher professional development is "new and emerging" (Feger & Zibit, 2005, p. 10), more research is warranted to determine the ways in which a site facilitator can best address the different aspects of managing members' engagement in an online learning community.

The distinct actions of coaches in the online learning community and these actions' relationship to the deepening of inquiry coaches' understanding of action research, the deepening of their understanding about coaching action research, and the deepening of their own evolving stance toward their own coaching practice was examined in Chapter 7. These three actions included: (1) Responding to site facilitator prompts, (2) Commenting, and (3) Peripheral Participation. The findings suggest that if participating coaches did not respond to the site facilitator's prompts, did not supply evidence of what techniques and strategies were working for them in either their own posts or in their comments to one another, then there was no benefit or no knowledge gained by the members of the online learning community. While contributing to the community via responding to prompts and commenting was critical to the value associated with the online learning community, coaches also derived value from observing each others' content on the site without directly adding anything to the conversation. This form of

eavesdropping or peripheral participation was also critical to note in terms of how an online learning community can support online teacher professional development.

Assertion

Using activity theory as an analytical framework for this study, I was able to trace “the motive, goals, and conditions” of the online learning community’s activity; identify “structural components” of the participants’ actions and operations, as well as the tools mediating the activity; and trace deepened understandings based on the participants’ actions (Kaptelinin, 1996, p. 58). Utilizing this framework, three categories of data were analyzed. The first category was the site facilitator activities and the subsequent responses by the coaches to them. The second category of data was the coaches’ activities. The third category was the technical data associated with the site facilitator and coaches’ activities as logged on the online learning community site. From looking across these data sets, a set of assertions was generated to explain how and why the asynchronous online teacher professional development community functioned:

- There were various motivations that brought participants to the online learning community;
- Those motivations drove the way participants engaged in activity;
- Those motivations can be described as “roles;”
- Those roles translated into operational ways of acting in the online learning community;
- The site facilitator and the participating coaches in the online learning community enacted a variety of roles and made decisions on when and how to enact those roles leading to outcomes that sustained the goal or object of the community.

To support this set of assertions, I name and describe the roles played by the site facilitator and the coaches in the following sections.

Site Facilitator Roles

The site facilitator took on three distinct roles within the online learning community. These roles included (1) community leader, (2) educative mentor, and (3) a participatory modeler.

These roles shifted and overlapped depending on the context and the site facilitator's intentions.

Community leader

For the purposes of this study, I have defined a community leader as a person who guides a group of people linked by a common interest or shared goal. As the online learning community's leader, the site facilitator was responsible for establishing and guiding the community for the participating coaches based on the goals of the partnership with P.K. Yonge Developmental Research School and the Northeast Florida Educational Consortium to provide training and guidance in teacher inquiry/action research. The site facilitator managed and maintained the learning community to include providing important information to the coaches as well as coordinating events online and face-to-face, creating a capacity for the learning community to work effectively toward achieving their shared goal. Additionally, as community leader, the site facilitator managed the expectations of the coaches, building and managing trust, engaging coaches in dialogue online, and acknowledging contributions of coaches through comments, weblog posts, and announcements in the online learning community. As community leader, the site facilitator designed appropriate yet flexible governance mechanisms to support and empower coaches in an effort to engage community members in their shared vision.

Educative mentor

An educative mentor can be defined as a person who promotes

A kind of teaching that is focused on conceptual understanding of subject matter, connections between learning and their pedagogical experiences in real-life contexts, active discovery of ideas, and careful examination of the ideas in a community of learners (Yendol-Hoppey & Dana, 2007, p. 15).

As an educative mentor, the site facilitator was responsible for the direct instruction of coaches on how to conduct teacher inquiry/action research as well as coach teacher inquiry/action research. The site facilitator was able to do this through assigned readings, face-to-face meetings, and online discussions designed to focus coaches on key elements of the teacher inquiry/action research process. The site facilitator in essence was responsible for steering the learning of participating coaches through a delicate balance of prompting and engaging coaches to reflect critically on their work as coaches in the online learning community.

Participatory modeler

A participatory modeler can be defined as a person who serves as an example of engaged, intentional, sharing behavior in the online learning community. As a participatory modeler, the site facilitator exemplified both adaptive expertise and a teacher inquiry stance for the coaches. As a model of adaptive expertise, the site facilitator shared in her weblog how her initial discomfort with facilitating the learning community online made her feel "nervous" (26 September 2007), yet she added an interrogative that revealed a sense of wonder suggesting that she anticipated a possible change of feeling over time :

Can our participation in our on-line learning community be as wonderful as our face-to-face participation in our learning community? Can it be better? Time will tell . . .

Such a stance, one open to possibility and growth, serves as an example of adaptability for the participating coaches. Through sharing her reflections online with the learning community, the site facilitator engaged in a level of metacognition that revealed her thought processes and ways of thinking about participating in the learning community. The site facilitator often shared how she thought about issues associated with managing an online community both showing participants how she framed an issue and the thought processes associated with solving the issue. In this sense, the site facilitator revealed herself to be both a problematizer and problem-solver as

a way of not only showing coaches her mind at work, but also as a way of using writing to think through issues and concerns.

Analysis

According to Anklam (2007), learning networks like the online learning community require a leader that serves as a role model for the norms and behaviors defined by the community members. While community leaders can never direct all activities to predictable outcomes, they must be able to create an environment where the relationships of the community members produce "innovative and productive outcomes for its members" (Anklam, 2007, p. 6) and the community itself. Analysis of the site facilitator's actions show that she assumed multiple roles in the online learning community as a community leader, educative mentor, and participatory modeler, and that these roles often overlapped depending on the situation at hand. Announcements often revealed the site facilitator in all three roles as she sought to communicate information, provide direct instruction, engage and steer coaches in critical reflection about their coaching practice, as well as model the type of writing and thinking she hoped to see in the coaches' posts. All three roles serve the learning community as a means to create and maintain the conditions that "enable productive and innovative relationships" (Anklam, 2007, p. 6).

Coaches' roles

The coaches took on four distinct roles within the online learning community. These roles included (1) advice seeker, (2) advice giver, (3) encourager, and (4) eavesdropper. These roles shifted and overlapped depending on the context and the coaches' intentions.

Advice seeker

Since social interaction is critical to knowledge building in online learning environments (Lou, Abrami, & d'Apollonia, 2001), it makes sense that coaches would use the online learning community as a space to ask questions, share and discuss their experiences as teacher

inquiry/action research coaches. In Chapter 7 Angie shares her feelings of discomfort with the community and asks for feedback regarding her coaching practice:

...one of my teachers wants to use poetry to increase her students' fluency. She was going to use a book, "Poetry Partners." Can she use this book as part of her inquiry?? We discussed that teacher inquirers are not required to reinvent the wheel, but we are still fuzzy. Please give us your thoughts.

Using both site facilitator prompts and their own initiative, coaches sought advice from learning community members in terms of understanding how to address specific concerns or contexts associated with coaching teacher inquiry/action research.

Advice giver

An advice giver can be defined as a coach who was willing to share his/her experiences and advise members of the learning community on issues associated with conducting and coaching teacher inquiry/action research. Diana notes in her interview (26 March 2008),

Most of the time I don't talk about my own inquiry, I just talk about helping others with their's. So it has helped me be a facilitator.

Providing advice and feedback was a role assumed mostly by seasoned or experienced coaches. However, through prompting by the site facilitator, all coaches offered differing levels of advice and knowledge of teacher inquiry/action research that served the community as a whole in terms of offering a variety of viewpoints that could be assessed by each member of the community depending on their context or needs.

Encourager

The role of the encourager can be defined as a coach who offered a voice of support or advocacy for another member of the community. In Chapter 7 Rachel takes the time to acknowledge Diana's support:

That was great advice. Thanks for sharing your tips for keeping everyone connected.

While encouraging words did not necessarily contribute to a deeper understanding of teacher inquiry/action research, coaching, or deepen learning community members' stance as a coach, such feedback served as a form of acknowledgement and recognition that aided in extending and sustaining the trust and social capital of the learning community.

Eavesdropper

The role of the eavesdropper can be defined as coaches logging on to the learning community site but never actively posting anything or sharing comments and feedback with members. In modern Internet parlance, this role is sometimes referred to as a "lurker," which contains rather negative connotations as someone hiding in the recesses, slinking about the shadows undetected by the group, potentially preying on others. In the online learning community context, lurking or eavesdropping served coaches as a way of building their knowledge and understanding of teacher inquiry/action research. Even though members of the community were not directly contributing to a particular conversation, they were able to read what others were saying and take away information relative to their coaching situation and needs. The in-depth interview of participating coaches suggest that the online learning community helped deepen coaches' understanding of action research and coaching action research by serving as a repository or clearinghouse of important information associated with the practice of coaching teacher inquiry/action research. The online learning community site itself permitted coaches to participate in a community of practice/professional learning community peripherally, without always having to contribute content in order to gain a deeper knowledge or understanding of their practice.

Implications

Based on the analysis provided above regarding the variety of roles associated with site facilitation and coaching teacher inquiry/action research, Figure 8-1 summarizes a model for teacher professional development in an online learning community and how it emerged.

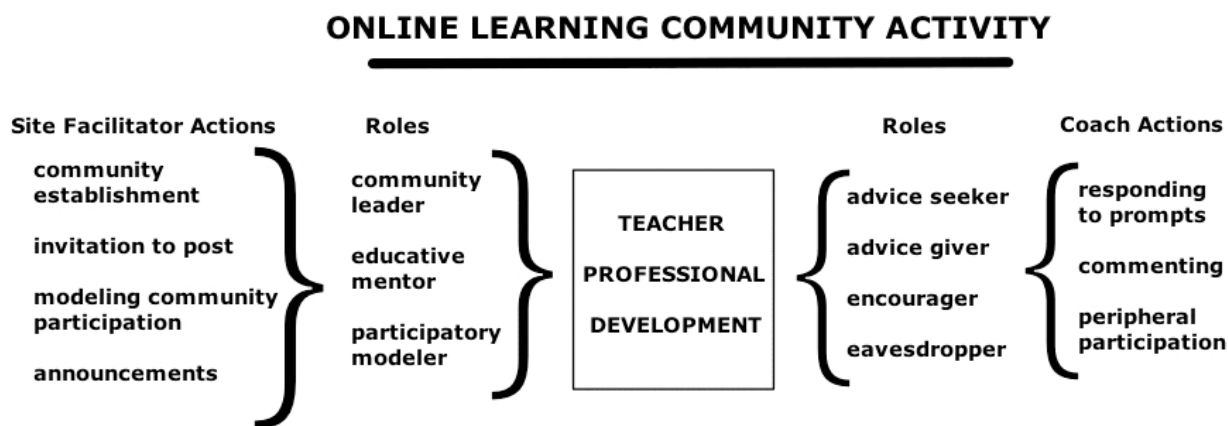


Figure 8-1 Model for teacher professional development in an online learning community.

The dynamic interplay between the site facilitator actions/roles and the coaches' actions/roles in the learning community contributed to teacher learning and a deepened understanding of teacher inquiry/action research—a clear goal established by the site facilitator at the onset of this teacher professional development program. The following implications are offered as a way of contributing to the literature and research associated with online teacher professional development.

For Members of an Online Learning Community

Within the online learning community, conversations and activity had most to do with teacher inquiry/action research content. It may have been more beneficial for members if some of the conversation and reflection focused on the way the online learning community functioned and the various roles members found themselves playing. This in turn might have added an additional layer to the way an online learning community functions. For example, how might the learning community function differently if members took time to reflect on the different roles

they were playing? Such a metacognitive exercise may have provided members with a better understanding of their own behaviors and how they might have been able to serve the community in a richer, deeper way. Cognitively identifying the various roles associated with the learning community and openly reflecting on them could lead to a deeper understanding of the various roles themselves and aid community members in making decisions on when and how to enact those roles within the learning community.

Similarly, it is worth considering the various roles participants play outside of the online community and the impact these roles have on activity within the community. Would I have seen different activity in the online community if participants were grouped by their current local job assignments? Moreover, would the participants' job assignments and the professional networks associated with their assignments impact the levels of engagement and activity in the online learning community? Further research is warranted to determine how job-alike roles impact engagement as well as perceived benefits of participating in an online learning community.

In regards to eavesdropping, what makes it a more troublesome form of participation is that the success of the online learning community is truly built on what participants contribute. If participants are spending more time eavesdropping than contributing posts and comments, then the community is destined to fail (Norman, 1993). Another important consideration is determining whether or not peripheral participation is legitimate, (Lave & Wenger, 1991) that is, an authentic form of participation. If a participant eavesdrops, then takes information back to her local teacher researchers to inform their practice, then one might infer that participation is legitimate. While this behavior may appear parasitic, it could also be seen as symbiotic if this same participant regularly contributes to conversations in the community. This leads me to questions such as: Should eavesdropping be an explicit topic of conversation in an online

learning community? Who determines whether eavesdropping is legitimate? Would other participants in the community consider eavesdroppers as participating legitimately? Should online learning communities be engineered to make eavesdropping visible to participants?

For Staff Developers

For staff developers who lead or develop online learning communities, the results of this study can provide a language to talk to community members about the different roles associated with membership and the possible results they might get. Given the tremendous number of variables and options associated with creating, developing, organizing, enacting and supporting a learning community online, this study provides a model which staff developers might use to guide their community design decisions. Clearly the roles assumed by community members vary according to context, intent, and technology used; however, as this study suggests, a community is only as valuable as the contributions made by its members. Understanding the various roles associated with community membership can lead staff developers to consider how they might structure activities so the level of contributions made are relevant and meaningful to the community as a whole.

With regards to the role of the eavesdropper, this study suggests that it is important for an online learning community site facilitator to regularly check the administrative log files to observe participation patterns, especially the invisible patterns associated with eavesdropping. By checking the administrative log files, a site facilitator can then make adjustments to his or her comments and/or prompts to aid in pulling participants out of the shadows.

For Educational Researchers

For educational researchers studying online teacher professional development and the use of social software to support professional development, the findings in this study provide several jumping off points worthy of additional research.

Given the number of analytical and research design frameworks, additional investigation would be useful in determining the utility of different theories for examining the various contexts associated with online learning communities (Nardi, 1996), to better frame and examine relations among participants, artifacts, activities, and social groups.

Given the complex role of the site facilitator in an online learning community, how responsive should the facilitator be to the ways coaches respond to prompts in the online learning community? When and in what ways should the facilitator push participants to work through problems they encounter in their practice as a group? Similarly, how might a facilitator of an online learning community deal with the knowledge gaps that participants might have about their practice, e.g., in this case, coaching teacher inquiry/action research? Also, in terms of site facilitation, it would be important to know whether the same strategies employed by the site facilitator in this case apply to a wider range of online teacher professional development settings.

It is also worth noting that while action research is regularly cited as being a powerful tool for fostering meaningful teacher practice (Cochran-Smith & Lytle, 1993), little is still known on how effectively action research ultimately impacts students. Clearly, further research is needed to better determine the impact of this organizational structure on student achievement.

Researchers might also benefit from examining the role eavesdropping or lurking plays in online learning communities. Specifically, given the ability of members of many online environments to participate without being seen or heard, in what ways does a facilitator interpret silence on the part of participants? Likewise, research is needed to better gauge how participants spend their time online. This could lead to examining different types of applications and their associated technical features to determine which ones might serve researchers best for such a

task. Perhaps using an application that captures when and where participants open specific links, that is, measuring clicks, may be useful for this type of research as well.

Moreover, additional research may be useful in examining the use of folksonomies to categorize information in online learning communities. A common taxonomy of terms is an essential element of any profession and is an explicit component of communication. This leads me to wonder, in what ways should tagging or categorizing online content be discussed to make the process of tagging information more useful for participants in an online learning community? What impact might predefining categories or tags have on participants? Would predefined tags limit how participants think about their practice? To what extent having no limit on tagging information and content overwhelm participants and make them feel they have too many choices?

Given the number of technological choices for supporting online communities, interaction, and collaboration, the question for many educational technology researchers becomes: what is the best online medium for storing and sharing a community's knowledge? Similarly, how can a community's work be indexed so that other practitioners can find what they need?

Summary

The role of the coaches as participants in the online learning community was critical to the success of the community. Through responding to prompts, seeking and giving advice, encouraging and clarifying information, and casually and intentionally observing one another, the coaches were able to deepen their understanding of teacher inquiry/action research, coaching teacher inquiry/action research, as well as deepen their understanding of their own stance toward their coaching practice.

Future research in understudied aspects of online professional development will afford members of online learning communities and staff developers an opportunity to better

understand the value each member can offer to a professional learning community (Dede, 2006). The benefit of this study also gives teacher educators, staff developers, and educational researchers the opportunity to examine activities and context-specific knowledge that can be useful for explaining patterns and relationships in online learning communities, as well as designing, enacting, and studying programs designed to facilitate teacher professional development. By studying an online learning community, the question of how to situate teachers' learning clearly arises. As a result, this study identifies specific actions and roles within which teachers' learning might meaningfully be situated online. Along with new discourse tools, such as an online content management application comes a need to study aspects of guidance and support that ensures participation that is "educationally meaningful and worthwhile" (Putnam & Borko, 2000, p. 12).

Ultimately, this study offers insight into the application of online learning communities for professional development purposes. It is hoped that this study will be helpful to those who facilitate online communities as well as those who seek such communities for growth and inspiration.

APPENDIX A
OUR INQUIRY FACILITATOR ON-LINE PROFESSIONAL LEARNING COMMUNITY

WHY AN INQUIRY FACILITATOR ON-LINE PLC?

We will not see each other very often. This is a way to remain connected with others who are engaging in the exciting process of inquiry and coaching inquiry within their districts!

A goal for this year is exploring ways to embed inquiry as staff development locally in our districts (institutionalization and sustainability). This is a way to remain connected to other NEFEC districts as we brainstorm different venues for making inquiry as staff development a reality at the local level!

We can learn a great deal about on-line communities of learners (in what ways they are and they are not valuable) that we can use to inform the ways we'll grow as a NEFEC group in the future!

WHAT ARE SOME THINGS WE CAN DO IN OUR INQUIRY FACILITATOR ON-LINE COMMUNITY OF LEARNERS?

We can . . .

Share what we're doing at local meetings. Get good ideas from others.

Share any helpful resources we stumble upon with the group.

Share our thinking about what's working/what's not working (pose questions/raise issues).

Share our thinking about the inquiry process and school-based professional development.

Respond to others' thinking to help them in their work.

Respond to others' thinking to help us clarify our beliefs about teaching practice and coaching school-based professional development.

Get support for our work and ultimately, improve our work with the teachers we are coaching!

WHEN DO I PARTICIPATE?

Participate in our on-line inquiry facilitator PLC . . .

After completing a reading

Some Ideas (Choose from anything on this menu or something else!):

* What did you think of the reading?

- * What are some things the reading made you think about?
- * What ideas did the reading give you for your coaching work?
- * What did you agree with and not agree with from the reading?
- * What puzzled you about the reading?
- * What inspired you from the reading?
- * In what ways did this reading contribute to your own understandings of the action research (inquiry) process?
- * In what ways did this reading contribute to your own understandings of coaching the action research (inquiry) process?

After you have held one of your local meetings.

Some Ideas (Choose from anything on this menu or something else!):

- * How did your meeting go? (What worked? What didn't?)
- * What types of questions about the action research (inquiry) process arose from the teachers you are working with and how did you respond?
- * Based on your interactions with your teacher inquirers at this meeting, what challenges do you anticipate in the future?
- * (Depending on meeting topic) What types of wonderings are your teachers interesting in exploring? What types of data collection strategies are your teachers employing? Is there any particular areas of inquiry design that any of your teachers are struggling with? How did you help them? Etc.
- * What did you learn about the action research (inquiry) process as a result of your participation in this group meeting?
- * What did you learn about coaching the action research (inquiry) process as a result of your participation in this group meeting?

Anytime you have a question members of our PLC might have insights into

Anytime you have something to share that can be useful to others in our community

Anytime someone poses a question or shares something with the group and you have something to contribute in response

HOW OFTEN DO I PARTICIPATE? HOW MUCH TIME DO I PUT INTO IT?

IT'S UP TO YOU!!! . . . If you follow the guidelines for “When do I participate?” above, I imagine you'll be checking into our community about once every two-three weeks, and spending between 15 and 30 minutes each time you check in.

A Good Rule of Thumb to Guide Your Participation: Our on-line inquiry facilitator PLC is here to help us all do our work better! If the time you are spending participating in our on-line PLC is detracting from, rather than enhancing your work as an inquiry coach and teacher, readjust how often and how much time you are participating, yet remembering that we'll only get out of our PLC what we put into it!

WHAT ARE SOME TIPS FOR BEING A MEMBER OF AN ON-LINE PLC?

Don't be afraid to pose questions, to say “I don't know,” to share something you are struggling with, or to say, “I need help!” When we engage in inquiry we adopt a stance towards our teaching that says we believe teaching is complex (in a good way), and because of teaching's complexity, it is natural and normal for many problems to emerge. Problems are our friends – they lead to our wonderings! Similarly, coaching the professional development of colleagues is complex (in a good way), and because of its complexity, it will be natural and normal for us all to encounter problems and/or questions in our work. Two heads are better than one and lots of heads are better than two – our on-line PLC is a way to engage lots of heads in understanding the problems we encounter and answering our questions! We engage in this community to help one another, not judge one another. As the popular teen song from High-School Musical goes, “We're all in this together!”

Don't feel you have to respond to everyone all the time!

Responses can vary greatly in length! Sometimes a short, simple “I agree!” or “Thanks for sharing that resource!” can go a long way.

If you're struggling with anything related to the ways our on-line PLC is working for you, use the on-line PLC to voice your struggles, and receive feedback and insight from PLC members.

If you experience any technology issues or have technology questions – ASK CHRIS!! He's happy to help!

Always keep our ground rules in mind.

APPENDIX B FORMING GROUND RULES

Developed by Marylyn Wentworth.

Ground Rules, or Norms, are important for a group that intends to work together on difficult issues, or who will be working together over time. They may be added to, or condensed, as the group progresses. Starting with basic Ground Rules builds trust, clarifies group expectations of one another, and establishes points of “reflection” to see how the group is doing regarding process.

Time

Approximately 30 minutes

1. Ask everyone to write down what each person needs in order to work productively in a group, giving an example of one thing the facilitator needs, i.e. “to have all voices heard,” or “to start and end our meetings when we say we will.” (This is to help people focus on process rather than product)
2. Each participant names one thing from his/her written list, going around in a circle, with no repeats, and as many circuits as necessary to have all the ground rules listed.
3. Ask for any clarifications needed. One person may not understand what another person has listed, or may interpret the language differently.
4. If the list is VERY long – more than 10 Ground Rules — ask the group if some of them can be combined to make the list more manageable. Sometimes the subtle differences are important to people, so it is more important that everyone feel their needs have been honored than it is to have a short list.
5. Ask if everyone can abide by the listed Ground Rules. If anyone dislikes or doesn't want to comply with one of them, that Ground Rule should be discussed and a decision should be made to keep it on the list with a notation of objection, to remove it, or to try it for a specified amount of time and check it again.
6. Ask if any one of the Ground Rules might be hard for the group to follow. If there is one or more, those Ground Rules should be highlighted and given attention. With time it will become clear if it should be dropped, or needs significant work. Sometimes what might appear to be a difficult rule turns out not to be hard at all. “Everyone has a turn to speak,” is sometimes debated for example, with the argument that not everyone likes to talk every time an issue is raised, and others think aloud and only process well if they have the space to do that. Frequently, a system of checking in with everyone, without requiring everyone to speak, becomes a more effective ground rule.
7. While work is in progress, refer to the Ground Rules whenever they would help group process. If one person is dominating, for example, it is easier to refer to a Ground Rule

that says, “take care with how often and how long you speak,” than to ask someone directly to stop dominating the group.

8. Check in on the Ground Rules when reflection is done on the group work. Note any that were not followed particularly well for attention in the next work session. Being sure they are followed, refining them, and adding or subtracting Ground Rules is important, as it makes for smoother work and more trust within the group.

APPENDIX C
SAMPLE PROBING QUESTIONS

- What might you learn about your students as a result of exploring this wondering?
- What difference might exploring this wondering make in your classroom practice?
- What potential impact will the insights you gain from this inquiry have on you?
- What potential impact will the insights you gain from this inquiry have on your students?
- What potential impact will the insights you gain from this inquiry have on your pedagogy?
- What potential impact will the insights you gain from this inquiry have on the school?

LIST OF REFERENCES

- Anderson, T., Annand, D. & Wark, N. 2005. The search for learning community in learner-paced distance education programming, or "Having your cake and eating it, too!" *Australian Journal of Educational Technology*, 21(2): 222-241. Retrieved 27 June 2007 from <http://www.ascilite.org.au/ajet/ajet21/res/anderson.html>
- Angrosino, M. V. 2005. Recontextualizing observation: Ethnography, pedagogy, and the prospects for a progressive political agenda. . In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook of Qualitative Research (Third Edition)* (pp. 729-745). Thousand Oaks, CA: Sage.
- Anklam, P. 2007. *Net work: A practical guide to creating and sustaining networks at work and in the world*. Oxford, UK: Elsevier.
- Ball, D. & Cohen, D. 1999. Developing practice, developing practitioners: Toward a practice-based theory of professional education. In L. Darling-Hammond and L. Sykes (Eds.), *The heart of the matter: teaching as the learning profession*. San Francisco: Jossey-Bass.
- Barab, S., Barnett, M. & Squire, K. 2002. Developing an empirical account of a community of practice: Characterizing the essential tensions. *Journal of the Learning Sciences*, 11(4), 489-542.
- Barkley, S. G. 2005. *Quality teaching in a culture of coaching*. Lanham, MD: Scarecrow Education.
- Barnett, M. 2002. *Issues and trends concerning electronic networking technologies for teacher professional development: A critical review of the literature*. Paper presented at the annual meeting of American Educational Research Association, New Orleans.
- Bereiter, C. 2002. *Education and mind in the knowledge age*. Hillsdale, NJ: Erlbaum.
- Berliner, D. C. 1988. Implications of studies on expertise in pedagogy for teacher education and evaluation. In *New Directions for Teacher Assessment*. (Proceedings of the 1988 ETS International Conference, pp. 39 - 68). Princeton, NJ: Educational Testing Service.
- Bichard, S. L. 2006. Building blogs: A multi-dimensional analysis of the distribution of frames on the 2004 presidential candidate web sites. *Journalism & Mass Communication Quarterly*, 83(2): 329-345.
- Borko, H. 2004. Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15.
- Borko, H. Whitcomb, J., & Liston, D. 2009. Wicked problems and other thoughts on issues of technology and teacher learning. *Journal of Teacher Education*, 60 (1), 3-7.
- Bogdan, R. and Biklen, S. K. 1992. *Qualitative Research For Education*. Boston, MA: Allyn and Bacon.

- Bonk, C. J., Wisner, R. A., & Lee, J. 2004. Moderating learner-centered e-learning: Problems and solutions, benefits and implications. In Roberts, T. S. (Ed.), *Online Collaborative Learning: Theory and Practice* (pp. 54-85). Idea Group Publishing.
- Bruner, J. 1997. Labov and Waletzky: Thirty years on. *Journal of Narrative and Life History*, 7, 61-68.
- Buysse, V., Sparkman, K., & Wesley, P. W. 2003. Communities of practice in educational research: Connecting what we know with what we do. *Exceptional Children*, 69(3), 263-277.
- Carr, W. & Kemmis, S. 1986. *Becoming critical: Education knowledge and action research*. London: Falmer Press.
- Chase, S. E. 2005. Narrative inquiry: Multiple lenses, approaches, voices. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook of Qualitative Research (Third Edition)* (pp. 651-679). Thousand Oaks, CA: Sage.
- Cochran-Smith, M. & Lytle, S. 1993. Research on teaching and teacher research: The issues that divide. *Inside/outside: Teacher research and knowledge*. New York: Teachers College Press.
- Cochran-Smith, M. & Lytle, S. 1996. Communities for teacher research: Fringe or forefront? In M. W. McLaughlin & I. Oberman (Eds.), *Teacher learning: New policies, new practices* (pp. 92-114). New York: Teachers College Press.
- Cochran-Smith, M. & Lytle, S. L. 1998. Teacher research: The question that persists. *International Journal of Leadership in Education*, 1, 19-36.
- Cochran-Smith, M. and Lytle, S. L. 1999. Relationships of knowledge and practice: Teaching learning in communities. *Review of Research in Education*, 24, 249-305.
- Corcoran, T. 1995. *Helping teachers teach well: Transforming professional development* (CPRE Policy Brief). New Brunswick, NJ: Consortium for Policy Research in Education. Available at www.cpre.org/index.php?option=com_content&task=view&id=166&Itemid=121.
- Dall'Alba, G. & Sandberg, J. 2006. Unveiling professional development: A critical review of stage models. *Review of Educational Research*, 76(3), 383-412.
- Dana, N. F. & Yendol-Silva, D. 2003. *The reflective educator's guide to classroom research: Learning to teach and teaching to learn through practitioner inquiry*. Thousand Oaks: Corwin Press.
- Dana, N. F. & Yendol-Hoppey, D. 2008. *The reflective educator's guide to professional development: Coaching inquiry-oriented learning communities*. Thousand Oaks, CA: Corwin Press.
- Darling-Hammond, L. 2007. Teacher learning that supports student learning. In B. Presseisen (Ed.) *Teaching for Intelligence*. Thousand Oaks, CA: Corwin Press.

- Darling-Hammond, L., & McLaughlin, M. 1995. Policies that support professional development in an era of reform. *Phi Delta Kappan*, 597-604.
- Dede, C. (2004). Enabling distributed learning communities via emerging technologies. *THE Journal (Technological Horizons In Education)*. Available at thejournal.com/articles/16909.
- Dede, C. (Ed.). 2006. *Online professional development for teachers: Emerging models and methods*. Cambridge, Ma: Harvard Education Press
- Dede, C., Ketelhut, D.J., Whitehouse, P., Breit, L., & McCloskey, E.M. 2009. A research agenda for online teacher professional development. *Journal of Teacher Education*, 60 (1) pp. 8-19.
- Desforges, C. 1995. How does experience affect theoretical knowledge for teaching? *Learning and Instruction*, 5, 385-400.
- Drago-Severson, E. 2004. *Helping teachers learn: Principal leadership for adult growth and development*. Thousand Oaks, CA: Corwin Press.
- Drennon, C. E. & Cervero, R. M. 2002. The politics of facilitation in practitioner inquiry groups. *Adult Education Quarterly*, 52(193): 193-209.
- Efimova, L. & deMoor, A. 2005. *Beyond personal webpublishing: An exploratory study of conversational blogging practices*. Proceedings of the 38th Hawaii International Conference on System Sciences, 2005. Available at doc.telin.nl/dscgi/ds.py/Get/File-44480.
- Engestrom, Y. 1987. Learning by expanding: An activity-theoretical approach to developmental research. Helsinki: Orienta-Konsultit Oy.
- Engestrom, Y. 1993. Developmental studies of work as a testbench of activity theory. In S. Chaiklin and J. Lave, *Understanding practice: Perspectives on activity and context* (pp. 64-103). Cambridge: Cambridge University Press.
- Erickson, F. 1986. Qualitative methods in research on teaching. In M. Wittrock (Ed.) *Handbook of Research on Teaching*, 3, 119-161. New York: MacMillan.
- Feger, S., & Zibit, M. 2005. *The role of facilitation in online professional development: Engendering co-construction of knowledge*. Unpublished manuscript, Providence, RI.
- Glesne, C. 1999. *Becoming qualitative researchers: An introduction (2nd. edition)*. New York: Longman.
- Hammerness, K., Darling-Hammond, L., Bransford, J., with Berliner, D., Cochran-Smith, M., McDonald, M., Zeichner, K. 2005. How teachers learn and develop. In Darling-Hammond, L., Bransford, J., LePage, P., Hammerness, K., and Duffy, H. (Eds). *Preparing Teachers for a Changing World: What teachers should learn and be able to do*. San Francisco: Jossey-Bass. p. 358-389.
- Hoepfl, M. C. 1997. Choosing qualitative research: A primer for technology education researchers. *Journal of Technology Education*, 9(1), 47-63.

Kaptelinin, V. 1996. Computer-mediated activity: Functional organs in social and developmental contexts. In B. Nardi (Ed.), *Context and consciousness: Activity theory and human-computer interaction*. Cambridge, MA: MIT Press.

Kincheloe, J.L. 1991. *Teachers as researchers: Qualitative inquiry as a path to empowerment*. London: The Falmer Press.

Koku, E. F., & Wellman, B. 2004. Scholarly networks as learning communities. In S. A. Barab, R. Kling, R., & J. H. Gray (Eds.), *Designing for virtual communities in the service of learning* (pp. 299-337). Cambridge, UK: Cambridge University Press.

LaFerrière, T., Lamon, M., Chan, C.K.K. 2006. Emerging e-trends and models in teacher education and professional development. *Teaching Education*, 17(1) 75-90.

Lave, J., & Wenger, E. 1991. *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.

Leont'ev, A. N. 1978. *Activity. Consciousness. Personality*. Englewood Cliffs, NJ: Prentice-Hall.

Levine, M. 2006. In search of the holy grail, *A List Apart*, January 30, 2006. Available at www.alistapart.com/articles/holygrail.

Lieberman, A., & Miller, L. 1990. *Professional development of teachers. Encyclopedia of educational research, 6th Edition*, New York: MacMillan.

Little, J. W. 1993. Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis*, 15(2), 129-151.

Lortie, D.C. 1975. *Schoolteacher: A sociological study*. Chicago, IL: University of Chicago Press.

Lou, Y., Abrami, P. C., & d'Apollonia, S. 2001. Small group and individual learning with technology: A meta-analysis. *Review of Educational Research*, 71, 449-521.

Makri, K. & Kynigos, C. 2007. The role of blogs in studying the discourse and social practices of mathematics teachers. *Educational Technology & Society*, 10(1): 73-84.

Markham, A. N. 2005. The methods, politics, and ethics of representation in online ethnography. . In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook of Qualitative Research (Third Edition)* (pp. 793-820). Thousand Oaks, CA: Sage.

Marshall, C. & Rossman, G. 1995. *Designing qualitative research (2nd edition)*. Newbury Park, CA: Sage.

Marshall, C. & Rossman, G.B. 1999. *Designing qualitative research (3rd edition)*. Thousand Oaks, CA: Sage Publications.

- Mejias, U. A. 2005. A nomad's guide to learning and social software. *The Knowledge Tree: An e-journal of learning innovation*. Available at knowledgetree.flexiblelearning.net.au/edition07/html/la_mejias.html.
- Nardi, B. 1996. Studying context: A comparison of activity theory, situated action models, and distributed cognition. In B. Nardi (Ed.), *Context and consciousness: Activity theory and human-computer interaction*. Cambridge, MA: The MIT Press.
- Nason, R., & Woodruff, E. 2004. Online collaborative learning in mathematics: Some necessary innovations. In T. Roberts (Ed.), *Online collaborative learning: Theory and practice* (pp. 103-131). London: Infosci.
- National Academy of Education Report 1999. *Recommendations regarding research priorities: An advisory report to the national educational research policy and priorities board*. Available at www.naeducation.org/NAEd_Publications.html.
- Nelson, B. S., & Hammerman, J. K. 1996. Reconceptualizing teaching: Moving toward the creation of intellectual communities of students, teachers, and teacher educators. In M. W. McLaughlin & I. Oberman (Eds.), *Teacher learning: New policies, new practices* (pp. 3-21). New York: Teachers College Press.
- Nemirovsky, R., & Galvis, A. 2004. Facilitating grounded online interactions in video-case-based teacher professional development. *Journal of Science Education & Technology*, 13(1), 67-79.
- Norman, D. 1993. *Things that make us smart: Defending human attributes in the age of the machine*. Reading, MA: Addison-Wesley.
- Oberg, A. 1990. Methods and meanings in action research: The action research journal. *Theory Into Practice*, 29(3), 214-221.
- Palloff, R., & Pratt, K. 1999. *Building learning communities in cyberspace: Effective strategies for the online classroom*. San Francisco: Jossey-Bass.
- Personal Narrative Group. (Eds.). 1989. *Interpreting women's lives: Feminist theory and personal narratives*. Bloomington, IN: Indiana University Press.
- Piaget, J. 1950. *The psychology of intelligence*. New York: Routledge.
- Pressley, M. 1995. More about the development of self-regulation: Complex, long-term, and thoroughly social. *Educational Psychologist*, 30, 207-212.
- 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.
- Riessman, C. K. 2002. Analysis of personal narratives. In J. F. Gubrium & J. A. Holstein (Eds.), *Handbook of interview research: Context and method* (pp. 695-710). Thousand Oaks, CA: Sage.

- Scardamalia, M., & Bereiter, C. 1994. Computer support for knowledge-building communities. *The Journal of the Learning Sciences*, 3(3), 265-283.
- Schaverien, L. 2003. Teacher education in the generative virtual classroom: Developing learning theories through a web-delivered, technology-and-science education context. *International Journal of Science Education*, 25(12) 1451 - 1469.
- Schlager, M., & Fusco, J. 2004. Teacher professional development, technology, and communities of practice: Are we putting the cart before the horse? In S. Barab, R. Kling, & J. Gray (Eds.), *Designing for virtual communities in the service of learning*. Cambridge, UK: Cambridge University Press.
- Senge, P. 1990. *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Sherer, P.D., Shea, T.P., & Kristensen, E. 2003. Online communities of practice: A catalyst for faculty development. *Innovative Higher Education*, 27(3), 183-194.
- Shneiderman, B., & Plaisant, C. 2005. *Designing the user interface: Strategies for effective human-computer interaction*. (4th edition). Boston, MA: Pearson Education.
- Shirky, C. 2003. Social software and the politics of groups. *Clay Shirky's Writings About the Internet: Economics & Culture, Media & Community, Open Source*. Available at shirky.com/writings/group_politics.html
- Sprinthall N.A., Reiman, A.J., & Thies-Sprinthall, L. 1996. Teacher professional development. In: Sikula, J., Buttery, T., & Guyton E, (eds.), *Handbook of Research on Teacher Education*. New York: Simon & Schuster Macmillan.
- Sternberg, R. J., Forsythe, G. B., Hedlund, J., Horvath, A. J., Wagner, R. K., Williams, W. M., Snook, S.A., & Grigorenko, E. L. 2000. *Practical intelligence in everyday life*. New York: Cambridge University Press.
- Thomas, D. 2003. *Dylan Thomas selected poems, 1934-1952*. New York: New Direction Publishing.
- Thompson, S. C., Gregg, L., & Niska, J. M. 2004. Professional learning communities, leadership, and student learning. *Research in Middle Level Education Online*, 28(1), 1-15. Available at www.nmsa.org/Publications/RMLEOnline/Articles/Vol28No1Article2/tabid/439/Default.aspx
- van Doorn, N., van Zoonen, L., & Wyatt, S. 2007. Writing from experience: Presentations of gender identity on weblogs. *European Journal of Women's Studies*, 14(143): 143-159.
- Vescio, V., Ross, D., & Adams, A. January, 2006. *Review on professional learning communities: What do we know?* Paper presented at the NSRF Research Forum. Available at www.nsrffharmony.org/research.vescio_ross_adams.pdf
- Vygotsky, L. S. 1978. *Mind and society*. Cambridge, MA: Harvard University Press.

Wallace, R.M. 2003. Online learning in higher education: A review of research on interactions among teachers and students. *Education, Communication and Information*, 3(2), 241-280.

Wearmouth, J., Smith, A. P., & Soler, J. 2004. Computer conferencing with access to a 'guest expert' in the professional development of special educational needs coordinators. *British Journal of Educational Technology*, 35(1), 81-93.

Wei, R.C., Darling-Hammond, L., Andree A., Richardson, N., & Orphanos, S. 2009. *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. Dallas, TX: National Staff Development Council.

Wenger, E. 1998. *Communities of practice: Learning, meaning, and identity*. New York: Cambridge University Press.

Whitehouse, P., Breit, L., McCloskey, E., Ketelhut, D. J., & Dede, C. 2006. An Overview of current findings from empirical research on online teacher professional development. In C. Dede (Ed.), *Online professional development for teachers: Emerging models and methods* (pp. 13-30). Cambridge, Ma: Harvard Education Press.

Yang, S. C. & Liu, S. F. 2004. Case study of online workshop for the professional development of teachers. *Computers in Human Behavior*, 20(6), 733-761.

BIOGRAPHICAL SKETCH

Christopher Davis Sessums is a clinical associate professor in the School of Teaching and Learning in the College of Education at the University of Florida, where he received his Ph.D. in the spring of 2009. From 2006 to 2008 Christopher served as Director of Distance Education in the College of Education where he managed the development and implementation of the college's online course and degree offerings. Prior to this, Christopher served as the Director of Distance Learning in the Office of Distance, Continuing, and Executive Education from 2001-2006 where he facilitated the design, production, and delivery of distance teaching and learning programs for various colleges and departments across campus. In 1997 Christopher earned his Master of Education degree in English Secondary Education from the University of Florida and subsequently taught language arts at P.K. Yonge Developmental Research School from 1997 to 2000.