

INQUIRING INTO PROFESSIONAL DEVELOPMENT IN A NEWLY DESIGNED 21ST
CENTURY SCHOOL

By

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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

2013

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To my family

ACKNOWLEDGMENTS

I would like to begin by thanking my mentor, friend, and the chair of my dissertation committee, Nancy Dana. Nancy began mentoring me long before we actually met. As an elementary school teacher, I carefully studied Nancy's work around practitioner inquiry and was inspired and motivated through her words to think creatively, critically, and joyfully about education so that my students could fall in love with learning. She taught me to be the kind of teacher my students deserved. When the opportunity arose to be Nancy's Ph.D. student, it was quickly evident that we held a deep connection through our love for inquiry, teachers, and learning. I am eternally grateful to Nancy for ushering me into a profession I love through exhilarating, challenging experiences, hours of intellectually stimulating conversations, her constant compassionate, wise, listening ear, and her friendship that is one I know I will always cherish.

I would next like to express my appreciation for my doctoral committee. Kara Dawson, Mirka Koro-Ljungberg, and Dorene Ross have been vital role models throughout my doctoral studies. Kara Dawson has always encouraged me to be innovative and daring with my work. She has taught me the immeasurable value of collaboration, trust, and hope, and has given me permission to be a teacher and scholar who is unafraid to think outside the box for teachers and students. Mirka Koro-Ljungberg has encouraged my research to reflect my ambitions, beliefs, and passions. She taught me to make research a part of my practice as a teacher educator and to learn to confidently and intelligently stand behind my decisions to use research as a tool for teacher empowerment and school improvement. Dorene Ross has always encouraged my ambition by teaching me the importance of perseverance. She has

taught me the significance of hard work, courage, dedication, and attention to detail; and by working side by side together for several years, she has also taught me the importance laughter and joy in work. I am forever grateful to the members of my doctoral committee, Nancy, Kara, Mirka, and Dorene. They are, without a doubt, the reason I am a passionate and dedicated teacher educator and scholar.

The two participants in this study have inspired my practice as a teacher educator more than I will ever be able to express. They invited me into their lives as educators and have forever instilled in me the values of school-family, advocacy, and reflectively. I would like to thank them for the many hours we spent together this year and for so motivating my work in teacher education. I look forward to remaining colleagues and friends for many years to come.

As I have pursued graduate education, the Lastinger Center for Learning has been a vital support system. I would like to thank Don Pemberton, Alyson Adams, Sylvia Boynton, Jamey Burns, Boaz Dvir, and all of my Lastinger Center colleagues, for being outstanding cheerleaders and supporters of my education and work as a teacher and scholar. I would like to thank them, too, for reminding me of the importance of school reform efforts through their tireless innovation efforts into making life and learning conditions better for educators and children in high needs schools.

There are many teachers who daily inspire my work. I would like to thank all of the teachers I have had the honor to work with and learn from. I would especially like to thank Kathy Brickley, Mary Jean Brooker, Nadine Ferranti, and Suzanne Mechler for touching the lives of so many children and ushering them into a lifelong love for learning. Janet Acerra has been my mentor, role model, and dear friend for as long as I

have known I wanted to be a teacher. She taught me, and continues to teach me, the true meaning of being a teacher. She is my teaching superhero. Perhaps the teacher who I am most proud to know is my younger brother, Nathan Wolkenhauer. I would like to thank Nathan for reminding me, in our almost daily conversations, how much *fun* teaching is because it is such a uniquely creative and intellectual endeavor.

I have said from the moment I decided to pursue a Ph.D. that I would be doing this for my students. At the time of making the decision, I knew I would be dedicating every moment of work to my third and fourth graders. Their work, drawings, and photographs are continuous mementos of motivation. As I have been in the Ph.D. program, my “students” have expanded to the preservice teachers I have fallen in love with teaching. I would like to thank each of my students, whether you are eight or twenty-two, for being my beacons of hope and lights of inspiration.

I would also like to thank the many friends who have patiently supported and loved me through this journey of doctoral studies: Carol and Mel Bernstein, Shaunté and Randell Duggins, Megan Gascon, Angela Hooser, Elena Kapetaneas, Desi Krell, Jessica Leeman, Jeanne and Jerry Plaskett, Andrea Thormer, and Becky Wolkenhauer for celebrating every step of the dissertation process with me, and for always providing me with perspective, balance, and breaks.

Finally, my family has been extraordinary throughout this dissertation process. A paragraph will never do justice to the support, comfort, and love they have tirelessly given to me. As I have embarked on this dissertation journey, my parents, Alan and Phyllis Wolkenhauer, have read my work, patiently listened to me talk out theories that perplexed me, and have heard endless stories about my dissertation experiences.

There have even been times when they have tried out inquiry, the focus of my dissertation, in their own practices, to ensure they truly understood my work in order to go through it with me. I would like to thank them for redefining “being there.” I couldn’t have done this without them by my side. My brother, Nathan, who I thanked earlier in these acknowledgements as a teacher who inspires me, has also been my constant companion in the times of stress, delight, uncertainty, and epiphany that this dissertation experience has brought. My nephews Carter and Eli, and my niece Leah remind me that the world is filled with wonder worthy of being carefully and enthusiastically explored. At ages 5, 1, and 3, they are perhaps my closest research companions as they investigate the world around them each day with curiosity, passion, and deep insight. Their father, my big brother Adam, and their mother, my sister-in-law Kathryn, are incredible role models of the immense significance of family connection. I would like to thank them for filling each day with mementos and reminders that above all else, taking joy in one another and encouraging each other’s passions is what matters most. It is to my precious family that I dedicate this dissertation.

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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

INQUIRING INTO PROFESSIONAL DEVELOPMENT IN A NEWLY DESIGNED 21ST
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By

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August 2013

Chair: Nancy Fichtman Dana
Major: Curriculum and Instruction

Prevalent new paradigms are emphasizing the need for more powerful learning opportunities that meet the needs of 21st century learners. One way to change education to better meet the needs of the 21st century is to reimagine school architecture. The purpose of this research was to study the ways practitioner inquiry can serve as a mechanism for mediating and supporting teacher professional development in a newly built school that uses space differently.

The elementary school that is the context of this study built a 21st century community learning center with innovators in architectural design that encourage a new way of teaching. A strong focus on professional development as teachers prepared for the new building was essential. Recognizing that professional development would be challenging in the transition to the new space, those responsible for professional development used practitioner inquiry to systematically and intentionally study their practices.

To investigate ways these professional developers used practitioner inquiry to understand their experiences in mediating teacher professional learning, this research was theoretically oriented by hermeneutics. During the first year in the new school

building, the participants and researcher simultaneously engaged in the inquiry cycle and hermeneutical circle. Using literature, historical artifacts, field notes, professional development documents, and interviews as data, this work is organized through pre-understandings, understandings, and new understandings of the experiences the participants encountered as they led professional development efforts during the first year in the new building space.

This study's findings suggest the value of inquiry for professional developers, and demonstrate the value of implicit inquiry as professional development. It provides insight into the need for professional development to be supportive of chaotic transitions during reform efforts, and discusses the importance of inquiry data for renegotiating existing school structures. This study demonstrates that 21st century school reform is not easy, but possible.

CHAPTER 1 INTRODUCTION AND BACKGROUND

Introduction

This study explored the ways in which practitioner inquiry can serve as a mechanism for mediating and supporting teacher growth and development in a newly designed 21st century community learning center that uses school space differently. Knowledge gained from this study brings new insights into the ways practitioner inquiry might be utilized by those responsible for teacher professional development in school reform efforts, and, ultimately, how it might serve as a method for encouragement and influence as educators make sense of, and use, a new school environment that encourages dramatic shifts in teaching for the 21st century. This research employed qualitative hermeneutic methodology to illustrate the phenomenon examined. Participants in this study included the two people responsible for professional development in the particular 21st century community learning center that is the context of this research.

This chapter begins with an overview of the need for school reform in the 21st century. Following this problem statement, the purpose and accompanying research questions are shared. Also included in this chapter is a discussion of the research design and significance of the study.

Problem Statement

Prevalent new paradigms are emphasizing the need for more powerful learning opportunities that meet the needs of 21st century learners; nonetheless these paradigms are not yet clearly reflected in our education system. 21st century schools continue following early factory models and do not meet the diverse and demanding needs of life,

work, and citizenship in the 21st century (Darling-Hammond, 2010; Darling-Hammond & Bransford, 2005; Hutchison, 2004).

While predominant debates in the field of education continue to be those surrounding the purposes of schooling, two current and competing educational reform agendas are emphasizing an urgent need for changes in education that will nurture future generations' capabilities in competing in an increasingly expanding globalized society with an abundance of information, advanced technologies, and rapid change (Darling-Hammond, 2010). The first of these reform initiatives is tied to the standards-based accountability movement and focuses on collecting evidentiary outcomes. Believing that all students are the same and expecting them to succeed within statistical norms, this movement insists that the most valuable educational reform efforts, based on empirical data, can be replicated across all schools to result in widespread improved student achievement. The second reform effort has a teacher professionalization agenda and works to better support and prepare teachers, asserting that giving all students opportunities to learn from highly qualified, intelligent, and ambitious teachers, will result in widespread improvements in student achievement (Cochran-Smith & Fries, 2001; Hardy & Ronnerman, 2011). Rather than believing that schools should provide the same education for all students, this effort works to ensure that each student receives individualized education attention to best meet diverse and dynamic learning needs. While these reform efforts offer very different perspectives on the purposes of education, they agree that schools must change to better reach the needs of today's students and ensure that they are provided with quality educational opportunities that will lead to successful futures.

One way of changing schools to better meet the needs of 21st century learners is to reimagine the space in which schooling, teaching, and learning occur. While the practices that foster highly effective teaching and learning are well known, current educational systems and structures make them difficult to carry out (Hutchison, 2004). In order to cultivate life long learning, schools need to become community learning centers where teachers and students learn together in environments that respect the learners present and the knowledge being generated; spaces that are conducive to authentic community-oriented, inquiry-based learning that is complex, engaging, and relevant (Nair, Fielding, & Lackney, 2009). When the spaces of schools are reimaged, it is easier to reimagine school systems that develop highly effective practices that can be carried out to ensure student achievement, and engaging, professionalized teaching.

When spaces are designed to transform schooling, teaching, and learning through authentic, community-oriented, inquiry-based teaching, students and teachers can be further empowered to take control of their learning and lead active, passionate, and influential learning lives. Randall Fielding and Prakash Nair design educational spaces with exactly this intent. Inspired by the work of Christopher Alexander (1976), they hope to close the gap between known best practices in teaching and learning and school facilities (Nair, et al., 2009). Grounded in philosophies of space and place, these architects look at the history of education and the realities of the 21st century to better understand the connection between the environment and the psyche.

The interconnectedness of people and space is a widely discussed topic among human geographers and space philosophers (i.e., Lefebvre, Heidegger, Hutchison, Soja, and Tuan). People's attachments to places come about from a link between the

human consciousness and spatial structures. Martin Heidegger and Yi-Fu Tuan discuss the search for Being-in-the-World as defined by a person's unique relation to the physical and emotional world (Heidegger, 1962; Hubbard & Kitchin, 2011). The multidimensionality of space includes a person's perception of and feeling toward that part of his or her world. This makes peoples' feelings about a place crucial for how he or she acts in that space (Hutchison, 2004). Lefebvre calls this "lived space," in which a person's potential is harnessed and redirected within the spaces he or she occupies (Hubbard & Kitchin, 2011).

When considering the importance of the interconnectedness of people and space in education, the space in which schooling takes place must align with aims of education so that the design of school buildings elicit the feelings and actions conducive to goals of teaching and learning (Hutchison, 2004). In the school designs of Fielding and Nair, sociality is woven into every aspect of buildings' spaces. They develop their plans for schools based on four realms of human experience: spatial, psychological, physiological, and behavioral. These realms, while interconnected, are honored for their complexity and recognized as non-linear and deeply contextual. Fielding and Nair carefully consider the work of key thinkers of space and place by nurturing the relationship between people and space. Universal human nature is recognized while specific attention to the wide range of history, culture, interest, and behavior tendencies is provided (Hubbard & Kitchin, 2011). In this way, the architects respect the complexity of time, context, and individual people within community. The spatial patterns they have developed nourish healthy, synergistic communities and speak to Simone Weil's assertion that the need for roots and space is a fundamental human need that is

intimately involved with “head, hands, heart, and place” (Hutchison, 2004, p. x; Nair, et al., 2009).

Space is defined by both shared and private meanings that are simultaneously adapting for, and changing because of the continual renewal of social dynamics. Christian Norberg-Shulz defines place as “space plus character” (1980, p.18) to demonstrate the dynamics of space philosophy. Places are dependent upon ideas, practice, and cultural norms. Societal expectations pressure schools to secure futures while connecting generations, to be places where moral and social skills are honed and practiced, and where citizens are prepared to take active and successful roles in a 21st century globalized society (Hutchison, 2004).

Taking this into consideration, Fielding and Nair believe school spaces should grow from shared vision that clearly communicates the school’s philosophy of education, teaching, and learning (Nair, et al., 2009). The classroom is the most visible symbol of this philosophy and, as demonstrated in the urban geography work of David Ley, people respond to structures’ feelings and from those feelings emerge cultural identity that is grounded within global forces and the specifics of location (Hubbard & Kitchin, 2011). The use of space has the potential to ensure schools are pleasant, spiritually uplifting, and attractive places to teach and learn (Alexander, 1976). When environments are dynamically built to change in order to best meet the needs of particular situations, social, holistic, and multifaceted learning has more opportunity to be facilitated. In these environments teachers and students can take passionate ownership of unique work through the ontology of difference. Structures are not simply aesthetically pleasing for show, but support humane, moral, and public values shared

by a community of learners with common geography and history, while encouraging an openness for new ideas and insights to emerge within those contexts (Hubbard & Kitchin, 2011).

Physical environments, social structures, and symbolic meanings determine experiences and what is learned about the world (Nair, et al., 2009). The design of school spaces, therefore have the potential to support or limit teaching and learning. Supportive, high quality schools bring about calmer, more sensitive, and friendly teachers who encourage more self-directed learning and teach respect. They help students feel well cared for and respected. Students are better behaved and engage in more collegial peer relationships in well-designed 21st century schools (Nair, et al., 2009). More traditional, institutionalized schools, on the other hand, attribute school with disrespect and negative social dynamics between peers and between students and teachers, while damaging views of what learning can be and what learning can yield. These traditional schools are no longer responsive to the increasingly diverse needs of 21st century learners (Nair, et al., 2009). Fielding and Nair point out that in these schools, differentiated instruction is being planned in settings that fundamentally oppose them (Nair, et al., 2009). Space considerations must be taken seriously if schools hope to meet the needs of the 21st century.

Research Purpose

P.K. Yonge Developmental Research School emphasizes learning within a community that is accepting, respectful, and promotes success. By “collaborating to meet the needs of each child” (P.K. Yonge Developmental Research School, 2012), P.K. Yonge promotes teaching that emulates exactly the kind of learning they hope to provide for their students. For nearly seven years, P.K. Yonge has developed,

designed, and built a new school building to their exact specifications. Teams of students, teachers, administrators, architects, and interior designers have worked together to create a space that nurtures 21st century learners. The new school building is a community learning center designed by Randall Fielding and Prakash Nair that utilizes open space, technology, and nature to foster playfulness, warmth, and sense of community to ensure students and teachers are provided with every opportunity to engage in authentic, inquiry-oriented learning that is complex, relevant, and stimulating (Nair, et al., 2009).

The 2012-2013 school year was the first year teachers and students in the P.K. Yonge elementary division used the new space. Rather than typical grade level and classroom structures, the school is organized in learning communities based on Fielding and Nair's argument for 4:100 classroom ratios. P.K. Yonge students and teachers in kindergarten and first grade; second and third grades; and fourth and fifth grades each have their own wing of the school in which all students and teachers from the community's two grade levels aim to collaborate in all teaching and learning. Figure 1-1 shows an early blueprint of the new school building's second floor, which houses the fourth and fifth grade learning community. The learning communities' spaces are designed to support collaborative learning among students and teachers where "different students learn different things from different people in different ways at different times and in different places" (Nair, et al., 2009, p. 27) so that their spatial, psychological, physiological, and behavioral needs are always met. There is not another school with which to compare this exact organization or architectural structure. Therefore, the teachers and students at P.K. Yonge Developmental Research School

are embarking on a new phenomenon in the field of education. As elementary school teachers at P.K. Yonge began working in new ways in this newly designed architectural space, traditional ways of teaching were called into question and professional development played a large role in the ways teachers made sense of and used this new space and approach to teaching in the first year.

The two elementary curriculum and instruction coordinators at P.K. Yonge Developmental Research School are responsible for supporting teachers in this transition to teaching in the newly designed space, and for mediating teacher professional growth and development. These curriculum and instruction coordinators, who are the participants in this study, wished to engage in practitioner inquiry to study their facilitation of teacher learning in the new space. By systematically studying their own practices, they worked to better understand professional development opportunities in the new space by considering preconceptions and critical new directions for professional learning (Laverty, 2003; Rich, 1990 in Crotty, 1998). The purpose of this research, therefore, was to study the ways in which practitioner inquiry can serve as a mechanism for mediating and supporting teacher growth and development in a new environment that uses space differently.

Statement of Purpose and Research Question

The purpose of this research was to study the ways in which practitioner inquiry can serve as a mechanism for mediating and supporting teacher growth and development in a new environment that uses space differently. This study asked:

- In what ways do those responsible for the growth and development of teachers within a newly designed 21st century community learning center use practitioner inquiry to understand their experiences in supporting and mediating teacher professional learning?

Research Design

In order to gain insight into this question, the research is theoretically oriented by hermeneutics. Hermeneutics is a method for holistically interpreting phenomena by continuously circling between global perspectives and personal reflection (Crotty, 1998; Koro-Ljungberg, Yendol-Hoppey, Smith, & Hayes, 2009). By cycling through wholes and parts of understanding, researchers and research participants are better able to interpret events by considering preconceptions with new, critical direction (Rich, 1990). This both separates them from and unites them more closely with what they know by decontextualizing thought from practice while continuously returning that thought to praxis (van Manen, 1990). Focusing on the social construction of knowledge, the researcher and research participants are often co-researchers in hermeneutical studies, together working to interpret the social meanings of phenomena.

Drawing on the tradition of hermeneutics, this study was designed to better understand the ways in which those responsible for the growth and development of teachers within a newly designed 21st century community leaning center use practitioner inquiry to understand their experiences in supporting and mediating teacher professional learning. For the purposes of this study, the hermeneutical circle has been aligned with the practitioner inquiry cycle. In this way, the hermeneutical circle became a part of the practitioner inquiry process through which participants in this study took part.

Study Significance

This study will contribute to the professional conversation in literature about inquiry as a mechanism for facilitating and supporting professional development.

Additionally, it will contribute to conversations about teacher professional development in environments that use space differently for 21st century school reform.

This study will add to current literature about practitioner inquiry by studying the ways in which those responsible for the professional development in a school use inquiry to study their own approaches in order to inform the professional development of the teachers they work with. This study will investigate the impact that inquiry has on the goal setting, decision-making, and actions of those responsible for teacher professional development, and the influences to the professional learning and reform efforts of the teachers they work with.

This study will also add to current conversations about the need for more powerful learning opportunities for teachers within our education systems that better meet the needs of 21st century teachers and learners. P.K. Yonge Developmental Research School is renegotiating the use of school space as a community learning center where teachers and students learn together in order to better meet the learning needs of every member of the community. It is essential that the ways in which professional learning and teaching are stimulated and disrupted within this new space are studied and broadly shared to inform the future planning and design of school spaces for 21st century school reform.

Overview of Dissertation

This chapter provided a brief overview of this study. It began with a summary of background and context in order to demonstrate the study's purpose. The purpose statement, research question and discussion of the research approach further contributed to the chapter by indicating the importance of the study within its structure.

Finally, this chapter examined the significance of the study within current professional conversations.

The remaining chapters of this dissertation will review relevant literature pertaining to this study, discuss the methodology used, provide a description of the context, and present the findings and implications of the work. In Chapter 2, a review of the literature on practitioner inquiry is presented. Chapter 3 will provide a detailed background of the theoretical orientation of this study, hermeneutics. In Chapter 4, the research methodology will be discussed. Chapters 5 and 6 present the findings that emerged from my data analysis. Finally, in Chapter 7, a summary of the study is presented as well as recommendations for future research on school reform efforts and the implications of professional development for those efforts.

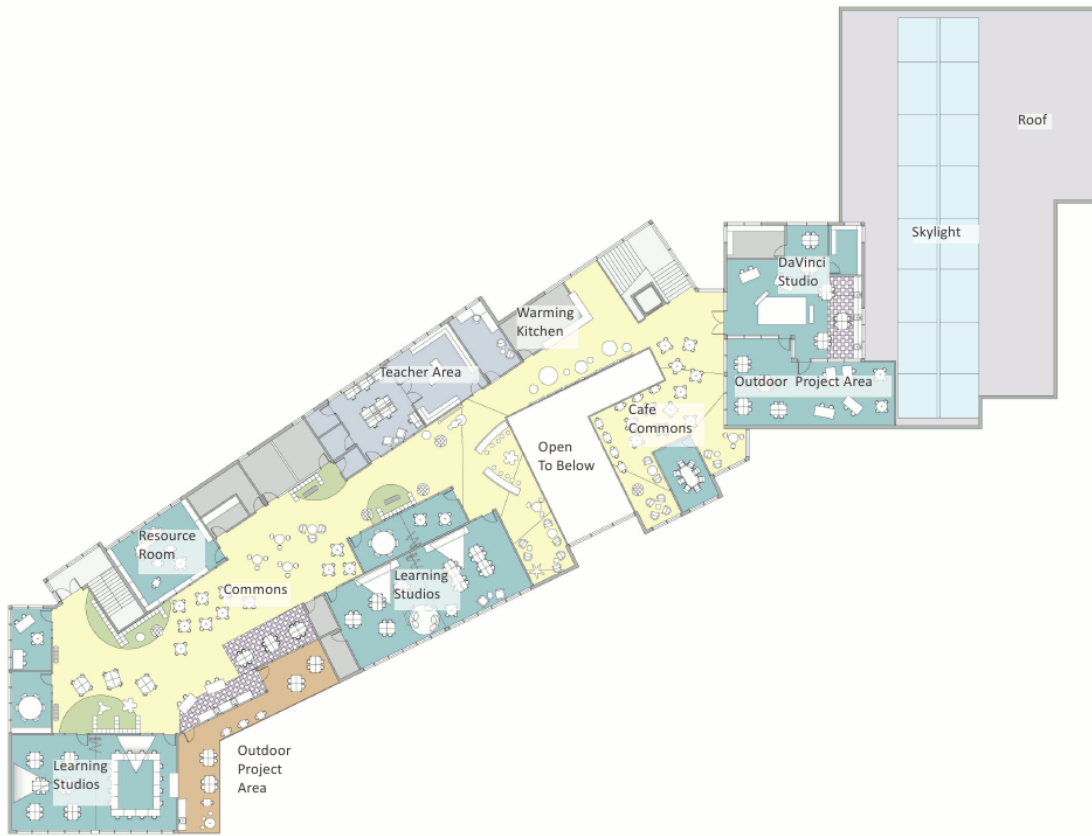


Figure 1-1. P.K. Yonge Development Research School elementary campus, 4-5 community learning space, second level floor plan (Fielding Nair International, 2012b)

CHAPTER 2 REVIEW OF THE LITERATURE

Introduction

This study was designed to better understand the ways in which those responsible for the growth and development of teachers within a newly designed 21st century community learning center use practitioner inquiry to understand their experiences in supporting and mediating teacher professional learning. In this chapter, therefore, a review of the literature surrounding practitioner inquiry is presented. First, the process will be defined, the origins and development of the practitioner inquiry movement will be discussed, and inquiry's foundational principles will be introduced. Finally, research that has been conducted on practitioner inquiry and how this study contributes to inquiry's growing research body will be shared.

Practitioner Inquiry

The current educational climate in the United States is reemphasizing the need to improve classroom teaching in order to increase student learning and achievement. Schools are increasingly pressured to make efficient use of scarce resources while being held accountable to high stakes measures for success in order to remain globally competitive. Traditionally, the professional learning of educators has been shallow and uninspiring. Practitioner inquiry offers a useful practical and theoretical alternative that honors the complexity of teaching. It responds to the need for outcomes while acknowledging and respecting the professionalism of teachers (Cochran-Smith, Barnatt, Friedman, & Pine, 2009; Hardy & Ronnerman, 2011; Heibert, Gallimore, & Stigler, 2002).

Practitioner inquiry is a form of professional learning that Cochran-Smith and Lytle (1993; 2009) define as the systematic, intentional study by educators of their own practice. Grounded in the creation of “knowledge-of-practice,” practitioner inquirers treat their classrooms and schools as contexts for interrogation while concurrently treating the knowledge and research generated by others as worthy of critique and consideration (Cochran-Smith & Lytle, 1993). Inquirers seek out change and reflect on their practice by posing questions or “wonderings,” collecting data to gain insights into their wonderings, analyzing the data, making changes in practice based on new understandings, and sharing findings with others (Dana & Yendol-Hoppey, 2009). Through inquiry, practitioners can gain a better understanding of their everyday beliefs, assumptions, and practices; consequently making more informed professional decisions (Oberg, 1990) while informing the practice of other educators.

While the field of education continuously sees innovations come and go, the enduring practitioner inquiry movement has proven its strength. The systematic and intentional study by teachers of their own practice has roots in the work of John Dewey (1933), was popularized by Kurt Lewin in the 1940s (Adelman, 1993), and was applied to the field of education by Stephen Corey shortly thereafter (1953). As the movement gained traction, Lawrence Stenhouse emphasized the need for practitioner research to contribute to the knowledge base of teaching and inform practice and policy (Goswami & Stillman, 1987) and Wilf Carr and Stephen Kemmis (1986) emphasized the importance of inquiry as an enterprise for social improvement. More recently, John Elliott, Susan Noffke, Marylin Cochran-Smith, and Susan G. Lytle have stressed three dimensions of the practitioner inquirer: the professional, the personal, and the political

(Noffke, 1997), by explicitly focusing on students (Elliot, 1991) and defining an inquiry stance as a career-long professional position (Cochran-Smith & Lytle, 1993; 2009).

Today practitioner inquiry, which is also referred to as action research, classroom research, teacher research, and teacher inquiry, continues to thrive in teacher education and as a continued professional development model (Cochran-Smith & Lytle, 2009). Valued for its ability to change personal teaching practice while raising the professional reputation to one that is scholarly, practitioner inquiry is a steadfast movement. Inquiry legitimizes practitioners' knowledge, asking educators to become active participants in the generation and construction of new knowledge while remaining critical consumers of the knowledge generated by others (Cochran-Smith & Lytle, 1993; Torres, 1996). It emphasizes "the connections to student learning and social change that will impact the profession of education while at the same time valuing what teachers already do as a part of their daily professional practice" (Snow-Gerono, 2005, p. 94).

The Origins and Development of Practitioner Inquiry

John Dewey (1929; 1938) is often credited with inspiring the practitioner inquiry movement. He built the foundation for inquiry by challenging the status quo and designating teachers as experts, and classrooms as centers for research. He believed in inquiry as a process for problem solving, therefore encouraging the natural questioning and reflection evident in effective teachers. Dewey believed the learning process was intrinsically problematic and that inquiry held the potential to structure teachers' exploration for defining problems and discovering solutions.

In the 1940s, psychologist Kurt Lewin (1938; 1945; 1946; 1947) coined the term action research, which is often used to refer to practitioner inquiry. Influenced by Lev Vygotsky and John Dewey, while immersed in studies of group dynamics, intercultural

group relations, social change, and resistance efforts, Lewin was interested in people supporting one another's learning. He worked to conduct action research that was intended to directly help the practitioner and improve social formations. He and his colleagues came to describe a cyclical process of action research that involves fact finding, the articulation of a specific idea, development of flexible, general plans for action, a search for facts to help determine the goals of that plan, and the evaluation of the results based on social change. In addition to establishing this framework for action research, Lewin spoke of the importance in aligning research with the immediate needs of those impacted by it and insisted on high standards of reliability, validity and rigor in social action work. He believed that it was through social research that the development of democratic social management systems would flourish (Somekh & Zeichner, 2009).

Stephen Corey was the leading voice in applying practitioner inquiry to the field of education. In the 1950s, Corey (1952; 1953; 1954) articulated the differences between traditional university-based research and practitioner inquiry. Expanding on Lewin's work, he asserted that teaching is too complex for traditional research paradigms. Practitioner inquiry, on the other hand, is continuous, applicable to immediate practices, and not generalizable, but transferable. Corey called practitioner inquiry, "cooperative action research," and believed it to be a more acceptable form of educational research (Somekh & Zeichner, 2009).

Lawrence Stenhouse was influential in the 1960s and 1970s (Goswami & Stillman, 1987). A historian, he focused on pedagogy and believed successful education depended on teachers as researchers exploring teacher-student interactions

and learning. He argued for an active role from students, with students as developers of education and teachers as facilitators. Stenhouse was well regarded, and in the 1970s, teachers began to be seen as creators of knowledge. Additionally, practitioner inquiry began to be seen as a potential solution to the theory-practice gap, as it brought a natural, professionalizing method of research to schools (Somekh & Zeichner, 2009).

Wilf Carr and Stephen Kemmis (1986) made an important contribution to the practitioner inquiry movement in the 1980s. Building on the work of Kurt Lewin, they positioned practitioner inquiry within the framework of critical theory. Lewin emphasized the importance of inquiry as an enterprise for social improvement, promoting social justice and working against oppression. Carr and Kemmis envisioned the power of inquiry to bring practitioners together in open and honest ways, eliminating hierarchical structures so that democratized education systems could work diligently and explicitly for social justice. Although much of this vision has yet to be realized (Carr & Kemmis, 2005), Carr and Kemmis's emancipatory views aim to use the practitioner inquiry movement as an impetus to educational change for equity and social justice (Somekh & Zeichner, 2009).

John Elliott, a colleague of Lawrence Stenhouse, extended and reformed practitioner inquiry. He focused on transforming teaching within the high stakes, hegemonized education climate. Elliott developed multi-level practitioner inquiry for professional development that more explicitly focused on student learning (Elliott, 1991). Through processes of cyclical reflection for praxis, he concentrated on improving education through practitioner inquiry that developed deep contextual understanding and moral agency (Elliott, 1991; Somekh & Zeichner, 2009).

Susan Noffke (1997) characterized practitioner inquiry in three dimensions: the professional, the personal, and the political. She recognized the range and variety of practitioner inquiry without placing value judgments on different methods and models. Noffke illustrated that practitioner inquiry had not only flourished and diversified, but throughout the practitioner inquiry movement, it had become better theorized within wider fields of thought and knowledge.

Marilyn Cochran-Smith and Susan Lytle published the pivotal text, *Inside/Outside: Teacher Research and Knowledge*, in 1993. The book made the argument that the knowledge needed by teachers to truly improve teaching and learning could not come from researchers who were primarily placed outside of school settings. Interrupting common practice, they called for a renegotiation of research boundaries so that practitioners were in primary positions as knowledge generators. Coining the phrase, “inquiry stance,” they suggested that inquiry become a way of work and professional position for teachers that translate across contexts and points in time. In the last two decades, Cochran-Smith and Lytle’s work has remained a cornerstone of the practitioner inquiry movement. They have inspired and led the continued growth and evolution of inquiry in American schools by asking teacher researchers to grapple with, reframe, and work to clearly communicate to increasingly larger audiences the expanding conceptual, theoretical, practical, and political frameworks of practitioner inquiry.

The Foundation of Practitioner Inquiry

The history of the practitioner inquiry movement is helpful in understanding the ways in which teacher knowledge has been studied and understood. While practitioner inquiry offers a powerful professional view of teachers as educators, researchers, and

change agents, there has been a continuous struggle in the history of the practitioner inquiry movement to sustain inquiry in meaningful ways. Although John Dewey advocated for a teaching force that was highly intelligent, curious, and action-oriented, his views were overshadowed by social efficiency models that continue to be pervasive in schools today.

These views of schooling have also been translated to the field of educational research in two dominant paradigms: process-product oriented research and qualitative, interpretive research. Teachers have traditionally been subjects of this research. University researchers, who typically work outside of the classrooms and schools they study, research the practices and classrooms of teachers without taking into consideration teachers' roles as theorists, interpreters, and critics (Cochran-Smith & Lytle, 1993). It is then expected that teachers will receive the knowledge gained in these studies and will not only accept the research as valid, but will also incorporate the researchers' findings into their practice. These perspectives are clearly represented in traditional models of professional development and teacher education where the knowledge of outside experts is merely disseminated to teachers. These expectations assume that teachers learn about their profession not through their own practices, contexts, and experiences, but by studying the findings of those outside of schools.

Since neither dominant research paradigm in education considers the role of teachers in the generation of educational knowledge, the practitioner inquiry movement provides a new way to think about teacher knowledge. By honoring both research conducted in classrooms and research conducted on classrooms, this third paradigm considers teachers as both contributors and recipients of study (Cochran-Smith & Lytle,

1993; 2009; Dana & Yendol-Hoppey, 2009). Focusing on the immediate concerns of teachers, practitioner inquiry believes teachers can and should contribute to the knowledge base about teaching and learning, and encourages continuous cycles of reflection and action that engage teachers in design, data collection, and analysis of data around personal questions (Carr & Kemmis, 1986; Dana & Yendol-Hoppey, 2009; Elliot, 1988). With the professional practice of teachers viewed as an intellectual activity of posing and exploring problems (Schön, 1983), practitioner inquiry takes the questions asked by teachers and makes them central to the research process, resulting in research findings that are directly relevant and grounded in practice.

Practitioner inquiry serves a different purpose for teachers than the transmissive process-product and qualitative, interpretive paradigms (Dana & Yendol-Hoppey, 2009). Practitioner inquiry has the potential to contribute to the knowledge base for teaching in which teachers conduct their own research and in turn inform their own practice and the practice of others. Through practitioner inquiry, teachers are liberated to become contributors and collaborators in educational research, ensuring theoretical knowledge is also professional knowledge (Cochran-Smith & Lytle, 1993; Sanders & McCutcheon, 1986).

Values of Practitioner Inquiry

Practitioner inquiry is grounded in an underlying set of values that drive the beliefs, goals, and decisions of the practitioner inquiry movement. The process of practitioner inquiry honors the complexity of teaching and makes it worthy of being questioned and studied (Dana & Yendol-Hoppey, 2009). It offers a powerful professional view of teachers as educators, researchers, and change agents. When it is actualized, teachers are given a powerful tool for professional learning (Zeichner,

2003), a mechanism for expanding the knowledge base for teaching (Cochran-Smith & Lytle, 1993; 2009), and a vehicle for raising their voices in educational reform (Meyers & Rust, 2003). Additionally, practitioner inquiry provides educators with a powerful stance that becomes a professional position owned by the teacher, where questioning one's practice becomes the natural, normal, and necessary way of being as an educator (Cochran-Smith & Lytle, 2009; Dana & Yendol-Hoppey, 2009; Snow-Gerono, 2005).

Powerful Tool for Professional Development

When used as a tool for professional development, practitioner inquiry becomes the core decision-making mechanism for teachers' professional growth (Valli & Price, 2000; Zeichner, 2003). Valuing teaching as an intellectual endeavor (Schön, 1983), educators' capability to steer professional development is acknowledged and honored (Caro-Bruce, Flessner, Kleher, & Zeichner, 2007). Through practitioner research, teachers take the questions that continuously arise as they teach and learn, and systematically examine them to construct their work and connect it to larger social, and cultural systems (Cochran-Smith & Lytle, 2001). These meaningful questions become the starting point for professional development, ensuring that learning is directly relevant to teachers' own work so that authentic and immediate change is possible (Caro-Bruce, et al., 2009). Since the problems of education are often complicated, teachers need space to analyze the day-to-day situations that arise in their own contexts, they need time to collaborate (Valli & Price, 2000), and they need time to speculate, reflect, and innovate (Dana & Yendol-Hoppey, 2009). Inquiry-oriented professional development provides this time and space by making intentional links between theory and practice. Teachers become students of teaching and learning through formal and informal types of knowledge while actively taking part in communities that hold one another

accountable for making impactful change in practice based on new learning (Cochran-Smith & Lytle, 2009; Dana & Yendol-Hoppey, 2009; Darling-Hammond, 2007; Weinbaum, Allen, Blythe, Simon, Seidel, & Rubin, 2004).

Mechanism for Expanding the Knowledge Base of Teaching

Heibert, Gallimore, & Stigler (2002) describe teacher research as the most useful research in the field of education. When practitioner inquiry is used as a mechanism for expanding the knowledge base of teaching, teachers' knowledge is recognized as essential to the advancement of the field (Cochran-Smith & Lytle, 1993; 2009). The practitioner inquiry movement demonstrates teachers' ability and responsibility to contribute to the knowledge base of teaching and learning. Through inquiry, teachers become rich resources of empirical and conceptual research that help to bridge the gap that exists between theory and practice and universities and schools (Cochran-Smith & Lytle, 1993). By making their practices problematic and visible, teacher researchers contribute to a knowledge base that grows over time as work is analyzed, shared with colleagues, and made public (Weinbaum, Allen, Blythe, Simon, Seidel, & Rubin, 2004). As scholars of their own practice, teachers generate a new paradigm of teaching and learning that can lead to continuous educational renewal. In this way, the professionalism of teaching is strengthened as complexities are recognized through teacher research that illustrates the multifaceted roles of an educator (Clark & Peterson, 1984; Dana & Yendol-Hoppey, 2009).

Vehicle for Raising the Voices of Teachers in Educational Reform

As teachers are looked to as originators of educational knowledge through practitioner inquiry, they are given an important vehicle for raising the voices of teachers in educational reform (Meyers & Rust, 2003). Inquiry more evenly distributes decision-

making power, breaking down traditional hierarchies and providing space for the power of inquiry to change teaching and learning from within teaching and learning. As informed decision-makers, teachers can claim roles that shape the practice of teaching as both educators and activists (Caro-Bruce, et al., 2009; Cochran-Smith & Lytle, 2009; Dana & Yendol-Hoppey, 2009). When teacher voice is present in issues of reform, knowledge and difference are made problematic so that the current structures and outcomes of schools can be challenged (Cochran-Smith & Lytle, 1993, 2009). With critical will and hope, teacher inquirers who are reformers view teaching as praxis, continuously theorizing the ways in which their daily work connects to larger movements of equity and social change (Cochran-Smith & Lytle, 2001; Freire, 1970; Weinbaum, et al., 2004). As social and educational critics, they use inquiry to speak out in order to dismantle harmful and hegemonic practices so that every child and teacher has opportunities to work in rich, challenging, and supportive environments (Cochran-Smith & Lytle, 2009). Practitioner inquirers use inquiry as a tool to support, battle, and question their work contexts and relationships. They speak out to break down and share power in order to professionalize teaching, legitimize multiple forms of knowledge, and advocate for change.

Inquiry Stance

Practitioner inquiry provides educators with a powerful stance. According to Katzenmeyer and Moller (2001), teachers with strong professional positions “lead within and beyond the classroom, identify with and contribute to a community of learners and leaders, and influence others toward improved education practice” (p. 5). As leaders, these teachers develop strong active voices. By fighting for what they know is best for every student, teachers recognize that they must cultivate the skills necessary to meet

the unique challenges of schools and become researchers, scholars, problem solvers, and advocates. With an inquiry stance they are willing to take risks and try new things, becoming resources to their schools and communities (Cochran-Smith & Lytle, 2009). Through continual processes of making practice problematic and questioning the accepted ways that knowledge and practice are constructed, evaluated, and used, practitioner inquirers are empowered to work individually and collectively for educational and social change (Cochran-Smith & Lytle, 2009). An inquiry stance is a critical habit of mind that informs professional work and becomes a way of living as an educator.

Teachers with inquiry stance bring their students and colleagues into inquiry as well (Caro-Bruce, et al., 2007; Cochran-Smith & Lytle, 1993, 2009; Dana, Thomas, & Boynton, 2011; Weinbaum, et al., 2004). For students of teachers with inquiry stance this often results in atmospheres that encourage creativity, problem solving, reflection, empowerment, and advocacy. For colleagues of teachers with inquiry stance this often results in atmospheres that encourage more collaboration, more collegiality, more openness, and more willingness to take risks that matter. Teachers with inquiry stance know that they have the power to change teaching and learning. These educators are motivated by their careers, enlivened by their work, and feel a responsibility for students, equity, and the teaching profession (Wolkenhauer, Boynton & Dana, 2011).

Research on Practitioner Inquiry

Research conducted on practitioner inquiry informs the work of the practitioner inquiry movement by exploring the ways in which it is typically actualized, the key features, tensions, and benefits that emerge as a result of practitioner inquiry, and its implications for teacher professional development. The following section of this chapter consists of an analysis of the research on practitioner inquiry. The research literature

considered for this review encompassed publications available in American educational research databases that identified practitioner inquiry, action research, or teacher inquiry as key terms. To identify relevant studies, these terms were used to search the Google Scholar and ERIC ProQuest databases as well as the University of Florida's College of Education library. In addition, the references of scholarly works were examined to identify publications that may have been overlooked. Although this review is not exhaustive, of the forty-six publications identified, nineteen are cited within this review. Four criteria were used to select these publications. First, the work was published in the last twenty-five years. Second, the work relates to practitioner inquiry in either preservice teacher education programs or inservice teacher professional development in the United States. Third, the work has been evaluated as a relevant contribution to the field through publication in a peer reviewed journal. Finally, the work directly reports or draws on empirical evidence related to practitioner inquiry. An article was deemed empirical if the method, theoretical framework, and findings were articulated. Thus, only reviews of research, original qualitative and quantitative studies, and empirical descriptions of practitioner inquiry are included in this review.

In contrast to the rich, historical underpinnings of the practitioner inquiry movement, the empirical research on practitioner inquiry is less plentiful. Focusing on research on practitioner inquiry in the United States in the last twenty-five years, however, there are several lessons to be learned. The following sections describe four important qualities of the practitioner inquiry movement: the types of practitioner inquiry, key features, benefits, and tensions.

Types of Inquiry

The review of research presented a variety of practitioner inquiry methods. First, as noted earlier in this chapter, practitioner inquiry goes by many names. While often used synonymously, the terms that describe practitioner inquiry are used to emphasize particular histories or highlight specific features of the process (Dana & Yendol-Hoppey, 2009).

Studies indicate that by removing the heft of academic research language, the term inquiry reminds educators that the systematic and intentional study of their own practice is a natural, normal, and necessary part of teaching (Dana, Dawson, Wolkenhauer & Krell, 2013). In the field of teacher education, inquiry is therefore paired with several descriptors: practitioner, teacher, or classroom. Studies that use the term practitioner inquiry typically use it as an all-encompassing term that includes educators at all levels, from teacher educators and administrators, to classrooms teachers and teacher candidates, within their various contexts. When studies use the terms teacher inquiry (Cochran-Smith, et al., 2009; Poekert, 2010) or classroom inquiry, they are usually describing the role and context of the inquirer more specifically.

Action research (Cochran-Smith, et al., 2009; Meriono & Holmes, 2006; Somekh & Zeichner, 2009) is a term used in research studies about inquiry to emphasize the discursive power in the practitioner inquiry process. When researchers use the term action research they are stressing the duality in the purposes of the process, both to generate knowledge and work toward the improvement of social and educational structures. In the studies that use the term action research, action researchers take on three distinct roles as teacher, scholar, and activist.

While spoken about less in the research on practitioner inquiry, participatory research is a tradition that Noffke and Zeichner (1987) describe as “a philosophical and ideological commitment which holds that every human being has the capacity of knowing, or analyzing and reflecting about reality so that she becomes a true agent of action in her life” (p. 8), and is a philosophy that often undergirds the practitioner inquiry carried out by educators (Cochran-Smith, 1991; Merino & Holmes, 2006).

Aside from the terminology used in the process, research indicates that there are also different forms that practitioner inquirers use as they implement inquiry into their practices and professional positions. Research that illustrates systematic inquiry, for example, often demonstrates inquiry studies taking place individually (Allen & Calhoun, 1998; Merion & Holmes, 2006) and following cycles similar to that described by Dana & Yendol-Hoppey (2009). Alternatively, we see forms of self-study (Cochran-Smith, et al., 2009), lesson study (Poekert, 2010), and narrative inquiry (Cochran-Smith & Lytle, 2009) in the research on the practitioner inquiry movement. Studies also show that systematic inquiry can take place as collaborative inquiry (Allen & Calhoun, 1998; Burbank & Kauchak, 2003; Zeichner & Klehr, 1999), where educators work together to study their own practices or the practices of their schools in collegial study groups (Poekert, 2010) or seminars (Zeichner & Klehr, 1999). We see that while these groups also typically follow cycles like Dana and Yendol-Hoppey describe (2009), they do so with the intention of studying community problems that may impact school teams, school faculties, or entire districts.

Key Features

No matter the model of inquiry utilized by the practitioner, research demonstrates that the systematic and intentional study by educators of their own practice share key

features that make the process a powerful form of teacher learning and professional development.

One key feature that was apparent in this review of the literature was that practitioner inquiry centers on problem solving. In Allen and Calhoun's 1998 study of schoolwide action research study, they found that inquiring professionals "live in the problem-solving process themselves and model it for their students. They focus on the collection of data to diagnose problems, they conduct a disciplined search for alternative solutions, they take collective action, and they conscientiously monitor whether and how well a 'solution' works" (Allen & Calhoun, 1998, p. 2). Since the literature indicates that inquiry often emerges from dissatisfaction and instructional problems (Cochran-Smith, 1991; Dana, Yendol-Hoppey, & Snow-Gerono, 2006; Emerling, 2009), the problem-solving cycle of inquiry has often led practitioners to purposefully understand those problems in order to make informed decisions about what works and what needs to be changed in the future (Emerling, 2009).

Another key feature of practitioner inquiry that was gleaned from this literature review is its emphasis on solving problems of practice within specific pragmatic contexts (Cochran-Smith, 1991; Merino & Holmes, 2006). We can see from these studies that when inquiry is job-embedded and immediately relevant (Dawson & Dana, 2007; Emerling, 2009; Zeichner & Klehr, 1999), practitioners are able to study personal passions (Snow-Gerono, 2005) that are connected to specific dilemmas (Poekert, 2010). These personal studies are not developed around topics deemed important by others, nor are they conducted on other people. Practitioner inquiry has the potential to directly align with personal interest to better understand and change one's own

classroom practice (Zeichner & Klehr, 1999). Snow-Gerono's (2005) study illustrates how inquiries may focus on students by addressing specific children's needs by taking seriously their thoughts, ideas, and learning styles, while studies conducted by Allen and Calhoun (1998), and Merino and Holmes (2006) are examples of inquiries that focused on instruction and curriculum. By threading inquiry into curriculum, Cochran-Smith and her colleagues (2009), and Emerling (2009) demonstrate that instruction can be recursively studied over time and can include other educators and students.

Because we see from research on inquiry that the most effective implementations of inquiry are job-embedded, teachers are better equipped to immediately apply new learning by experimenting with strategies, constructing curriculum, and taking risks in their practice. This persistence on working toward detectable improvement (Emerling, 2009; Snow-Gerono, 2005) can lead to spirals of repeated, connected cycles of inquiry that continuously inform knowledge and practice (Merino & Holmes, 2006; Torres, 1996).

Zeichner and Klehr (1999) found that creating a culture of inquiry takes respect for the voices of teachers and the knowledge they bring to the field of education. Such respectful cultures invest in the intellectual capital of teachers by increasing their opportunities to take control over their professional lives by studying and making public their personal views about what works best for teaching and learning (Burbank & Kauchak, 2003). Their work indicates that inquiry offers teachers the intellectual stimulation (Zeichner & Klehr, 1999). Other studies add to this research by illustrating that in requiring deep processing, elaborative strategizing, and metacognitive reflection, inquiring practitioners must synthesize their experiences based on data collected in their

classrooms (Dawson, 2007; Dawson, 2007) and through engagement with professional literature (Cochran-Smith, 1991; Poekert, 2010). Practitioner inquirers are then able to use this evidence to engage in reflection focused on new learning and the ways in which this learning impacts students, colleagues, and broader communities of practice (Burbank & Kauchak, 2003; Cochran-Smith, et al., 2009; Emerling, 2009). Burbank & Kauchak (2003) discuss that through this respectful culture of inquiry, they saw that the ability of teachers to take control over their professional lives was heightened, resulting in opportunities to publically share personal views about educational goals, expectations, and outcomes.

The research on practitioner inquiry indicates that such cultures cannot exist without meaningful collaboration that takes place over a substantial amount of time (Cochran-Smith, et al., 2009; Zeichner & Klehr, 1999) and is situated in social contexts (Dawson & Dana, 2007). In his study on American high school teachers' workgroup experiences with collaborative inquiry, Bradley Emerling (2010) revealed the need for inquiry communities to be like-minded and collectively committed. Through shared leadership, the teams he studied collaborated to consider changes they could implement together and evidence they could collect and evaluate over time. Through established rituals and routines, such as inquiry-focused protocols for discussion and regularly scheduled meetings, these teams formed collegial communities that allowed them the opportunity to act collectively as decision-makers with the ability to reshape teaching (Cochran-Smith, 1991). From their study, as well as from the work of Cochran-Smith (1991), we understand how inquiry communities might benefit school cultures when they are comprised of various stakeholders (i.e., teacher candidates,

teachers, administrators, university partners) because they promote dialogue (Burbank & Kauchak, 2003) that leads to the questioning of assumptions, the investigation of practices, and innovations that lead to school improvement and opportunities for allied advocacy (Cochran-Smith, 1991).

Aligned with the conceptual framework of practitioner inquiry, research on inquiry shows that the most important features of the inquiry process combine outcome focuses and professionalization agendas (Cochran-Smith, et al., 2009). Connecting scholarship, reflection, experience, perception, logistical management, collegiality, and the voices of children, practitioner inquiry has the ability to nurture teacher growth in respective, intellectually stimulating, and reflective ways (Snow-Gerono, 2005).

Benefits

The research on practitioner inquiry indicates that practitioner inquirers can benefit from the structure of the inquiry process. Since inquiry asks inquirers to direct their own learning, their work has the potential to be refined and focused through intentional connections of theory and practice. In Poekert's (2010) study exploring best practices for facilitating teacher learning through inquiry, he found that there is power in professional development when teachers direct their own learning. Through participant-driven, actively engaging facilitation, the teachers in Poekert's study reported the "luxury" of driving their own professional learning within a facilitated structure that supported differentiated instruction for individual teacher learning. Snow-Gerono (2005) reported similar findings with pre-service teachers when she found that teacher candidates were empowered by the permission inquiry gave them to ask their own professional questions. Numerous studies reiterate this power as discovering one's self as a systematic and intentional learner provides teachers with a sense of autonomy and

control (Burbank & Kauchak, 2003; Donnell & Harper, 2005; Merino & Holmes, 2006), which are important when problematizing practice (Poekert, 2010).

The literature on practitioner inquiry demonstrates, however, that given the responsibility to direct one's own learning, the learning must be focused. Practitioner inquiry structures may help learning stay concentrated as conversations, investigations, theoretical study, and teaching practices stay focused on single, intentional wonderings. As discussed earlier, research indicates that there are many means by which educators may choose to focus their work: needs of children, content and concepts, tensions between beliefs and practices, and learning about the cultures of schools (Allen & Calhoun, 1998; Crockett, 2002; Dana, et al., 2006; Stuart & Yarger-Kane, 2000). With refined focus, teachers develop important habits (Burbank & Kauchak, 2003) that enlighten their roles as teachers who influence change (Emeling, 2009) through the recognition, utilization, and integration of the interrelated components of schools with specific focus on research, reflection, and practice (Burbank & Kauchak, 2003; Donnell & Harper, 2005). In a study conducted by Dawson (2007) for example, preservice teachers focused explicitly on the integration of technology in elementary school classrooms. By taking the complexities of teaching and learning and studying them through the specific lens of authentic technology, teacher candidates refined their understanding of both technology integration and student learning. The focus of the inquiries proved to be a powerful motivator for conceptual change as preservice teachers moved from technology-centered teaching to student-centered teaching. Donnell and Harper saw similar changes through refined and focused professional

learning when the preservice teachers they studied shifted from thinking like students to thinking like teachers (2005).

Research indicates that the structures provided by the practitioner inquiry process make professional learning enjoyable and engaging (Crockett, 2002; Dawson & Dana, 2007). Studies reveal that the process can be gratifying in part because learning and collaboration extend beyond professional development events (Burbank & Kauchak, 2003; Poekert, 2010). In Donnell and Harper's 2005 study, they researched the ways that practitioner inquiry fosters lifelong learning in a teacher preparation program. Similarly, Emerling (2009) studied the ways in which inquiry as professional development might contribute to the ongoing growth of educators. Cochran-Smith and her colleagues (2009) demonstrate the ways in which inquiry lets practitioners dive deeply into immediate questions while simultaneously acting as a springboard for future learning. These studies illustrate that in nurturing teachers in their learning within inquiry structures, they can be freer to engage in the work about which they are most passionate.

Many of the schools in which inquiry has been studied provide explicit collaborative organization. These collaborative structures have been used as tools through which educators can be supported, but are also held accountable (Allen & Calhoun, 1998; Poekert, 2010). The communities in Torres's study (1996) illustrate the ways in which collaborative groups can nurture one another, share concerns, and provide space for every voice to be heard. Other studies show how professionalized communities of practice promote co-learning (Cochran-Smith, 1991; Merino & Holmes, 2006), open and honest dialogue (Burbank & Kauchak, 2003), and stimulating

discussions that lead to action (Crockett, 2002). Inquiry facilitators are often part of these inquiry communities, too (Krell & Dana, 2012). In the research conducted by Allen and Calhoun (1998), they discuss the importance of both internal and external facilitation structures for meaningful collaboration to take place. Internal facilitators in their study worked with teachers throughout the inquiry process as questions arose, while external facilitators were able to examine the school's efforts from a fresh perspective. With the balance of immediate support and the outside examination of the school's efforts, the local knowledge base of the educators could be expanded and reinforced as they were both encouraged and challenged (Allen & Calhoun, 1998).

Another benefit of the inquiry process that is seen in the research on practitioner inquiry is the impact it has on teachers' professionalism. Zeichner and Klehr (1999) write about the ways in which inquiry has the potential to raise the social status of the teaching profession by providing a powerful persona for teaching from which teachers revitalize the occupation by making more informed decisions, engaging in continual learning, exuding self-confidence, and carrying an inquiry stance throughout their professional lives (see also, Dana, et al., 2006; Snow-Gerono, 2005). Studies also reveal that inquiry provides a mechanism for teachers' voices to be heard (Cochran-Smith, 1991; Crockett, 2002) so that the complexities of teaching might be more publically recognized (Dawson & Dana, 2007). Studies by Donnell and Harper (2005) and Merino and Holmes (2006), share examples of teachers claiming positions as reflective problem solvers, change agents, critical consumers of professional research, and legitimate generators of knowledge. There is evidence that this professional positioning can renew educators' sense of efficacy, expertise, and agency (Allen &

Calhoun, 1998; Merino & Holmes, 2006). Additionally, research indicates that when the professional identity of an educator is identified and respected, teachers often become more enthusiastic in their work (Burbank & Kauchak, 2003) and can develop a deeper sense of commitment for the profession and for the students they serve (Emerling, 2009).

While research on the direct connection between teacher inquiry and student learning are scarce, some empirical studies do exist that imply positive connections. Allen and Calhoun (1998), for example, found that the schools they studied with the highest implementations of inquiry communities saw increases in student achievement attributed to those inquiry processes. Zeichner and Klehr (1999) found similar results in the professional development schools they studied. Additionally, several studies found that inquiry impacts student learning by increasing the awareness of the complexities inherent in student learning and bringing students to the forefront of professional development (Burbank & Kauchak, 2003; Cochran-Smith, et al., 2009; Dawson, 2007; Merino & Holmes, 2006).

The professional growth of teachers through practitioner inquiry is also tied to changes in school cultures and the larger society in the literature. Studies indicate that inquiry can encourage responsiveness to knowledge generation, transformation, and social justice (Donnell & Harper, 2005) while stimulating positive changes in the culture and productivity of schools (Zeichner & Klehr, 1999). As professional networks grow within schools and systems, feelings of community and professionalism have the possibility of generating momentum and interest (Burbank & Kauchak, 2003). Emerling (2009) found that this energy influenced school faculty members who were not

previously involved in inquiry to join in on the systematic, intentional study of their practice and/or to learn from the expertise of the inquiring professionals within their school. Beyond the walls of their schools, research also suggests that practitioner inquirers have the potential to impact wider audiences. By examining their assumptions of students and schooling while systematically studying their own practices (Burbank & Kauchak, 2003), teachers can see the changes that need to be made and actively resist harmful oppressive practices (Torres, 1996). Inquiry provides teachers with documentation of their practices that they can use to rationalize and articulate their purposes, goals, and actions to wider audiences than they might have typically because, with inquiry data, they have documented evidence of change (Allen and Callhoun, 1998; Burbank & Kauchak, 2003).

According to Cochran-Smith and Lytle (1993), “when teachers research their own practice...they begin to envision alternative configurations of human and material resources to meet the needs of culturally diverse groups of students, teachers, and administrators” (p. 80). In their seminal article, *Learning to Teach Against the Grain* (1991), they reveal the intellectual work of activism in teaching and how this role can effectively inform pre-service teacher education. In their study, inservice and preservice teachers were positioned as decision-makers and collaborators who must work to reshape teaching to include activism. Educators took on the responsibilities of collaborative resonance where together they critiqued the culture of schools and research practices while asserting their own expertise and calling into question the policies and language that the field of education takes for granted. The educators in

Cochran-Smith and Lytle's study demonstrate the benefit of inquiry as a reform effort that is deeply embedded in the role of teaching and schooling.

Tensions

The research on practitioner inquiry indicates benefits of the process, but also points to some tensions that exist and inhibit the broader expansion of practitioner inquiry.

The most frequently cited challenges in research on practitioner inquiry are the logistics of facilitating and sustaining meaningful inquiry as teacher education and professional development. Time is a common concern for educators and the involved processes of inquiry make this a frequent concern (Cochran-Smith, et al., 2009; Torres, 1996;). Educators conducting inquiry can feel overloaded and burdened (Burbank & Kauchak, 2003; Stuart & Yarger-Kane, 2000). We learn from the literature that inquiry can make the daily realities of teaching become obstacles to professional growth. Increasing the demands of a teacher who is already overloaded with mandated expectations and curriculum (Cochran-Smith, et al., 2009; Cochran-Smith & Lytle, 1991; Donnell & Harper, 2005), inquiry can take time from other obligations (Stuart & Yarger-Kane, 2000). Another complaint in the research about time is that inquiry cycles are often rushed to accommodate academic calendars, so the deep meaningful learning of the process can be difficult to achieve in the time allotted (Merino & Holmes, 2006). Research has also determined that time can confound issues of sustainability when resources, including time, are not invested in structures that support inquiry (Allen & Calhoun, 1998; Cochran-Smith, et al., 2009). For example, Stuart and Yarger-Kane (2000) discovered that lack of support and understanding, as well as poor design and implementation of the inquiry program they studied deterred practitioner inquiry from

fully developing. Research on practitioner inquiry in preservice teacher education programs demonstrates that some logistical challenges are unique to preservice teacher education. If mentor teachers feel threatened by preservice research or if these host teachers are apathetic or uncooperative, for example, it can be very difficult for teacher candidates to conduct inquiry, nonetheless develop an inquiry stance (Burbank & Kauchak, 2003; Stuart & Yarger-Kane, 2000).

As discussed in the historical underpinnings, practitioner inquiry does not align with many traditional views of teaching or research. This can cause tensions when practitioner inquiry is being implemented in teacher education and professional development programs. Research shows that it is difficult to maintain high levels of participation when educators are unable to see the connections of the process to what they expect from teaching, learning, and schools (Allen & Calhoun, 1998; Cochran-Smith, 1991; Snow-Gerono, 2005). In a profession that is traditionally private and isolating, teachers can be reluctant to open up their classrooms or turn the gaze of professional development on their instructional practices (Allen & Calhoun, 1998). This is often true because of the tension that exists surrounding preconceptions of the research process (Burbank & Kauchak, 2003). Residual notions of research on teachers that is process-product focused, intrusive, and unhelpful is antithetical to the inquiry process, but often limits inquiry's chance of being implemented (Cochran-Smith, et al., 2009).

When inquiry is implemented in schools, research reveals that there is a delicate balance that must be struck. This balance can be difficult due to the complex nature of both teaching and inquiring. When inquiry is introduced as a compulsory assignment

within a linear process (Burbank & Kauchak, 2003; Cochran-Smith, et al., 2009; Zeichner & Klehr, 1999), for example, inquiry stance is less likely to develop, and as a result, programs of inquiry are difficult to uphold. The questions that teachers ask can also make the process of implementing inquiry difficult. For instance, Poekert (2010) demonstrates the importance of coaching genuine questions that are not so narrow that learning is limited, but also that facilitators do not challenge teachers so much that the question becomes too complex and is no longer the meaningful question of the teacher.

Several of the research reports in this review noted a social justice tension in the ways in which inquiry is implemented in teacher education and professional development. Both Snow-Gerono (2005) and Stuart and Yarger-Kane (2000) found that the individualization of inquiry artificially separates the teacher from social justice or school reform issues. They found that the teachers they studied rarely discussed the collective struggle for social change and as a result, findings discussing social justice were not reached. Cochran-Smith (1991) attributes this lack of social justice orientation in part to the absence of their emphasis in teacher education programs. She finds that teachers are frequently socialized into the profession without having the time or space to tackle issues related to equity, and therefore, they are often unaware or uncomfortable with the social injustice they witness.

Finally, Crockett (2002) points to an important tension. He asserts that research does not yet accurately illustrate how inquiry as professional learning plays out in practice. He found that articles on practitioner inquiry focus too much on structure and process, and not enough on the content or specific activities needed to implement effective practices that support reflective inquiry-based teacher learning.

Conclusions

Despite tensions characteristic of practitioner inquiry, when key features are effectively applied, research indicates influential arguments for practitioner inquiry to shift the ways in which professional development is carried out in the United States. As a review of the literature on the practitioner inquiry movement has revealed, inquiry has the potential to transform teacher learning and professional growth. For this reason, the infusion of practitioner inquiry into efforts to transition teacher learning and professional growth makes sense.

As the educators at P.K. Yonge Developmental Research School reimagined the use of school space and called into question traditional ways of teaching and learning, professional development would play a unique and essential role in teachers' ability to make sense of and use the newly designed 21st century community learning center, and correspondingly, approaches to teaching. As professional development would play such a critical role in this move, and as a review of the literature suggests practitioner inquiry is a promising practice for teacher professional development efforts, the infusion of practitioner inquiry into professional development associated with the move to the new space is the focus of this study. Specifically, this study was designed to understand the ways those responsible for the growth and development of teachers within a newly designed 21st century community learning center use practitioner inquiry to understand their experiences in supporting and mediating teacher professional learning.

To provide a foundation for this study, this chapter reviewed the scholarship of practitioner inquiry by discussing the origins and development of practitioner inquiry, the foundational principles of practitioner inquiry, and the research on practitioner inquiry.

The next chapter will describe this study's theoretical orientation (hermeneutics) and the ways in which I integrate hermeneutics and the practitioner inquiry research cycle into the study's design.

CHAPTER 3 THEORETICAL ORIENTATION

Introduction

Qualitative research studies are occasionally questioned for their design choices, purposes, and trustworthiness (e.g. Freeman, deMarrias, Preissle, Roulston, & St. Pierre, 2007; St. Pierre, 2006). Therefore, this chapter clearly and explicitly connects this study's theoretical perspective with its purposes and design. In doing so, it serves to articulate the ways in which the study is an interconnected unit, by sharing a clear description of the theoretical perspective used to orient this research, and confirming the study's design is appropriate for supporting its claims (Koro-Ljungberg, et al., 2009).

This chapter, therefore, will address the theoretical orientation for this study, hermeneutics. The chapter will begin with a description of the origins and development of hermeneutics. It will then move into the foundational principles of the theoretical perspective and the process of the hermeneutical circle. Finally, this chapter will discuss the ways in which the hermeneutical circle and the inquiry cycle align in this proposed study to honor the study's theoretical orientation.

Hermeneutics

This research is theoretically oriented by hermeneutics. Hermeneutics is a method for holistically interpreting phenomena by continuously circling between global perspectives and personal reflection (Crotty, 1998; Koro-Ljungberg, et al., 2009). By cycling through wholes and parts of understanding, researchers and research participants are better able to interpret events by considering preconceptions with new, critical direction (Rich, 1990). This both separates them from and unites them more closely with what they know by decontextualizing thought from practice while

continuously returning that thought to praxis (van Manen, 1990). Focusing on the social construction of knowledge, the researcher and research participants are often co-researchers in hermeneutical studies, together working to interpret the social meanings of phenomena.

The Origins and Development of Hermeneutics

Hermeneutics was originally developed in the 17th century to interpret biblical texts and has been applied for centuries to the study of both written and unwritten texts. While the specific theoretical perspective of hermeneutics was developed in the 1600s, the traditions of hermeneutics are grounded in ancient practices.

Greek mythology explains the role of Hermes as an interpreter. His job was to interpret the decisions of the gods to the humans. When ancient Greeks studied written word, they took individual texts, authors' complete works, and entire schools of thought, and looked across them for logic that would correct, confirm, and authenticate preconceptions while generating new knowledge. Their practice of relating wholes to parts and parts to wholes is an enduring hermeneutical theme (Crotty, 1998).

When applied to the biblical exegesis, hermeneutics gained popularity during the Protestant Reformation when protestant Christians fought the Roman Catholic Church dominance in biblical interpretation and began studying the Bible in order to apply biblical texts to everyday situations. Applied in this way, hermeneutics gave relevance to the relationship between the author and the interpreter. It moved biblical studies away from pure academic study to incorporate them into practical, everyday practices (Crotty, 1998). Hermeneutics gave theologians a basis for interpretation that was not just the transfer of meaning from one community to another, but became a cultural self-understanding that "only as historically and culturally located beings can we articulate

ourselves in relation to others and the world in general” (Rundell, 1995, p. 10).

Theologians were able to use hermeneutical methods to gain rich understandings of biblical texts that surpassed the understanding of original authors. They were able to further develop what was already understood by making explicit the implicit intentions of authors to gain more developed understanding of beginning knowledge and applying it in new and different ways (Okrent, 1998).

Friedrich Schleiermacher was one of the first philosophers to apply hermeneutics outside of biblical exegesis. Schleiermacher believed hermeneutics as a theoretical perspective could be applied to more general human understanding (Crotty, 1998). Since Schleiermacher sought the application of hermeneutics beyond theological communities, he continued traditional uses of hermeneutics to move beyond the transfer of knowledge from one community to another. His application of hermeneutics continues to inform modern hermeneutics, most notably through the works of Wilhelm Dilthey, Martin Heidegger, Hans-Georg Gadamer, Paul Ricoeur, and Max van Manen.

Principles of Hermeneutics

Modern hermeneutics are built on several foundational principles. First, life and history are intertwined. Second, human understanding can never exhaust reality, there will always be more to understand (Marias, 1967), and finally, our worldviews, which are grounded in historical and life experiences, guide our actions within a hermeneutical circle (Crotty, 1998).

According to Dilthey, life and history are intertwined (Crotty, 1998). To be open to new experiences we must understand what Husserl calls the foundational, prerequisite to human life, original experience (Lindseth & Norberg, 2004). The primary source of understanding in modern hermeneutics, therefore, comes from an iterative

combination of historical and cultural contexts. Since we are shaped by the practices, events, and situations of our histories and current experiences, hermeneutics is a method for making sense of those incidents through a reflective process that reveals the indirect meaning beneath more obvious ones (Crotty, 1998).

Heidegger explains this as a way to take these experiences and give them new meaning. With interests in ontology, Heidegger writes about Being, or Dasein, as coming from pre-understanding forestructures that inform the events of our lives. In his book *Being and Time*, he emphasizes the philosophical roots of our understanding. According to Heidegger, Being is granted to us after faithfully interpreting its meaning within historical and cultural contexts (Heidegger, 1962). In other words, because we can link to the past, we can interpret the events in our lives and create bonds with traditions to inform current practices (Crotty, 1998; Rundell, 1995). With this depth of understanding we can revise old thought by entering it with critical new direction in order to clarify the essential meaning of the human experience through individual and social levels within historical and cultural contexts (Lavery, 2003; Lindseth & Norberg, 2004; Rich, 1990). Recognizing that hermeneutics start from the desire to interpret a phenomenon based on traditions and personal connections, the theoretical perspective recognizes that one cannot stand outside pre-understandings and history, but must interpret events through a movement in and out of horizons of past, present, and future (Gadamer, 1989).

The hermeneutical perspective believes there will always be more to understand, that human understanding can never exhaust reality (Crotty, 1998). Hermeneutics is a theoretical perspective that believes texts, or lived experiences, are meant to transmit

meaning through the cyclical interpretation of that meaning (Lindseth & Norberg, 2004). Since interpretation is a dynamic process, no definite interpretation is ever possible; there is always more to learn (Laverty, 2003).

Through a dialectical interaction of distancing and binding the interpreter and the meaning, knowledge becomes more abstract and more concrete by separating researchers from what is known while uniting them more closely with what is known (Geelan & Taylor, 2001). This cycle leads researchers to share only the best understanding they are able to produce in that moment (Lindseth & Norbet, 2004; Laverty, 2003). These understandings are strengthened when social phenomena are interpreted through language and communicated with others (van Manen, 1990). In this way, we can come to better understanding of experiences that help to correct misconceptions within more global and historical perspectives (Tuncer, 2008). Experiences are no longer just foreign events in others' lives, but are modes for transmitting meaning through the intention of the participants, the relationship between the participants and the interpreter, and the relevance of that experience to others (Crotty, 1998).

This affinity between experiences and interpreters can lead to deeper understanding when hypotheses derived from one experience are tested against the experiences of others (Flick, 2009). These new understandings can advance the experiences of participants, interpreters, and outsider readers of these experiences when the insights go beyond original intentions or knowledge. Objectivity and validity increase as more is learned about each experience and when it is thought about more and more deeply to form new understandings (Crotty, 1998). Understanding, after all, is

more than recreating someone else's meaning. It is questioning the possibilities of meaning so that what is meaningful passes into the understanding of the experience. Gadamer asserts that understanding comes from being transformed "into a communion in which we do not remain what we are" (Lavery, 2003, p. 375). Heidegger agrees, calling thought a "self-blossoming emergence" (1962, p. 283). We must rid ourselves of reactionary interpretation and be more open to exploring meaning.

To do so, researchers approach new situations in empathetic and critical ways. They are open and receptive while also being analytical and engaging in dialogue with the participants. Researchers also must take transactional approaches so that through their active involvement with participants, new insights can emerge (Crotty, 1998).

This co-creation of knowledge emphasizes the social dimension of Being. Participants are seen as co-researchers who dynamically share hermeneutical studies. Authors of experience and researchers are never seen in isolation, but within social context (Geelan & Taylor, 2001; Tuncer, 2008). They are inextricably linked in the creation of findings, with the investigator acting "as a passionate participant" (Lavery, 2003, p. 13). In this way, there is always more to understand as interpretations are local, specifically constructed, and arise from the movement between parts and wholes in a fusion of history, experience, content, context, researcher, and participant (Lavery, 2003).

The Hermeneutical Circle

Within the hermeneutical perspective, our worldviews, which are grounded in historical and life experiences, guide our actions within a hermeneutical circle (Crotty, 1998). Caputo contextualized this circle by stating, "being and beings are borne or carried outside of one another yet at the same time borne toward one another" (Crotty,

1998, p. 148). Here he speaks of a phenomenological return to our original understandings that, when interpreted, reveal what is implicit, making it explicit in order to grasp the meaning of Being.

Hermeneutics is concerned with a cycle of decontextualizing thought from practice while returning that thought to praxis so that new meaning can be found as the world is constructed through existing experience and history (Geelan & Taylor, 2001; Laverty, 2003). For Gadamer (1989) the circularity of hermeneutics leads to an understanding that is much more than recreating what others know, but is a process of questioning that opens up possibilities of meaning that are then passed into the understanding of experience. Understandings “come from being transformed into a communion in which we do not remain what we are” (p. 375).

The hermeneutical circle moves between the parts of experiences and the whole of the experiences. Interpretation then arises from ever-widening circles of local knowledge and global thought through which the whole is conceived from parts, which are motivated by the whole (Crotty, 1998; Geertz, 1979; Laverty, 2003). Unlike other philosophies it is not about principles of rules for understanding, the hermeneutical circle requires reflectivity, insightfulness, sensitivity, and open mindedness (Crotty, 1998; van Manen, 1990). Reflecting on hermeneutics as a guiding philosophy, researchers begin with self-reflection that leads to circles of reading, experiencing, reflective writing, and interpretation (Laverty, 2003).

Hermeneutic researchers focus not on outcomes, but on events in order to make interpretive sense of phenomena (Crotty, 1998; van Manen, 1990). An underlying principle of hermeneutics is the social co-construction of knowledge, therefore these

interpretations come from participants and researchers as co-researchers who use the hermeneutical circle to construct multiple realities that help to explain the social meaning of actions of objects (Flick, 2009; Laverly, 2003). In doing so, they emphasize the social dimension of being related to others and embedded within culture (Tuncer, 2008).

The aim of hermeneutics is to create dialogical text that resonates with interpreters while evoking critical reflexivity about their own practices (Geelan & Taylor, 2001), allowing the research process to contribute to pedagogical thought and action (van Manen, 1990). Through conversations about shared experience, interpretations can be constructed while questions are simultaneously being raised about those interpretations. Hermeneutical research is an ongoing story of social and historical interpretation that is critically conscious of underlying values and assumptions (Geelan & Taylor, 2001).

The spiral of hermeneutics ends only when researchers feel that in that moment they can make sensible meaning of the phenomenon that is free of inner-contradiction. It is only then that they can write down the experiences and share the story (Lindseth & Norberg, 2004). Ricoeur clarifies this process. He explains that pre-understandings shape stories and these stories give our experiences meaning, which in turn, give meaning to the whole story. The story, according to Ricoeur (1984), is a dialectic between the past, the present, and the future. The past is the present remembering, the present is the present attending, and the future is the present expecting. This threefold present demonstrates how stories can help us see the world in new, yet grounding, ways.

While these hermeneutical circles lead to stories that help bring meaning to phenomena, they also remind us that those experiences are never neutral, they demonstrate both good and bad (Lindseth & Norberg, 2004). Within the hermeneutical perspective, our worldviews guide our actions within a hermeneutical circle (Crotty, 1998). Without reflection within hermeneutics, it would be difficult to see the undesirable practices we are a part of, but with this cyclical reflection, we can be more critical and insightful in our actions in order to change practice and lead discourse improvement.

Figure 3-1 illustrates the hermeneutical circle. This diagram depicts the spiral between local parts and global wholes of an experience that co-researchers engage in while embedded with culture. Through the hermeneutical circle, co-researchers cycle between self-reflection, reading, experiencing, reflective writing, social interpretation, and then the questioning of those interpretations, which begins the hermeneutical circle again. By circling through hermeneutics, co-researchers' stories of their experiences are shaped by pre-understanding, understanding, and new understanding.

Aligning the Hermeneutical Circle and the Inquiry Cycle

To further present the theoretical orientation of this study, the hermeneutical circle will be compared to the practitioner inquiry cycle (Figure 3-3). Recall from Chapter 2 that practitioner inquiry is a powerful form of professional learning that Cochran-Smith and Lytle (1993; 2009) define as the systematic, intentional study by educators of their own practice. Inquirers seek out change and reflect on their practice by engaging in an inquiry cycle (Figure 3-2) of posing questions or “wonderings,” collecting data to gain insights into their wonderings, analyzing the data, making changes in practice based on new understandings, and sharing findings with others

(Dana & Yendol-Hoppey, 2009). Through inquiry, practitioners gain a better understanding of their everyday beliefs, assumptions, and practices; consequently making more informed professional decisions while informing the practice of other educators (Oberg, 1990).

For the purposes of this study, the hermeneutical circle has been aligned with the practitioner inquiry cycle. In this way, the hermeneutical circle became a part of the practitioner inquiry process through which participants in this study took part as the study sought to answer the following question: In what ways do those responsible for the growth and development of teachers within a newly designed 21st century community leaning center use practitioner inquiry to understand their experiences in supporting and mediating teacher professional learning? The next chapter of this dissertation will describe the research methodology employed to gain insights into this question, as well as return to the relationship between the hermeneutical circle (the theoretical lens that frames this study) and the practitioner inquiry cycle (the process enacted in this study) and explicate the relationship between them.

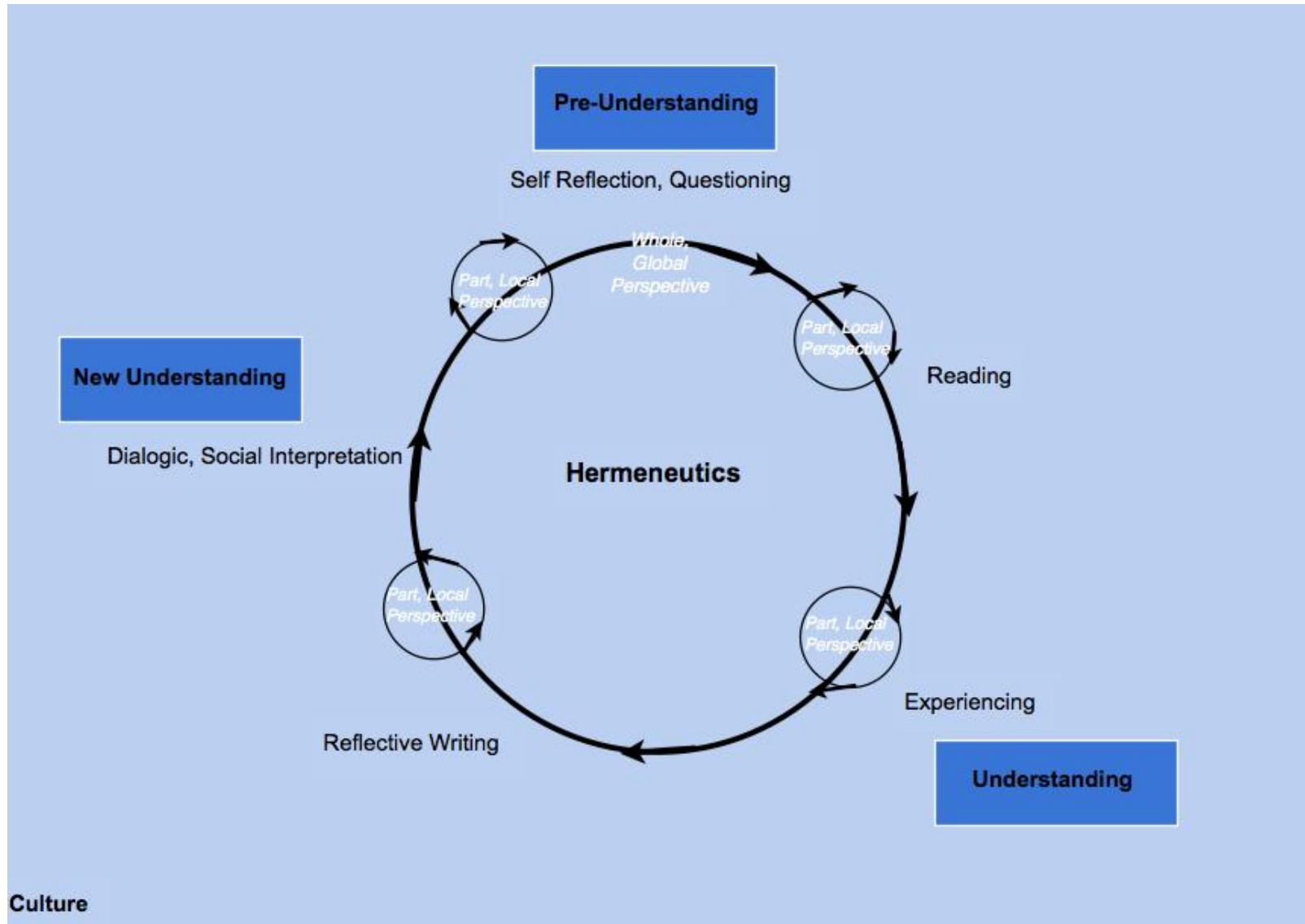


Figure 3-1. The hermeneutical circle

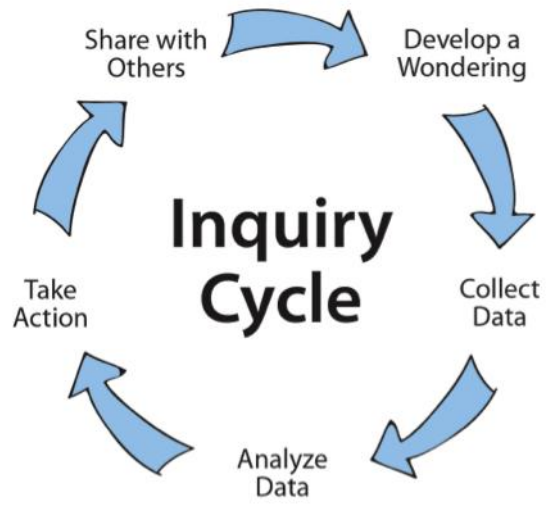


Figure 3-2. The inquiry cycle (Dana, Thomas, Boynton, 2011)

CHAPTER 4 METHODOLOGY

Introduction

This chapter addresses the methodology used to conduct this research, which studied the ways in which practitioner inquiry can serve as a mechanism for mediating and supporting teacher growth and development in a new environment that uses space differently. As described in Chapter 3, hermeneutics was used as the theoretical framework to approach this work.

Keeping with hermeneutic traditions, I was a participant in this study, along with the elementary curriculum and instruction coordinators at P.K. Yonge Developmental Research School, Lillian and Diana (pseudonyms). Lillian and Diana are responsible for the professional development at the school, and most notably for this study, they were responsible for supporting teachers in the school's transition to teaching in the newly designed 21st century community learning center that they moved into during the 2012-2013 school year.

As co-participants, we met on a regular basis to study the most effective ways to conduct professional development in the newly designed 21st century community learning center, using practitioner inquiry as a mechanism to understand professional development practices and how they were playing out for the teachers as they transitioned into the new building and the new configurations for teaching and learning within it.

Because we employed the process of practitioner inquiry to study professional development in this new space, it is important to explicate the ways this process aligns with hermeneutics, the theoretical lens that drove this work. Therefore, in this chapter, I

begin by describing the ways hermeneutics and practitioner inquiry align with one another, providing a general sense of the ways this study unfolded for the reader. Next, I describe in more detail the participants in this study, Lillian, Diana, and myself. I will also describe the dual roles I played as the researcher and a participant in this dissertation study. After these descriptions, I share the details of the procedures we followed, including when we met, how often, and what we did when we met with one another. I next describe our data collection methods and the data analysis and interpretation procedures that guided this work. Finally, I end the chapter by establishing the trustworthiness of this research.

Practitioner Inquiry and Hermeneutics

Recall from Chapter 2 that practitioner inquiry is a powerful form of professional learning that Cochran-Smith and Lytle (1993; 2009) define as the systematic, intentional study by educators of their own practice. Inquirers seek out change and reflect on their practice by engaging in an inquiry cycle (Figure 3-2) of posing questions or “wonderings,” collecting data to gain insights into their wonderings, analyzing the data, making changes in practice based on new understandings, and sharing findings with others (Dana & Yendol-Hoppey, 2009). Through inquiry, practitioners gain a better understanding of their everyday beliefs, assumptions, and practices; consequently making more informed professional decisions while informing the practice of other educators (Oberg, 1990).

The hermeneutical circle, as discussed in Chapter 3, moves from parts of experience to the whole experience and back and forth again to increase the depth of engagement and the understanding of experiences in order to interpret phenomena within its historical and social contexts, and within the perspectives of all participants,

including the researcher (Laverty, 2003). Geertz (1979) defines the hermeneutical circle as:

a continuous dialectical tacking between the most local of local detail and the most global of global structure in such a way as to bring both into view simultaneously...Hopping back and forth between whole conceived through the parts that actualize it and the parts conceived through the whole which motivates them, we seek to turn them, by a sort of intellectual perpetual motion, into explications of one another. (Tuncer, 2008, p. 239)

Hermeneutic researchers move back and forth between parts of experience and whole experience by engaging in a circle of self-reflecting/questioning, reading, experiencing, reflective writing, and dialogical/social interpretation. Throughout this circle, researchers ascertain pre-understanding of the phenomenon under study through self-reflection/questioning and reading, understanding of the phenomenon under study through experiencing and reflective writing, and new understanding of the phenomenon under study through dialogic, social interpretation (Figure 3-1).

The practitioner inquiry cycle and the hermeneutical circle share many similarities that were capitalized on in this study to intentionally align practitioner inquiry (the process Lillian, Diana, and I used to understand professional development in the new 21st century community learning center) with the hermeneutical circle (the theoretical lens that drove my work as the researcher in this setting). The alignment of the practitioner inquiry cycle and the hermeneutical circle is illustrated in Figure 4-1, and I describe the ways the practitioner inquiry cycle and hermeneutical circle converged with one another in the work Lillian, Diana and I engaged in throughout this study in the remainder of this section.

The hermeneutical circle begins with preconceptions within the parts and the whole of an experience. When considering preconceptions, participants in this study

considered their personal histories and assumptions of teacher professional development surrounding their preparation for teaching in a newly designed 21st century community learning center, while reflecting on the field of teacher education's larger history. In a similar fashion, practitioners reflect on real world teaching dilemmas and problems of practice at the outset of an inquiry cycle to define the focus of the inquiry. The focus of the teacher's work as a practitioner inquirer must be a topic that they are passionate about exploring (Dana, 2013). When considering one's passions before starting inquiry, practitioners ensure their inquiries are personally relevant and contextually meaningful.

Through these reflections, questions begin to develop. The "wonderings" (Dana & Yendol-Hoppey, 2009) in the inquiry cycle are personal and highly situated; questioning at this stage in the hermeneutical circle, while often specific and pragmatic, are related to the larger culture in which the participants' are embedded. At this stage, participants ask how history will impact the phenomena of a new experience and analyze their roles within this new experience. For this study, for example, participants asked: "What are the professional development needs of teachers when they are transitioning into a new architectural space designed to facilitate collaborative teaching and learning, and how do we, as professional developers, meet these needs?"

After reflecting on the questions generated during preconception in the hermeneutical circle, participants then act by investigating new data and new insight like practitioner inquirers do in the data collection stage of the inquiry cycle. Hermeneutical data collection consists of explicit readings of texts and prior events that lead to experiencing new events, and then reflectively writing about the actions that took place

at the new events. In this study for example, participants carefully read through documents gathered in past professional development experiences, which led to the planning and facilitation of new professional development opportunities. After each professional development experience, the participants met to discuss their written reflections on the event and worked to better make sense of the effectiveness of professional development for teachers working in the newly designed school space.

The hermeneutical understandings garnered from these readings, experiences, and reflections lead to the social construction of interpreting the events to come to new understanding. Reflections on new interpretations of the experience and how this impacts original questions, is similar to what is done in data analysis in the inquiry cycle. In the case of this study, for example, the data gathered in professional development and reflective writings helped the participants make systematic and measured decisions for moving forward with professional development that would better meet the needs of the teachers they work with in the newly designed school space.

Next, like the action phase in inquiry, participants in hermeneutical studies shift perspective and change practice based on the interpretations they have made. These changes impact the whole, as systemic change, and parts, by specific changes in individuals' practice and/or discourse. As a result of these shifts, new questions and preconceptions are formed. Participants have added to history and moved to new perceptions. In the case of this study, the action phase was an essential element in maintaining meaningful professional development that supported and mediated teacher growth and development in the 21st century space. Having analyzed data to stand behind their decisions, actions on the inquiry cycle, as informed by the hermeneutical

circle, were quickly accepted by school administration and more clearly understood by P.K. Yonge teachers.

An important step in the inquiry cycle is the sharing of findings with others. Hermeneutical traditions also emphasize sharing (Crotty, 1998), therefore when these new perspectives are formed, participants can share what they have learned in the hopes of stirring new insight for others. The participants in this study, for example, continuously shared their work with the faculty at their school throughout the experiences of professional development in their first year in the new space. They also shared a summary and analysis of their work at the end of their inquiry with the school faculty and with local university partners. Additionally, the participants have submitted state and national conference proposals to share their work with colleagues in the more global field of teacher education. It is in this stage that new hermeneutic and inquiry cycles begin because in the act of sharing, new insights develop into new ideas that will cause more questions and bring about the need for further inquiry.

The inquiry cycle and the hermeneutical circle have been aligned in this study. Since the focus of this study is on practitioner inquiry as a mechanism for mediating and supporting teacher growth and professional development in a new environment that uses space differently, and because this study is theoretically oriented by hermeneutics, the two curriculum coordinators and I were co-researchers within two complementary layers of research occurring simultaneously. In the first layer, we utilized hermeneutics to study the ways in which the two curriculum coordinators used inquiry as a mechanism for supporting and mediating professional development in the new school space. The second layer of research is a cycle of practitioner inquiry that occurred

within the hermeneutical exploration. In this layer of research, we studied the ways that the professional development we were planning and facilitating was supporting and mediating teaching practices as they occurred in a newly designed school space. As a result of these two layers, the inquiry cycle and the hermeneutical circle have been aligned to gain deeper understanding of the findings that emerged from each layer of research in this study.

Research Participants

Lillian attended P.K. Yonge Developmental Research School in kindergarten through twelfth grade and then went on to study elementary education at the school's partner university. Upon graduating with a master's degree in special education, Lillian landed her dream job as a third grade teacher at P.K. Yonge. Lillian taught second, third, and fifth grades, as well as third-fifth grade instructional support for eight years before becoming the school's instructional coach and curriculum coordinator in 2012. As a teacher at P.K. Yonge, Lillian was introduced to inquiry. Her inquiries focused on studying self-regulation strategies for a student with Asperger's Syndrome, and on finding alternatives to traditional grading practices. Lillian found such value in inquiring into her practices that she decided to pursue a doctoral degree and conduct an action research dissertation on self-regulated learning for students who received Tier 3 instruction in reading in the P.K. Yonge's new architectural space. Lillian anticipates earning her doctorate in the summer of 2013.

Diana graduated with a bachelor's degree in elementary education and a master's degree in reading education. She began her teaching career as a first grade teacher in an elementary school in a neighboring town to P.K. Yonge. She then taught first and third grades at P.K. Yonge Developmental Research School before becoming

an elementary curriculum coordinator. Diana also continued her graduate studies while teaching at P.K. Yonge and earned her doctorate in 2012. As a master's student, Diana was introduced to inquiry. When she began her teaching career, she remained an active teacher inquirer within her own classrooms, studying differentiated instruction in math and alternatives to traditional grading practices. As Diana moved into her role as curriculum coordinator, she discovered the joy and value of engaging in collaborative inquiries with her colleagues.

I graduated with a bachelor's degree in elementary education and a master's degree in curriculum and instruction. I taught third and fourth grade in a Florida elementary school. As a master's student, I was introduced to practitioner inquiry and became an avid teacher researcher in my elementary school classroom, studying innovative teaching approaches for reading and writing instruction. So passionate about inquiry, I coached other teachers through the process, used inquiry as a pedagogical approach to teaching my students, and decided to pursue a doctoral degree in order to study practitioner inquiry more closely. This dissertation study is the culmination of that doctoral work.

Researcher Roles: Inquirer and Hermeneutic Researcher

As explained earlier in this chapter, the cycle of practitioner inquiry aligns naturally with hermeneutics (Figure 4-1). Therefore, as Lillian, Diana, and I were engaging in a cycle of practitioner inquiry we were simultaneously engaging in the hermeneutical circle.

According to hermeneutic traditions, therefore, I had two intricately interwoven roles in this study. In my first, I was a co-inquirer. By engaging in cycles of wondering, data collection, and data analysis, Lillian, Diana, and I reflected on professional

development both historically and immediately. Using past lived experiences, observational notes, and reflections of the professional development offered to teachers at P.K. Yonge, we critically analyzed professional development practices in order to make systematic and informed decisions for weekly professional learning and for future goal setting. As a co-inquirer, I helped to take action on our systematic studies by planning for, and when appropriate, taking active roles in, the facilitation of professional learning. In this role, my focus remained tightly connected to part of the professional development. With this focus I could bind myself to our local perspectives of the immediate professional development facilitation in the new space.

In my second role, I served as a hermeneutically oriented researcher. In this role, my focus remained more on the global, whole perspective of understanding the experiences of supporting and mediating teacher professional learning in the newly designed school environment. By taking this more global view, I could better distance myself for greater perspective as I observed professional development in action, taking careful field notes guided by our inquiry, professional development pedagogy, and teacher learning. Each week I analyzed the notes I had taken, synthesized across emerging findings, and reflected on the whole experience through emails with Lillian and Diana (Figure 4-2). We then took these reflective notes into our inquiry conversations to guide our work with teachers in professional development.

The work I did as a hermeneutically oriented researcher informed my work as a co-inquirer, which then fed back into my hermeneutic research. These dialectic interactions allowed me to both bind and distance myself from the practices and effects of professional development as Lillian, Diana, and I studied, planned and facilitated it.

The following sections will provide richer detail into the experience of the relationship of Lillian, Diana, and me as we used inquiry as a worldview to move within the hermeneutical circle, through both parts and wholes of the experience of professional learning in the new space. Lillian and Diana were familiar with practitioner inquiry before our study began, therefore I used the language associated with practitioner inquiry most often as we worked with one another during the seven months of this study, and subsequently regularly use the language of practitioner inquiry to frame the reporting of our work together.

Procedures

As Lillian, Diana, and I aligned and used the inquiry cycle and the hermeneutical circle, we met early in the school year to determine the focus and procedures of our research on mediating and supporting teacher growth and development in their newly designed 21st century community learning center. To frame our inquiry we asked:

- What are the professional development needs of teachers when they are transitioning into a new architectural space designed to facilitate collaborative teaching and learning, and how do we, as professional developers, meet these needs?

To gain insight into our research question, Lillian, Diana, and I met for one – two hours on Tuesdays to reflect on the professional development opportunities we were designing and enacting with the teachers each week. We looked through observational field notes, our researcher reflective email logs, teachers' notes that had been shared, meeting agendas, and previous professional development planning documents. In addition, we took the history of the teachers' learning and P.K. Yonge professional development into consideration, and spent time discussing teacher and student need, the goals of the new space, and the philosophies behind the school's purposes.

With these reflections, we planned for professional development during these Tuesday meetings in two ways. First, we did immediate planning for the week's professional development opportunities. We prepared big questions, planned activities, developed agendas and presentations, and made lists for gathering supplies. It was often during this immediate planning that we communicated with teachers for what to expect and what to prepare for the week in relationship to the professional development time they would share with us. The second kind of planning we did was future-oriented. In order to ensure we were deliberately discussing the ways in which the new space might support or limit teacher and student learning in the long-term, we dedicated some of our time together to talk about the overall progress of professional development in the new space and how we envisioned it contributing to teacher and student learning in the future. With the mission of P.K. Yonge and the new space in the forefront of our minds, we set big goals for moving the teachers toward these objectives with a balance of support and pressure.

During each professional development opportunity, Lillian and/or Diana took the lead in facilitating, often including other teachers in the process. I attended professional development sessions, contributing when appropriate and taking notes throughout. At the end of each week, I sent synthesized versions of my notes, with reflections, to Lillian and Diana (Figure 4-2). These notes and reflections were then used to inform our practices in professional development moving forward.

As co-researchers in this study, Lillian, Diana, and I worked together to continuously circle between global perspectives and personal reflections (Crotty, 1998; Koro-Ljungberg, et al., 2009) by applying the inquiry cycle to the hermeneutical circle.

In doing so, we could decontextualize thought from practice while continuously returning that thought to praxis in order to become culturally self-aware and to articulate our work in relation to others at both local and global levels (van Manen, 1990). By conducting inquiry within a hermeneutical study we were able to ground our work in the our history while openly and dynamically experiencing professional learning in the new space as we were living it through a movement in and out of the horizons of past, present, and future (Gadamer, 1989; Lindseth & Norberg, 2004).

Our work deeply impacted members of P.K. Yonge, including administrators, teachers, and students who did not participate in our small group's inquiry focused meetings, but were influenced by the professional development we planned for, facilitated, and worked to continuously improve. Reflecting on hermeneutics as a guiding philosophy, it was important for us to share what we are learning, not for the transfer of knowledge from one group to another, but for the creation of new ideas, for shifts in practice, and for transformative thoughts and actions for schooling, teaching, and learning (Rundell, 1995). Through inquiry and the hermeneutical circle, we were able to both distance and bind ourselves to the experiences of professional learning in the new space so that the events could be interpreted and transformative (Geelan & Taylor, 2001).

Data Collection

The primary source of understanding in modern hermeneutics comes from the interaction of historical and cultural contexts. Hermeneutics, when used with practitioner inquiry, is a method for making sense of one's own practice by systematically and intentionally reflecting on the experiences of schooling, teaching, and learning (Crotty, 1998; Dana & Yendol-Hoppey, 2009). In doing so, practitioner

inquirers have the opportunity to reveal the indirect meaning beneath more obvious ones (Crotty, 1998). Hermeneutical researchers focus not on outcomes, but on events in order to make interpretive sense of a phenomenon (Crotty, 1998; van Manen, 1990), therefore data collection in this study reflect the events that helped meaning develop from studying and facilitating professional development in P.K. Yonge's newly designed 21st century community learning center.

The meetings where the two curriculum coordinators and I met to discuss new insights, critically analyze the work of our group, and reflect on current and historical implications to our work, served as data collection resources. Additionally, artifacts from our inquiry, including data collected, data analysis, and inquiry findings were collected as data for this study. Lillian and Diana were also interviewed about their preconceptions of the processes of facilitating professional learning in the newly designed space and perceptions of the ways in which teacher professional learning would be experienced. As a participant in the study, I too carefully reflected on my preconceptions of inquiry, professional development, 21st century learning, and my perceptions of the new space and of teacher learning there. The interviews I did with Lillian and Diana were audiotaped and transcribed verbatim.

In addition to these data collection techniques, I also gathered field notes, informal interviews, and photographs while attending and observing professional development facilitated by the study participants, and maintained reflective email communication logs throughout my time as a member of the P.K. Yonge community.

Finally, historical artifacts of professional development at P.K. Yonge (i.e., interview transcripts and professional development artifacts) and the school's transition

to the new space (i.e., blueprints, interview transcripts gathered before the move, professional development artifacts from preparation of teachers to work in the new space, notes from planning meetings) were used to gain deeper insight into the historical perspective of the school's professional learning and their transition to a newly designed 21st century community learning center.

Data Analysis

Hermeneutical data analysis seeks to surpass original understandings of participants, researchers, and observers in order to gain more developed understanding of beginning knowledge and apply it in new and different ways (Okrent, 1998). Because hermeneutics makes intentional links to the past, it is possible to interpret lived experiences and create bonds with traditions to inform current and future practice (Crotty, 1998; Rundell, 1995). With this depth of understanding, the data analysis of hermeneutical studies works to revise old thought by entering it with critical new direction in order to clarify meaning of phenomena through individual and social levels within historical and cultural contexts (Lavery, 2003; Lindseth & Norberg, 2004; Rich, 1990).

Hermeneutics is concerned with a cycle of decontextualizing thought from practice while returning that thought to praxis so that new meaning can be found as the world is constructed through existing experience and history (Geelan & Taylor, 2001; Lavery, 2003). For Gadamer (1989) the circularity of hermeneutics leads to an understanding that is much more than recreating what others know, but is a process of questioning that opens up possibilities of meaning that are then passed into the understanding of experience. Understandings "come from being transformed into a communion in which we do not remain what we are" (p. 375).

Data analysis for this study, therefore, was an iterative process in which the co-researchers moved within the hermeneutical circle, between the parts of experiences of professional development in the new school space and the whole of the experiences. Interpretation arose from ever-widening circles of local knowledge and global thought through which the whole is conceived from parts, which are motivated by the whole (Crotty, 1998; Geertz, 1979; Laverly, 2003). Unlike other philosophies it was not about principles of rules for understanding in this study, as the hermeneutical circle required reflectivity, insightfulness, sensitivity, and open mindedness (Crotty, 1998; van Manen, 1990). Reflecting on hermeneutics as a guiding philosophy, we began this study with self-reflection that led to circles of reading, experiencing, reflective writing, and interpretation (Laverly, 2003). Throughout the seven months Lillian, Diana, and I engaged in the systematic study of professional development in their newly designed 21st century community learning center, we spiraled through numerous hermeneutical circles. While these circles of analysis were inextricably linked, I will pull apart the process in an effort to simplify the ways in which we used hermeneutics to analyze the experience of mediating and supporting teacher growth and development in the new school space (Figure 4-3).

We began each analysis circle by reading our reflective emails, field notes, interview transcripts, professional development artifacts, historical artifacts, and relevant literature. Through the analysis of these readings we were able to process each part of the professional development experiences within the whole experience. By rereading and critically reflecting on text that was generated by different people (i.e., Lillian, Diana, me, P.K. Yonge teachers, educational researchers) we gained new perspectives to the

experiences as we were living them. Using these readings to inform our work, we then prepared for and facilitated professional development. Our analysis continued through the experience of facilitating professional development because of the unique duality in the position I took as a co-participant in the experience and as a hermeneutically – oriented researcher, observing and taking notes. Living the experience as a co-participant in professional development activities at the same time I was observing and taking field notes on the experience as an outside observer allowed me to analyze the mediation and support of teacher professional development by viewing it from past, present, and future perspectives. I did so by applying what we had learned so far, paying careful attention to the ways professional development was currently being effective or ineffective in the experience, and at the same time projecting into the ways professional development would need to change in future experiences based on these perspectives. After each professional development experience, I engaged in reflective writing analyses by synthesizing field notes from the experience and writing reflective summaries and interpretations to Lillian and Diana through email so that they could also gain the perspectives of the outside point of view. These reflective notes allowed them to be completely present while leading professional development activities, but to still benefit from the outside perspective I could bring through these analyses. The reflective writing allowed us to analyze the experience together, through each of our unique perspectives, after it had taken place. We could then use these readings, shared experiences, and reflective writings to interpret the events of professional development to that point in order to move our professional development work in critical new directions. These interpretations were articulated in two ways: through email and

through informal interviews before, after, and during professional development experiences (which were recorded as part of the field notes).

This spiral of hermeneutical analysis ended when we felt that in that moment we could make sensible meaning that was free of inner-contradiction of the ways in which those responsible for the growth and development of teachers within a newly designed 21st century community leaning center were using practitioner inquiry to understand their experiences in supporting and mediating teacher professional learning. It was then that I could begin a summative analysis for writing down the experiences in order to share the story (Lindseth & Norberg, 2004).

In the summative analysis of this study, I read and reread all of the data collected during my seven months at P.K. Yonge, often inviting Lillian and Diana into the experience through meetings, emails, and the co-production of our final inquiry documents (which can be found in Appendix A, B, and C). As I read, I worked to pull apart pre-understanding, understanding, and new understanding for participants in this study. I then reorganized data based on these horizons and carefully analyzed the interpretations Lillian, Diana, and I had made during each horizon. It was from these analyses that I was able to come to more global findings and implications for this research.

Through the dialectical interaction of distancing and binding the interpreter and the meaning, knowledge becomes more abstract and more concrete by separating researchers from what is known while uniting them more closely with what is known (Geelan & Taylor, 2001). The spiral of iterative analyses we engaged in continuously moved us in and out of horizons of the global, local, and individual in order to fuse

history, experience, content, context, researcher, and participant. This cycle allowed us to share only the best understanding we were able to produce in that moment (Lindseth & Norbet, 2004; Lavery, 2003). By sharing our work with others, as I am doing through this dissertation, our experiences are no longer just foreign events in others' lives, but are modes for transmitting meaning through the intention of the study's participants, the relationship between the participants and the reader, and the relevance of that experience to others (Crotty, 1998).

Establishing Trustworthiness

Validity, or trustworthiness, has been carefully considered in this study in order to come to credible research results (Lincoln & Guba, 1985). To ensure that the research methods described above are trustworthy, valid, and credible, several techniques have been applied including, prolonged engagement, triangulation, peer debriefing, and member checking.

When researchers have prolonged engagement in the field, they are better able to establish trust, understand the culture, and confirm findings (Glesne, 2011). By spending seven months (August 2012 – March 2013) at P.K. Yonge Developmental Research School, I was able to become a trusted partner in the professional development culture of the school. By engaging with the two participants in this study for an average of two days each week during those seven months to prepare for, facilitate, and systematically study the mediation and support of teacher professional learning in the newly designed school space, I could continuously and systematically circle through both inquiry and hermeneutical cycles of understanding and analysis alongside the study's participants, making the research more credible as a result.

During the extensive time I spent at P.K. Yonge with Lillian and Diana, we used several methods of triangulation to further ensure trustworthiness. Triangulation can be achieved through multiple forms of data and multiple analysts analyzing that data (Glesne, 2011). As described in detail above, data collected in this study included historical documents, field notes and artifacts from meetings and professional development, formal and informal interviews with Lillian and Diana, and our email communication. The three of us carefully and critically analyzed this data (as described in detail above) as we cycled through multiple inquiry and hermeneutic cycles. Both data triangulation and analyst triangulation allowed us to check for consistency throughout our research (Lincoln & Guba, 1985).

In addition to the triangulation methods used in this study, peer debriefing was also an important aspect of the work. By stepping outside of the field to consult with other knowledgeable professionals in order to analyze data, test hypotheses, and gain new perspective (Lincoln & Guba, 1985), qualitative research studies gain increased trustworthiness. While engaging in fieldwork, and while conducting formative and summative analyses of the research, I frequently consulted with my dissertation committee chair, Dr. Nancy Dana, and methodologist, Dr. Mirka Koro-Ljungberg. Their extensive expertise in practitioner inquiry and hermeneutics, respectively, helped to better ensure I was coming to trustworthy results.

Finally, another method for establishing trustworthiness in qualitative studies is through member checking. Member checking takes place as researchers share data and interpretations with research participants to be sure they are being accurately represented (Glesne, 2011; Lincoln & Guba, 1985). In this study, member checking

was used throughout the data collection, formative analysis, and inquiry reporting process, as Lillian, Diana, and I were co-participants in the study. In addition, while completing the summative analysis and final dissertation report, I consulted with Lillian and Diana to confirm events, facts, and understandings.

Conclusions

This chapter addressed the methodology used to conduct this research, which studied the ways in which practitioner inquiry can serve as a mechanism for mediating and supporting teacher growth and development in a new environment that uses space differently. Since hermeneutics was used as the theoretical framework to approach this work, this chapter began with a description of the ways hermeneutics and practitioner inquiry align with one another. Next it described the participants and explained the two interwoven researcher roles taken in this approach to the research. After these descriptions, I shared the procedures we followed, described our data collection methods, as well as the data analysis and interpretation procedures that guided this work, and finally, established the trustworthiness of this research.

The remaining chapters in this dissertation report the findings of this study. Constructed based on the study's theoretical orientation in hermeneutics, the findings chapters have been organized by pre-understanding (Chapter 5), understanding (Chapter 6), and new understanding (Chapter 7). As Ricoeur (1984) explains, pre-understandings shape stories and these stories help us come to understandings of our experiences, which in turn, gives meaning to the whole story and helps us to develop new understandings. Hence, the story of the experience of the study's participants, as they learned to mediate and support teacher growth and development in the new school

space, are told in this dissertation within these horizons of past, present, and future (Gadamer, 1989).

As Lillian and Diana needed to come to understandings of professional development that could support and mediate teacher growth and development in a newly designed 21st century school space with ideas and terms that presupposed the experience of working there (Crotty, 1998; Heidegger, 1962; Rundell, 1995), Chapter 5 provides a description of the study participants' pre-understandings. Representing pre-understandings, this chapter includes a detailed description of the space, as well as descriptions of the ways the new building was conceptualized and planned, the vision participants created for teaching and learning within it, and the professional learning opportunities Lillian and Diana enacted with the teachers in preparation for the move into the new building.

Once moved into the new building, Chapter 6 shares the understandings that emerged through Lillian, Diana, and my use of practitioner inquiry as a mechanism for untangling the complexity of professional development in the new school environment in order to better support the faculty as they worked to make sense of the new space and new teaching approaches the space encourages. In the first part of this chapter, I reconstruct the inquiry experience that Lillian, Diana and I had during the first year in the new school building. In the second part of the chapter, I analyze our inquiry experience through my perspective as a hermeneutically-oriented researcher.

When insights go beyond original intentions or knowledge, as they did for Lillian and Diana through their inquiry into professional development in the new school environment, new understandings can advance the experiences of participants,

interpreters, and outside readers of these experiences (Crotty, 1998). Therefore, Chapter 7 will share the new understanding that emerged from this study for Lillian, Diana, and me, and for the field of education. It will discuss the ways in which Lillian and Diana utilized inquiry in unexpected ways and how their professional development work in the first year in their new school space can inform the 21st century school reform agenda.

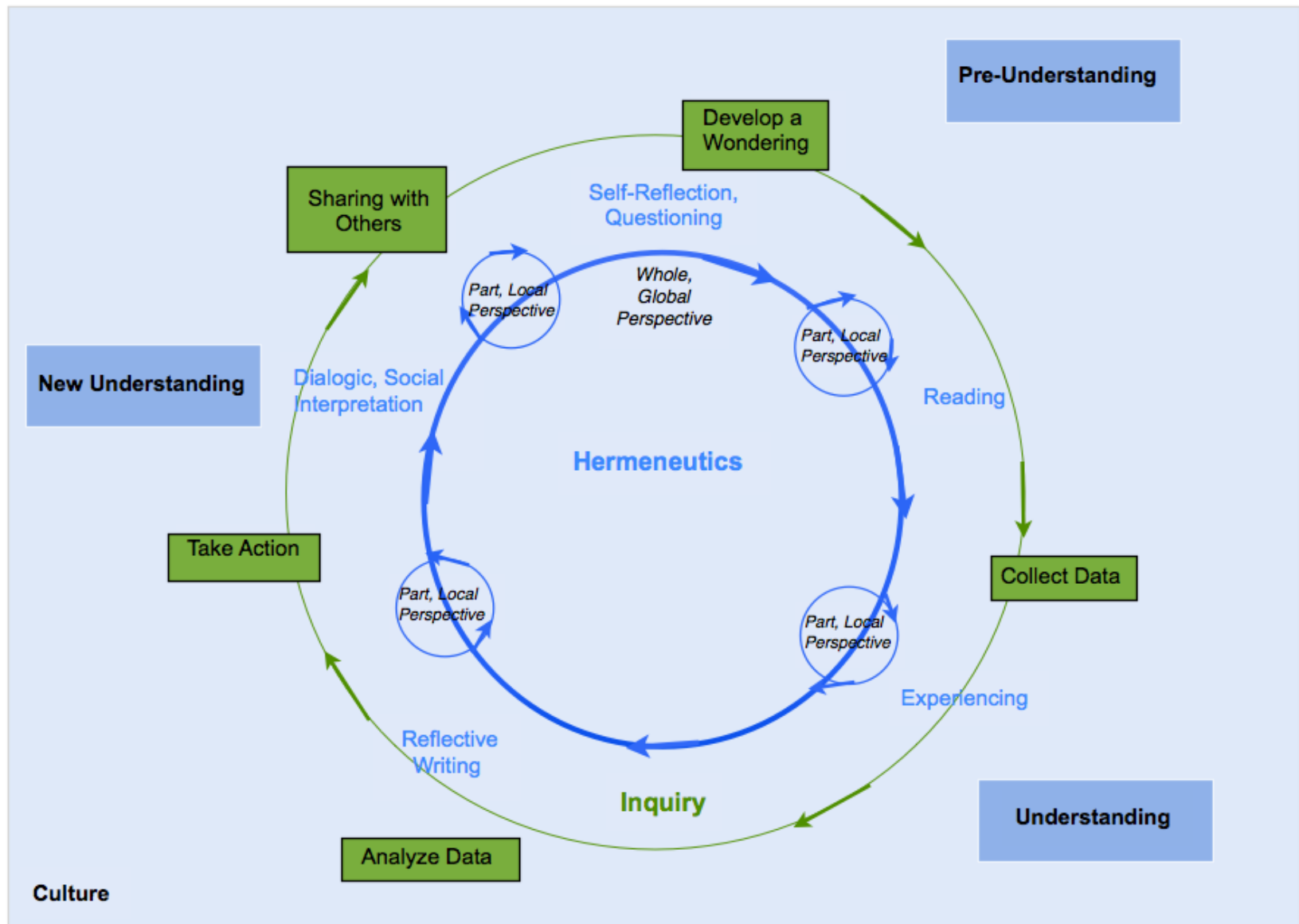


Figure 4-1. Aligning the hermeneutical circle and the practitioner inquiry cycle

Subject: Notes from Last Week
Sender: Rachel Wolkenhauer
Date: 10/15/2012 7:20 PM
Field Notes Week of 10912.docx

There are some AMAZING things going on at P.K. Yonge right now. Teachers are very close to having the esoteric conversations you were talking about at our PLC on October 9, 2012. I took notes (attached) from our PLC and from Wacky Wednesday and focused them on wondering development/inquiry with the hope that we can start pushing our PLC conversations and teachers' conversations in this direction (at least with use of language) like I believe we want. The field notes below show incredible evidence of inquiry work. I'm excited for you to look over them and am anxious to hear your thoughts.

I also wanted to mention that I was very passionate about conferring with readers and writers when I was a teacher. I used the book, *Conferring with Readers*, as a book study with my faculty and modeled conferencing with many of the teachers. I'm really happy to help with the next cycle of Wacky Wednesday, etc. in any way I can. I ordered the book for us (you) this weekend. I meant to bring it to you today, but will have to bring it to our meeting tomorrow instead. I hope it can be helpful.

Thanks for the great opportunity to work with you last week. I truly enjoyed my time with you. I look so forward to the weeks to come.

See you both tomorrow!

Rachel

--

Rachel Wolkenhauer, M.Ed.
University of Florida, School of Teaching & Learning
Lastinger Center for Learning
Teacher in Residence
PhD Candidate

Figure 4-2. Reflective email

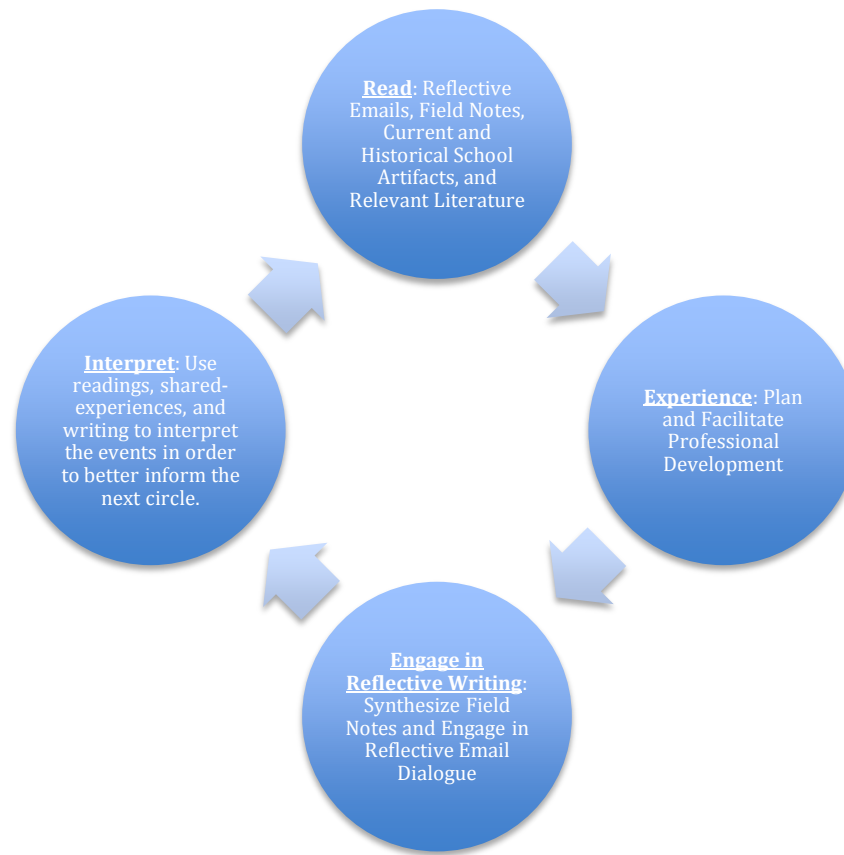


Figure 4-3. Analysis process

CHAPTER 5 CREATING THE SPACE FOR 21ST CENTURY LEARNING (PRE-UNDERSTANDING)

Introduction

The purpose of this study was to understand the ways in which practitioner inquiry can serve as a mechanism for mediating and supporting teacher growth and development in a new environment that uses space differently. Based on field notes, interviews, and historical documents from the school, this chapter provides a rich description of P.K. Yonge Developmental Research School's new environment by describing the newly designed 21st century community learning center. This chapter will also discuss the school's vision for using the space and will share the ways in which Lillian and Diana, those responsible for the professional growth and development of teachers, helped prepare the faculty for making sense of working in the new space and the new teaching approaches the space encourages.

The hermeneutical circle asserts that to come to understanding of a phenomenon, one must come into that understanding with ideas and terms that presuppose the phenomenon trying to be understood (Crotty, 1998; Heidegger, 1962; Rundell, 1995). Hence, this chapter provides a description of the study participants' pre-understanding. It provides an overview of the context, but also demonstrates the necessity of this study, as professional development was critical for learning to work within the new environment in ways that would transform education to better prepare students for tomorrow's world.

A Newly Designed 21st Century Community Learning Center

For many years the educators at P.K Yonge Developmental Research School were frustrated that the traditional spaces where they were teaching students were no

longer conducive to the types of learning students needed to be successful global citizens in the 21st century (Darling-Hammond, 2010; Dede, 2009; Prensky, 2001). Wanting to move beyond the institutionalized school structures that were inhibiting collaborative, interactive, and creative learning, they built a new school with innovators in architectural design to transform education and better prepare students for tomorrow's world.

The 2012 – 2013 school year was the first year teachers and students moved into the newly designed 21st century community learning center. The new one of a kind building was designed to promote collaboration in order to meet the needs of every child (Katzenmeyer & Moller, 2001). In the new space, elementary school teachers and students work together in learning communities. Rather than typical grade level and classroom structures, P.K. Yonge students and teachers in kindergarten and first grade; second and third grades; and fourth and fifth grades each have their own wing of the school in which all students and teachers from the community's two grade levels aim to collaborate in all teaching and learning.

Within these learning communities, seven teachers share the teaching responsibility for their 108 – 132 students. Since teachers no longer work within the confines of traditional school spaces, where one teacher is assigned to 18-25 students for a school year, students in the learning communities have opportunities “to learn different things from different people in different ways at different times and in different places” throughout the school day (Nair, Fielding, & Lackney, 2009, p. 27). In this way, instruction has the potential to be personalized and deepened in ways traditional structures could never support. The level of collaboration between teachers is

completely different than it was before, enabling teachers to collaborate throughout the teaching day to systematically and openly discuss teaching practices, analyze student data, plan lessons, try co-teaching strategies, experiment with new teaching configurations, and share working norms. Since collaboration is at such a high level, teachers can focus on their practice in a completely different way, and as a result can better ensure every child in their learning community is getting individualized, meaningful, and authentic learning opportunities every day (Cochran-Smith & Lytle, 2009; Katzenmeyer & Moller, 2001; Schmoker, 2004).

The architecture of the new school building supports these high levels of collaboration and personalized learning. Unlike traditional school architecture with equal sized classrooms connected by hallways, where every teacher is assigned one isolated classroom, P.K. Yonge's newly designed 21st century community learning center has three learning community spaces connected by open, common areas. Figures 5-1 and 5-2 are the blueprints for both floors of the new building. On these blueprints, the floor plans for the three small learning community spaces and common shared spaces can be seen.

Each learning community's space was designed to meet the teachers' and students' needs and learning goals. Space, color, and natural light are utilized to foster a deep sense of warmth, respectfulness, and community ownership (Nair, et al., 2009). The learning communities consist of small, medium, and large learning studios, which, unlike traditional classrooms, are not owned by single teachers or for single activities. The learning studios are designed to be flexible. They all have transparent, soundproof walls, and furniture that is easily moved and transformed to suit many learning

purposes. Some of the learning studios have doors, while others have openings that lead to a large space shared by all members of the community. Figures 5-3, 5-4, and 5-5 show different configurations and uses of the learning studio spaces. Figure 5-3 shows a whole group lesson in one of the larger learning studios in the kindergarten and first grade community where furniture has been pushed against the walls to allow for the students and teacher to gather in a circle on the floor. Figure 5-4 shows students and a teacher working in a small group in one of the smaller learning studios. Figure 5-5 shows another configuration in a whole group lesson where tables have been pushed together for small group collaboration and to allow for more space for movement.

There are no hallways in the learning community spaces. Instead, the learning studios are connected with a large, open space designed for large group gatherings, for small groups of students and teachers to cluster, or for students to work autonomously. As the furniture in learning studios is flexible, so is the furniture in this larger, open space, enabling on the spot transformations to immediately meet learning situations as they arise. This space also houses shared materials, such as classroom library books, laptops, and office supplies for easy access throughout the day. Figures 5-6, 5-7, and 5-8 show examples of how each community uses their large, open spaces. Figures 5-9, 5-10, and 5-11 show the ways in which the space allows for flexible movement in order to provide individualized learning environments for every learner.

Another unique feature in each learning community is the large, shared teacher workspace. A picture of the second and third grade teacher workspace can be seen in Figure 5-12. The teachers' office is one large, centrally located room that is surrounded by glass so that teachers can always see out to the spaces surrounding it in the

community. In this space, teachers join together to prepare for lessons, discuss their students, and engage in professional learning. Through the transparent walls, they can observe one another's teaching as they prepare lessons during planning periods, and can observe students as they work with other teachers, other students, or independently. Likewise, students and teachers can see into the teacher workspace from the surrounding community spaces (Figure 5-13). By making the teachers' work prominent in the community, it is more visible and public, which demonstrates shared learning for all members of the learning community, all children and adults (Dillon, 2007; Fullan, 1993). By moving into this newly designed 21st century community learning center, the spaces where P.K. Yonge elementary teachers and students work now supports the kind of learning that educators at P.K. Yonge are trying to change.

The Vision for Teaching and Learning in a 21st Century Community Learning Center

The new school space at P.K. Yonge Developmental Research School was established with careful consideration to the school's vision for ideal 21st century learning. For nearly seven years, P.K. Yonge educators and students worked with the architectural firm Fielding and Nair International and interior designers from BRPH Companies Inc., to help define the ways in which they thought their school could transform education and better prepare students for the 21st century. Knowing students needed more control over what and how they learn, and that they needed strong collaboration models to accomplish the real differentiated, student-driven learning they wanted, they decided on the community learning center model (Darling-Hammond, 2010; Dede, 2009; Prenskey, 2010).

Before moving into the building, Lillian shared the importance of changing the experience of school for kids:

The new space represents a new way of teaching and learning that is far overdue. It's time to do something different. I could go on and on about the way kids are different now than they were fifty years ago, or even ten years ago. You can actually watch the impact school is having on kids in these traditional settings – you can see kids coming to school and powering down. And then as you see them leaving school, you see their energy powered back up because now, after school, they can learn and immerse themselves in things and in ways that they want to be doing. It is our duty to change education to match these kids. We're not doing them right by continuing to teach them in this traditional model. In the new building we can do right by kids and we can do right by teachers too, because in the new building, teachers will be able to truly collaborate. Teachers will be collaborating to help all kids and in different ways. This is an opportunity for kids to receive real differentiated instruction. I'm excited to see that for kids. I mean, learn in a way that makes you feel good, in a way that you need to learn! Let us try to help you in that way, not make you fit into our mold.
(Lillian, Interview)

The new space was designed to ensure students have ample opportunity to learn about and explore the world in ways that respects their interests, intelligence, and social wellbeing (Darling-Hammond, 2010; Darling-Hammond, Barron, Pearson, Schoenfeld, Stage, Zimmerman, Cervetti, & Tilson, 2008; Prenskey, 2010). By working in learning communities within flexible spaces, teachers are no longer the experts standing in front of a room telling children what it is they need to know. Instead, teachers are facilitators working on teams of professionals to personalize learning experiences for students that are more authentic, applicable, and engaging for the 21st century (Reeve, 2006). In the newly designed space, students are able to work with teams of teachers and peers to set individualized learning goals based on school standards and personal interests that will push their academic growth and development. They can then make decisions about who they work with (i.e., alone, in pairs, in small groups), where they work (i.e., in quiet places, in noisy spaces, outdoors, near teachers, at desks, on the floor...), how they

work (i.e., paper and pencil or laptop), and often even in what medium (art, drama, music, multimedia, oral presentation, etc.).

Honoring students' learning goals by teaching self-regulation and effective goal setting was one of the most important goals for teachers as they moved into the new building (Hill, in press). In an interview for a video posted on Fielding and Nair International's website, Lillian, Diana, and the school's director explained:

We really embarked on this grand experiment to figure out how to prepare students for the changing world and what's coming next for them. The world is being invented, reinvented and innovated at such a rapid pace that if we can work with our learners on our campus today to know how to organize themselves around goals, and how to monitor themselves as learners in accomplishing those goals, then we know that they will graduate from here better prepared to lead and to work in innovative and creative ways that can make a real contribution to the future of our world. We needed to think about the ways in which space is organized so that it can support the flexibility that needs to happen around teaching and learning. (Fielding and Nair, 2012a)

P.K. Yonge educators knew that by working as teams of professionals personalizing learning for students, they must reconsider not only the ways in which they can flexibly use space to change the experience of school for their students, but also for their work as teachers in the 21st century. Since they were preparing students for collaborative self-regulation and goal setting, it no longer made sense for teachers to isolate themselves in single classrooms with single groups of children (Darling-Hammond & Bransford, 2005). Instead, in the new space, they envisioned seven teachers collaborating to meet the needs of all students. To do so, they plan lessons together, relying on different teachers' strengths at different times. They teach alongside one another, for the first time observing other teachers' teaching. They share teaching responsibilities and resources, are able to conduct flexible student grouping, and have opportunities to confer about student need instantaneously, as need arises.

The new space allows communities of teachers to advocate for the teaching and learning needs of their entire communities. One teacher reflects on the impact of their 21st century space on teaching in a learning community in the video on Fielding and Nair International's website:

It's affected my teaching, just astronomically. We can see what everybody's doing and we can ask questions. The different ways that we do things becomes a communal pool of knowledge. It's such an enriching experience to be able to really live in a space where the other teachers can influence my teaching, and I can influence their teaching. We all have strengths and we're able to give away a little bit of our strength to each other and gain from the strength of others. (Fielding and Nair International, 2012a)

In sum, the newly designed community learning center was constructed to allow educators at P.K. Yonge to actualize a vision for effective 21st century schooling. This vision included students working with teams of teachers and peers in a large, flexible space to set individualized learning goals based upon school standards and personal interest and subsequently engage in a variety of activities to meet their goals. Teachers would no longer be responsible for an individual classroom of students but would collaborate with one another across two grade levels in order to have more flexibility in designing instructional activities that are personalized and meet the particular needs of every learner across two grade levels, with the ultimate goal of providing opportunities for students to develop the skills they will need for success in the 21st century.

Preparing for Teaching and Learning in a 21st Century Community Learning Center

Moving towards a new way of teaching in a new architectural space that departed dramatically from teachers' prior ways of work as well as the architectural space they had occupied for years necessitated a strong focus on teacher professional development as teachers prepared for the new building. As the school's two curriculum

coordinators, Lillian and Diana were responsible for the professional support and development of teachers at P.K. Yonge. During preparation for the new building, Lillian and Diana had active roles. They were involved in “everything soup to nuts from the beginning around conceptualizing the building and then working with teams of teachers to prepare for it” (Diana, Interview). They were on the initial planning team, meeting with architects and interior designers, and they facilitated discussions with teachers and parents to gain the perspectives and include the voices of the whole community. As soon as the plans for the space began to materialize and they could start envisioning what it would look like for teaching and learning, Lillian and Diana began professional development to support teachers’ transition into the new environment.

One significant change in teaching that teachers knew to expect in the new space was that all teaching and learning would now occur within learning communities, two traditional grade levels sharing one wing of the school in order to collaborate and differentiate teaching and learning based on student interest and need. In the video on Fielding and Nair International’s website, the school’s director explained the importance of organizing the school in learning communities:

If we have students and teachers continuing to work in isolated ways and individual classrooms where the teacher stands at the front of the classroom and tells students what it is they need to know, and then students work in isolation to master what they’re being told, they won’t be prepared for tomorrow’s world. (Fielding and Nair International, 2012a)

Despite an articulation of the importance of working in learning communities, teachers had trepidations about the new concept. Lillian explained:

(Teachers) started hearing this term being thrown around, like, “we’re a learning community,” “we need to go into learning communities,” and they were saying, “What is that?”...In general there’s a lot of excitement but also a lot fear because we’ve never done anything like this before and we’ve never been in a building like this before, we’ve never taught like this before,

we don't have a schema for it. We just have these big hopes and dreams, so it's scary. (Lillian, Interview)

Hence, working in K/1, 2/3, and 4/5 learning communities posed a challenge in thinking about the transition to the new space. As Lillian explained:

There's going to be a tremendous amount of collaboration amongst adults who have a certain way of thinking about school because they went to school. They have a certain way of teaching because that's their style. And how to really get adults to play nice together in ways that they have never had to before, they've always been able to just close their door and do whatever they want. That's going to be a big challenge. (Lillian, Interview)

To begin tackling this challenge early on, Lillian and Diana knew they needed to find a way for the teachers to work productively with one another when they occupied the new building space as well as in preparation for the move. Drawing on the literature on effective teacher professional development practices, they introduced a concept that aligned with the learning community model the new building was designed to support. As seven teachers and approximately 115 learners worked together in a K/1, 2/3, or 4/5 learning community in the new building, teachers would work together in professional learning communities (PLCs), defined as small groups of teachers who meet regularly to engage in critical, reflective dialogue about their teaching practices. Research on professional learning communities noted the promise this approach to professional learning held (Vescio, Adams & Ross, 2008), as teachers come together to engage in highly structured meetings organized through protocols and procedures that ensure their conversations and efforts stay productively focused on student learning (DuFour, 2004; Hord, 1997; Yendol-Hoppey & Dana, 2010).

Professional learning communities (DuFour, 2003; 2004; Many, 2009; Pappano, 2007; Schmoker, 2005) became the main container for professional development at P.K

Yonge as they prepared to move into the new space. Teachers from each grade level, and at times, across two grade levels, began to frequently meet for the purposes of professional learning. Together they engaged in critical dialogue about how they would work in their K/1, 2/3 and 4/5 learning communities.

While they understood that the K/1, 2/3, and 4/5 learning community structure would mean “collaborating to help all kids,” they still needed to untangle the complexity of that statement and used their professional learning community meeting time to do so. Lillian attended PLC meetings and explained the emerging vision for collaborative teaching in the K/1, 2/3, and 4/5 learning community structure:

I hope that (students') needs are going to be met better, because you're not stuck in a classroom with a teacher who maybe you don't like, or a teacher isn't stuck with kids that she or he knows that they aren't able to reach. I see the kids needs being able to be met because if, in one classroom you've got some kids that are working on fluency, and this classroom has some kids working on fluency, and this classroom has some kids working on fluency, why not pull all those kids together and one teacher does that, and then these two other teachers are freed up to make sure that these other kids' needs are being met. To me, it's just more efficient and so, when we're more efficient with our resources, then kids' needs can be met better. Instead of one teacher in a room just meeting with these kids who need fluency and everybody else doesn't get met with. Their needs will be able to be met so much more. (Lillian, Interview)

With the vision to better meet every student's individual needs by collaboratively teaching in shared spaces that allows for them to share students, teachers also used their PLC meetings to renegotiate traditional teaching responsibilities. In the new building, they may no longer teach a core set of students all of the subject areas all day long. They may instead focus on certain skill sets, and changing groups of students, while flexibly adapting responsibilities every day to the needs of the community. This idea of flexible and shared responsibility brought with it a lot of tension. Lillian shared:

There has to be some way of like, “I am responsible for these students. You are responsible for these students,” or (it could become) “I’m not responsible for anybody.” There has to be some give there. We don’t know what it is yet. (Lillian, Interview)

By using a professional learning community structure for teachers to meet and discuss the impending move and what it would mean to restructure traditional individual classrooms into one cross – grade level learning community where a number of teachers would share responsibility for a large group of students, Lillian and Diana created the space and opportunity for teachers to begin to envision their new way of work and come to a richer shared pre-understanding of what a K/1, 2/3 and 4/5 learning community might look like. Through their PLC meetings, teachers agreed that by implementing the K/1, 2/3 and 4/5 community structure, they were:

doing right by kids and doing right by teachers too, because in the new building’s learning communities, you would not be alone in a classroom with twenty-two kids all day. You will almost be forced in this architecture to truly collaborate (Lillian, Interview).

While they knew that collaboration was going to look different than they had ever experienced it before, and that it would be challenging, they were more confident after forming professional learning communities in saying, “(Collaboration) is what that building means. That teachers will be collaborating to help all kids” (Lillian, Interview).

As teachers were able to begin to envision the ways a K/1, 2/3, and 4/5 learning community might function and became more confident in the potential benefits of collaborating with their colleagues to better meet the needs of a greater number of students, two things became very apparent. First, if the goal of working in learning communities was to better meet the learning needs of each individual student, then it would be imperative for teachers to have a system to understand and assess individual learner needs. Second, a new way of work and a new space would necessitate the

need to revisit classroom management and teach students how to function in the new space. To address these two emerging professional development needs, Lillian and Diana helped teachers shift the gaze of their PLC meeting times to content that would be useful as they moved into the new building. Specifically, the PLCs began studying Assessment for Learning (Chappuis, Stiggins, Chappuis, & Arter, 2011) and the Responsive Classroom (Denton, 2007).

Assessment for Learning

Lillian and Diana discuss their reasoning for introducing the concept of Assessment for Learning into PLC meeting times:

(In the new building), our eventual goals are really around this idea of personalized learning and helping kids self select for that, and how that makes sense. (Diana, Interview)

We have to figure out how to teach in this space... Kids will be having the opportunity to learn differently and to be learning in ways that are going to prepare them for the work force. Now, how do we do that? There's so many different ways...We started by studying Assessment for Learning, and that is mainly about, what are your learning targets and how are you helping students track their learning along the way? (Lillian, Interview)

As Lillian's words in the quote above describe, Assessment for Learning is an approach to formative assessment coined by Rick Stiggins, where students don't just learn about objectives and standards, but are really brought into the process of preparing for successful learning (2005). Students collaborate with their teachers to learn about achievement expectations and analyze models of strong and weak work. They take part in continuously monitoring their current level of achievement as compared to the agreed upon expectations in order to set goals for what to learn next. Students communicate evidence of learning throughout the learning process not only to their teachers, but to other students and to their families as well. Assessment for

Learning strategies make sense for the goals of the new building and the K/1, 2/3, and 4/5 community structure as using these strategies would enable P.K. Yonge students to have the opportunity to be a part of the assessment by participating in the process, watching themselves grow, and seeing evidence that if they keep trying, they can be confident in their continued success (Stiggins, 2005; Chappuis, et al., 2011).

Lillian and Diana shared articles about Assessment of Learning and integrated the reading and discussion of these articles into PLC meeting times. In studying Assessment for Learning within the PLC, teachers began incorporating some of the Assessment for Learning strategies into their teaching before even entering the new building. Assessment for Learning provided one bridge for the teachers to shift from their old way of work in individual classrooms to their new way of work in K/1, 2/3, and 4/5 communities.

Responsive Classroom Approach

In addition to their studies around Assessment for Learning, Lillian and Diana also introduced the concept of the Responsive Classroom into the PLC meeting times to help teachers engage in rich conversations about the ways in which they might manage behavior in the new space:

We've really tried to get into: What is our core behavior system and what are the ways that we can agree on behavior targets? Because when we get into the building, if one teacher likes it loud and one teacher doesn't let their kids talk at all, we're going to have issues. So what are we going to agree upon and compromise on and what are our core behavior systems that are in place? We're really hitting that hard. (Diana, Interview)

The Responsive Classroom approach, researched by Sara Rimm-Kaufman and her colleagues (i.e., Rimm-Kaufman & Sawyer, 2004; Ottmar, Rimm-Kaufman, Berry, & Larsen, in press; Wanless, Patton, & Rimm-Kaufman, Deutsch, 2012), is designed to

build positive relationships within a community of learners. The approach offers tools for consistency, organization, and student engagement. Key practices of the Responsive Classroom include a daily morning meeting, proactive approaches to discipline, positive teacher language, and giving students choice in their learning (Responsive Classroom, 2013).

The approach nurtures a teaching philosophy that aligned very well with P.K. Yonge's vision for their newly designed 21st century community learning center. By building positive relationships that ensure students feel they matter to the community, children become members of that community in order to more successfully engage academically (Denton, 2007; Rimm-Kaufman & Sawyer, 2004; Responsive Classroom, 2013).

Lillian and Diana shared articles about the Responsive Classroom and integrated the reading and discussion of these articles into PLC meeting times. In studying the Responsive Classroom within the PLC, teachers began incorporating some of the Responsive Classroom strategies into their teaching before even entering the new building. The Responsive Classroom provided one bridge for the teachers to shift from their old way of work in individual classrooms to their new way of work in K/1, 2/3, and 4/5 communities.

Making Professional Development Plans for the 21st Century Community Learning Center

The elementary school faculty had been preparing to teach in the new school building for several years, but Lillian and Diana were concerned that the preparation would be overshadowed by the imminent and extensive changes the new space would bring as they entered the new building during the 2012-2013 academic year. Hence,

just before they moved into the new space, Lillian and Diana developed extensive plans for professional development in the new building, hoping that their continued efforts in providing professional development would support teachers in the transition.

To help systematize professional development that would be valuable and supportive from the very beginning, they established a professional development schedule that each teacher was expected to follow and shared it before the new school year started. The plan was that every Tuesday after school, teachers would meet on their grade level teams for instructional planning. Wednesdays would be dedicated professional development days. All students would be released from school early on Wednesdays so that the whole faculty could engage in professional development together. In addition, one grade level each Wednesday morning would participate in professional development while their students attended specially scheduled classes with art, music, PE, or media teachers.

With their plan for teacher learning prearranged, Lillian and Diana ended the 2011-2012 school year filled with feelings of excitement and trepidation for their next year in the new space. Since they were anxious about the impending challenges for professional development in the new school building, they turned to a familiar mechanism for untangling the complexities of their practices as those responsible for professional development – practitioner inquiry, inviting me to work with them for the upcoming school year.

Chapter 6 will describe the ways Lillian, Diana, and I ended up using practitioner inquiry as a mechanism for supporting professional development during the 2012-2013 school year. It will discuss the ways in which our engagement in inquiry helped to

reinforce the preparatory professional development Lillian and Diana facilitated, while applying supportive pressure for actualizing their vision for the newly designed 21st century community learning center.

As the hermeneutical circle asserts, Lillian and Diana needed to come to understanding of professional development that could support and mediate teacher growth and development in a newly designed 21st century school space with ideas and terms that presuppose the phenomenon trying to be understood (Crotty, 1998; Heidegger, 1962; Rundell, 1995). This chapter, therefore, revealed the study participants' pre-understanding. Chapter 6 will next share the understanding that emerged through our inquiry into professional development in the new school environment by discussing the ways in which Lillian's and Diana's insights went beyond their original intentions or knowledge.

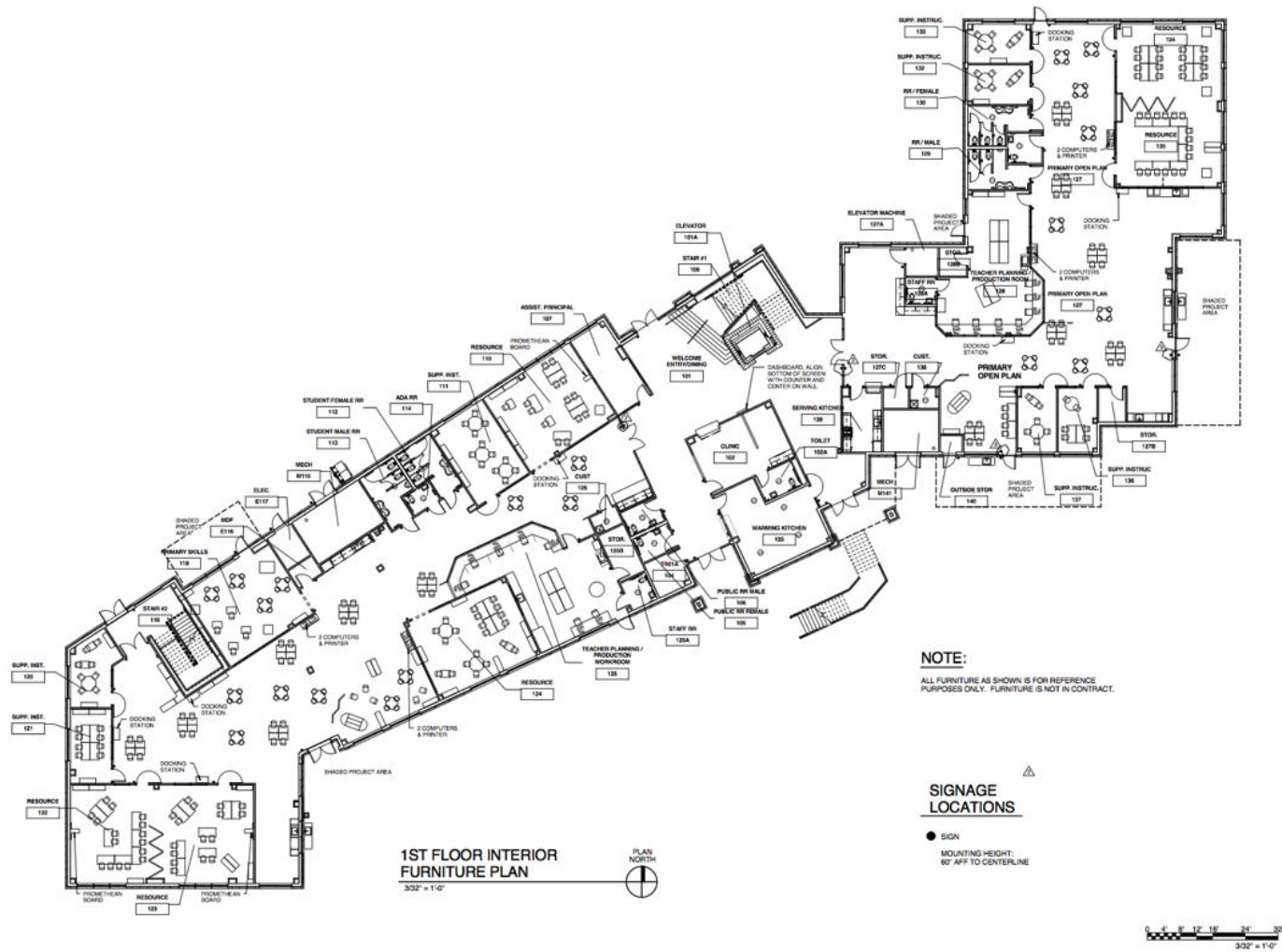


Figure 5-1. First floor blueprint (BRPH Companies Inc., 2011)

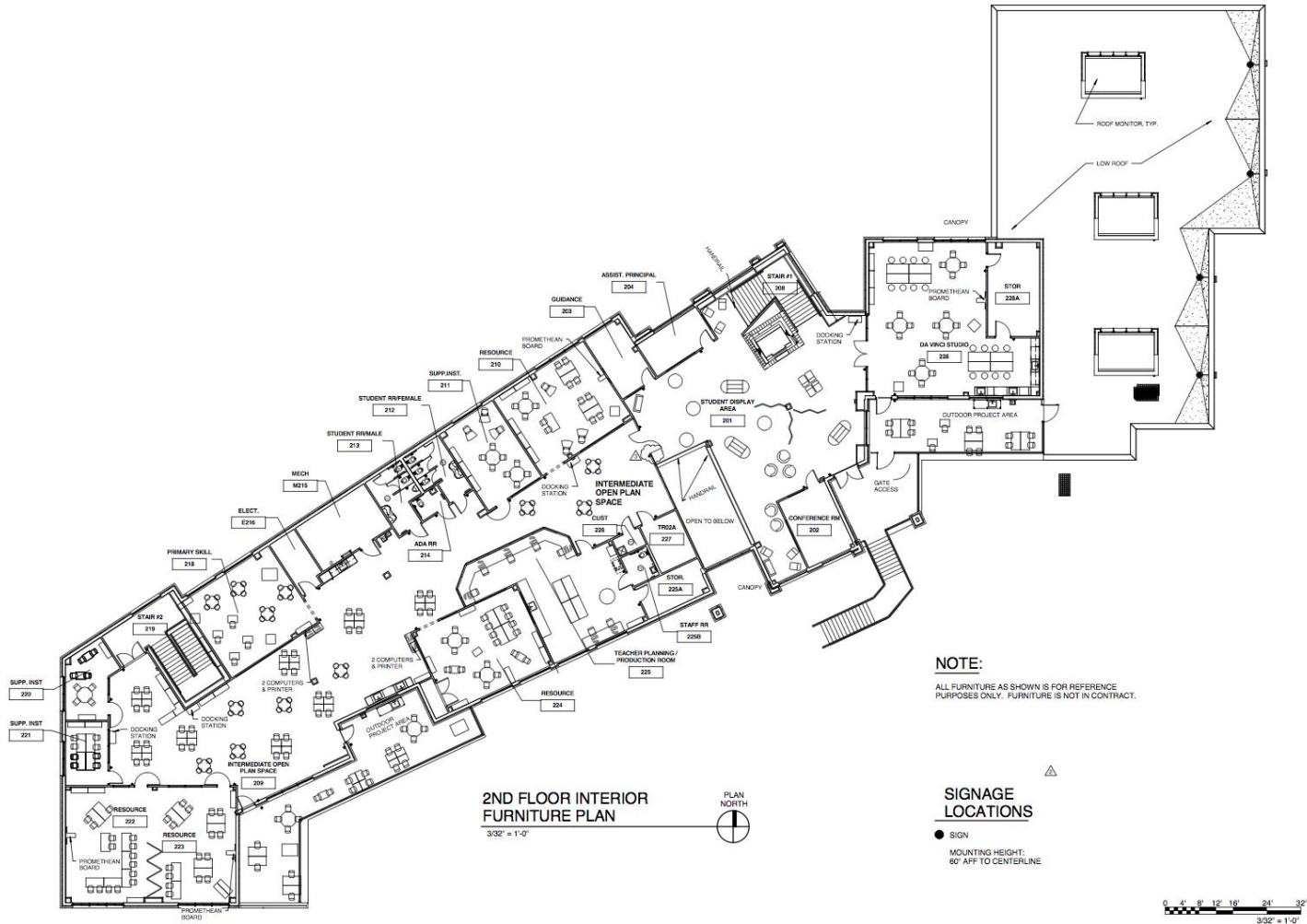


Figure 5-2. Second floor blueprint (BRPH Companies Inc., 2011)



Figure 5-3. K/1 learning studio (Photo courtesy of Fielding and Nair International, 2012b)



Figure 5-4. Small group learning studio (Photo courtesy of Fielding and Nair International, 2012a)



Figure 5-5. 4/5 learning studio (Photo courtesy of Fielding and Nair International, 2012a)



Figure 5-6. K/1 learning community (Photo courtesy of Fielding and Nair International, 2012b)



Figure 5-7. 2/3 learning community (Photo courtesy of Fielding and Nair International, 2012a)



Figure 5-8. 4/5 learning community (Photo courtesy of Fielding and Nair International, 2012b)



Figure 5-9. Small group choice seating (Photo courtesy of Fielding and Nair International, 2012a)



Figure 5-10. Varied seating options in one space (Photo courtesy of Fielding and Nair International, 2012a)



Figure 5-11. Flexible movement for peer coaching (Photo courtesy of Fielding and Nair International, 2012a)



Figure 5-12. Teacher workspace (Photo courtesy of Fielding and Nair International, 2012b)



Figure 5-13. View of teacher workspace from learning studio (Photo courtesy of Fielding and Nair International, 2012a)

CHAPTER 6
INQUIRING INTO THE WORK OF PROFESSIONAL DEVELOPMENT IN A 21ST
CENTURY COMMUNITY LEARNING CENTER (UNDERSTANDING)

Introduction

The purpose of this study was to understand the ways in which practitioner inquiry can serve as a mechanism for mediating and supporting teacher growth and development in a new environment that uses space differently. This chapter shares the story of the inquiry experience Lillian, Diana, and I engaged in during the first year P.K. Yonge Developmental Research School moved into their newly designed 21st century community learning center. This chapter will discuss the ways in which the three of us used inquiry as a mechanism for untangling the complexity of professional development in the new school environment in order to better support the faculty as they worked to make sense of the new space and new teaching approaches the space encourages.

The hermeneutical circle asserts that a pre-understanding of a phenomenon leads to a more developed understanding (Crotty, 1998). Because of the pre-understanding Lillian and Diana developed in preparation for the new building (described in Chapter 5), they approached professional development in the new space with more developed understanding that was strengthened and magnified from the pre-understanding they brought with them into the new space. This chapter, therefore, reveals the study participants' understanding of professional development in the newly designed school building as it unfolded through the process of practitioner inquiry.

In order to tell the story of our inquiry journey and analyze the impact of inquiry as a mechanism for professional learning, this chapter was constructed based on field notes, reflective emails, and professional development documents from the seven months Lillian, Diana, and I engaged in inquiry around professional development in the

new school space. In addition, interviews with Lillian and Diana about their pre-conceptions of the new school space, as well as P.K. Yonge historical documents were used to develop the historical influences in our work.

In the first part of this chapter, I will reconstruct the inquiry experience that Lillian, Diana, and I had during the first year in the new school building. Next, I will turn to analyzing our inquiry experience through my perspective as a hermeneutically-oriented researcher. By ending the chapter with this more global view, I can better interpret the practices of professional development and the effect of those practices on teacher learning at P.K. Yonge during their first year in the newly designed space.

The Inquiry Story

Inquiry Background

As described in Chapter 5, for nearly seven years, P.K. Yonge Developmental Research School developed and built a new school structure designed to bring teaching and learning into the 21st century (Nair, Fielding, & Lackney, 2009). The most pervasive shift in the new space and approach to teaching and learning for the 21st century was the focus on student and teacher collaboration. Rather than typical isolated grade level and classroom structures, P.K. Yonge students and teachers in kindergarten and first grade; second and third grades; and fourth and fifth grades would each have their own wing of the school and would function as a “learning community,” in which all students and teachers from the community’s two grade levels would aim to collaborate in all teaching and learning. The learning communities’ spaces were designed to support collaborative learning among students and teachers where “different students learn different things from different people in different ways at different times and in different

places” (Nair, et al., 2009, p. 27). The 2012-2013 school year was the first year teachers and students at P.K. Yonge used the new space.

As Chapter 5 discussed, Lillian and Diana, the school’s curriculum coordinators who are responsible for the professional growth and development of teachers, intensely prepared for the school’s first year in the new building. After three years of professional development to prepare for occupying the new space, Lillian and Diana established a professional development routine for the new building that they felt would continue to support and mediate teacher learning for the new environment.

Because of their close involvement with the design and preparation of the space, Lillian and Diana understood that professional development would continue to be a complicated and essential element for success, but before moving in, they still had a difficult time imagining exactly what teachers would need, and how the professional development would be oriented in order to both support and mediate teacher learning for the mission of the school, the goals of the space, and the needs of both students and teachers. Before moving in, Lillian understood that she and Diana would need to be flexible, “I don’t know what our practices will look like yet, but I’m really excited and feel that this is a once in a lifetime opportunity” (Lillian, Interview).

Knowing that the transition into the 21st century community learning center would be an exciting, albeit an unfamiliar and complicated challenge, Lillian and Diana turned to a mechanism for untangling professional complexity with which they were both intimately familiar – practitioner inquiry (Dana & Yendol-Hoppey, 2009). Lillian and Diana had studied and practiced practitioner inquiry for much of their professional lives. Introduced to inquiry within their teaching careers, they had engaged in multiple cycles

of inquiry as classroom teachers, and had encouraged inquiry as professional development for the teachers they worked with as curriculum coordinators. Presented with the new challenge of supporting and mediating teacher learning in the newly designed space, Lillian and Diana wondered how the practitioner inquiry cycle they were familiar with for systematically studying classroom teaching practices could translate into the systematic study of their professional development practices in the new building.

As a graduate school classmate, and P.K. Yonge university partner, Lillian and Diana knew that I had been an avid teacher researcher in my own elementary school classrooms and that the focus of my doctoral studies was on practitioner inquiry. Additionally, as the 2011-2012 school year had been wrapping up and teachers were preparing to transition into the new space, I had worked with P.K. Yonge educators to establish a shared vision for teaching and learning in the 21st century community learning center. With my experience in practitioner inquiry and my knowledge of the new school vision, Lillian and Diana believed I would make a good thought partner in making sense of their new roles and the ways that practitioner inquiry might help them negotiate professional development in the newly designed space.

Establishing Our Inquiry Relationship

On August 28, 2012, just two weeks after teachers had begun working in the new building during pre-planning, and just six days after students had arrived, Lillian, Diana, and I met to discuss their emerging thoughts on professional development and the possible ways I could support them in the new space. Before coming to the meeting, I knew little of Lillian's and Diana's thinking around the use of inquiry in the new environment. When I thought of inquiry as professional development, I, much like Lillian

and Diana, thought first of classroom teachers inquiring into their practices. I came to the meeting, therefore, prepared to discuss the possibility of my assistance in facilitating inquiry-oriented professional development for the teachers. I wondered, “How can P.K. Yonge teachers use practitioner inquiry to open up new horizons of schooling, teaching, and learning in this new space?” (Wolkenhauer, 2012).

As described in my field notes from that day, at the start of the meeting, Lillian and Diana asked me to share my initial thoughts around professional development in the new space. As I described my thinking around inquiry-oriented professional development for teachers, they listened intently, but then discussed the potential problems with my ideas:

From our conversation, Lillian and Diana brought up two big pitfalls. First, this would be one more thing for teachers to have to take on and be scrutinized over. Second, teachers are in survival mode and only concentrating on practicalities, they will unlikely be able to reflect on the experience and how it is impacting teaching and learning yet. (Field Notes, 8/28/12)

Still wanting to see how inquiry could fit, we tossed around a few ideas in terms of teachers volunteering to engage in inquiry and meeting on a regular basis to study the new teaching approaches they were using in the new space. As we played with this idea, Lillian and Diana began pointedly reflecting on the process of teaching in the new space as they had been seeing it unfold in the emotional and exhausting first two weeks. They talked about the numerous issues that had arisen (i.e., no one had a personal space to call home, teachers were unsure how to share responsibility for students), the strategies they had taken to begin to overcome the issues (i.e., discussing the “whats and wheres” of teaching and learning in the new space with teachers), and the personal exhaustion it was causing the two of them as they engaged

in extensive conversations with overwhelmed teachers. After this discussion, they were adamant that adding inquiry to teachers' professional expectations would be too much for the teachers to handle, even if it were on a volunteer basis.

As Lillian and Diana spoke, I realized that although they weren't interested in the use of practitioner inquiry with the teachers to help them unpack and understand the shifts in teaching practice necessitated by the architecture of the new building at this point in time, Lillian and Diana could use the process of practitioner inquiry themselves to unpack and understand their practice as professional developers. I reflected in my field notes:

I was suddenly very excited about the opportunity right in front of us. How are these school leaders navigating, driving, supporting, and pushing teaching and learning in this space?...Ah ha! I asked Lillian and Diana if they would be willing to discuss their own use of practitioner inquiry more extensively. (Field Notes, 8/28/12)

At this point, Lillian and Diana shared that they had already been considering the use of inquiry to study their own practices in supporting and mediating teacher professional learning in the new space, but that, like the teachers, they were uncertain of their capabilities in doing so because of all the turmoil the move to the new building had created, and just like the teachers, they were feeling overwhelmed. I offered my support in the process, believing that if I were to take a dual role as both a close, professional development colleague and a more globally-oriented hermeneutic researcher, I could help to both bind and distance us from the newness of the experience in order to dialectically interpret the experiences of mediating and supporting teacher growth and development during this time of complicated reform (Geelan & Taylor, 2001).

Because of our understanding of inquiry's impact on community (Cochran-Smith & Lytle, 1993; 2009), we believed that through Lillian's and Diana's utilization of inquiry to navigate the complexity of facilitating teacher professional learning in the newly designed building, teachers and students in the building could begin untangling that complexity, too. Additionally, we thought that by Lillian and Diana engaging in explicit inquiry themselves, they would be modeling the process for the teachers so that when the time was right, they might come to reimagine the use of inquiry as professional development and find new ways to revitalize its use with teachers at P.K. Yonge.

With these hopes, Lillian, Diana, and I planned to meet on a regular basis to systematically study professional development in the new building. At the end of our meeting on August 28, 2012, we decided to wait to schedule our next meeting until after Lillian and Diana had more time to settle into their new ways of work and had time to help teachers settle into theirs. Lillian and Diana had planned to begin the professional development routine they had prepared for during the transition into the new space on September 26, 2012, so we scheduled our first inquiry meeting for the day before – September 25, 2012.

Finding a Wondering and Developing an Inquiry Plan

Even before we met again in September, Lillian, Diana, and I began the process of focusing our inquiry study. By living in the space for one month, Lillian and Diana gained perspective into the professional learning needs of teachers. They closely collaborated by talking several times a day about what they were seeing, hearing, and experiencing, and communicated plans for sharing responsibly to ensure that the most pressing needs of teachers were being met. At the same time, I was reading literature about practitioner inquiry as professional development (i.e., Dana, 2013; Lieberman &

Miller, 2001), school space philosophy (i.e., Hubbard & Kitchin, 2011; Hutchison, 2004), and 21st century teaching and learning (i.e., Darling-Hammond, 2010; Prenskey, 2010), while also reviewing P.K. Yonge historical documents, to ensure we would be connecting our inquiry to the field of education and to the goals of the school and the vision for the new space.

While Lillian and Diana felt it was important that they engage in inquiry, the month they had lived in the new space made them apprehensive about the commitment we had made together to inquire into the practice of professional development. Despite the years of preparation and planning, entering the new space had been more overwhelming than anyone could have anticipated – both for the teachers and for Lillian and Diana. Hence, they worried about the time and pressure that engagement in inquiry would demand. They worried about the process of data collection for their inquiry and if the data they would need to collect from teachers to understand how they were experiencing professional development in the new building, would place additional burden on the teachers who were already feeling overwhelmed. Diana reflected:

Teachers feel like they can't do one more thing. If I asked them to write five words on a paper they would say, "No way, can't do it." (Diana, Interview)

Finally, they worried that they, themselves, would be unable to critically reflect on and analyze their professional development practices when they, like the teachers, were initially functioning in survival mode.

To support them and help to alleviate some concerns, during our September meeting I brought in the research I had been conducting since we first met, and used it as a supportive foundation to discuss and address each issue they had been troubled by. First, since they wondered how they would find the time to inquire into their

practices when there was already so much added pressure to their jobs in the new building, we put a dedicated one-hour meeting on our weekly calendars. We promised to use the hour to reflect on and prepare for teacher professional development in the new building. By committing this time to planning for the coming week of professional development, it became clear that a large portion of the time that would be devoted to our inquiry would focus on work that Lillian and Diana needed to do anyway – plan for how to use the professional development time they had with the teachers. In so doing, the process of inquiry became a part of Lillian and Diana’s practice as professional developers, rather than apart from it (Dana & Yendol-Hoppey, 2009).

Second, since they wondered what data we would collect, as they were concerned about placing any additional pressure on the teachers, I offered to help with the data collection by attending professional development each week with a hermeneutic-orientation for our inquiry work. I would take notes and collect materials that were created or used during the meetings so that Lillian and Diana could place all of their attention on the facilitation of professional development and support of the teachers they work with. Knowing I would be attending professional development meetings with them, having intimate knowledge of the history, preparation, and desired outcomes of the work, I also agreed to help facilitate and/or participate in professional development conversations or activities as they were taking place. Additionally, we developed a list of resources that were already on hand, but would inform our professional development practices: literature, teachers’ Google Doc planning and professional development pages, and historical documents of school blueprints, visioning plans, and teacher input. In articulating this data collection plan and

developing this list of potential data sources, it became clear that the process of data collection would mean nothing more than systematically collecting and analyzing all that was naturally being produced as a part of Lillian's and Diana's professional development work. There would be plenty of data generated naturally so that asking teachers to engage in additional interactions with Lillian and Diana in the name of data collection would not be necessary (Carr & Kemmis, 1986; Dana & Yendol-Hoppey, 2009).

The support I could offer by attending professional development meetings also helped to alleviate their most pressing issue, as they worried they would be unable to critically and reflectively analyze their professional development practices when they were so immersed in the newness of the experience. By taking careful field notes of professional development, I could then reflect on the experience for us and share those reflections to inform decision-making (Valli & Price, 2000; Zeichner, 2003). Through this dialectic interaction of both binding and distancing ourselves from the new experience of supporting and mediating teacher professional learning in a new environment that uses space differently, we could better understand the experience and help to correct misconceptions within more global perspectives (Geelan & Taylor, 2001; Tuncer, 2008).

Discussing the practicality of our inquiry and how it could fit into Lillian's and Diana's everyday practices helped us move forward. Although all of us were initially overwhelmed by the enormity of P.K. Yonge's school reform effort and the roles we would take in leading teacher professional learning in this new setting, during our meeting in September, Lillian, Diana, and I realized the importance of taking time to reflect on professional development practices in order to move the school forward

(Caro-Bruce, et al., 2009). In an inquiry planning document we created together, we reflected on this realization by stating:

As the curriculum and instruction coordinators and a university partner, we know we are responsible for supporting teachers in this transition to the newly designed space, and for mediating teacher learning. By engaging in practitioner inquiry to study our preparation for, and facilitation of, teacher learning, we hope to systematically study our own practices to better understand professional development opportunities in the new space by considering preconceptions and critical new directions for professional learning (Laverty, 2003; Rich, 1990 in Crotty, 1998). The purpose of this inquiry, therefore, is to study the ways in which we mediate and support teaching learning in a new environment that uses space differently. (Inquiry Planning Document, 2012)

With the purpose of our inquiry established, we wondered: “What are the professional development needs of teachers when they are transitioning into a new architectural space designed to facilitate collaborative teaching and learning?,” and “How do we, as professional developers, meet these needs?”

With minimized concerns surrounding the feasibility of our inquiry and purposeful wonderings developed, Lillian, Diana, and I established a systematic plan for engaging in cycles of wondering, data collection, data analysis, and new action (Dana & Yendol-Hoppey, 2009). Our inquiry planning document read:

On Tuesdays, beginning in October, the three of us will meet to discuss current professional development and make a plan for next steps. This meeting will also be time for discussing our inquiry work as findings emerge that can inform our practices. Every Wednesday morning, we will meet with one grade level and then with the whole faculty on Wednesday afternoons. At the end of every week, Rachel will send field notes and reflections to Lillian and Diana, who may respond with their own reflections for the week. As we support and mediate professional learning in the new space, we will also gather evidence that reflects teacher learning, growth, and development as it emerges. After gathering data, we will analyze the results and present our findings at the P.K. Yonge inquiry showcase in May. (Inquiry Planning Document, 2012)

The Start of Our Inquiry into The Work of Professional Development in a 21st Century Community Learning Center: Survival

Before moving into the new space, Lillian and Diana established a professional development schedule that each teacher was expected to follow. The plan was that every Tuesday after school, teachers would meet on their grade level teams for instructional planning. Wednesdays would be dedicated professional development days. All students would be released from school early on Wednesdays so that the whole faculty could engage in professional development together. In addition, beginning in late September (so that teachers could have a chance to first settle into the new space), one grade level each Wednesday morning would participate in professional development while their students attended specially scheduled classes with art, music, PE, or media teachers.

Lillian, Diana, and I began our inquiry into the work of professional development in the 21st century community learning center just as the Wednesday morning professional development experiences were beginning. We met Tuesdays in order to reflect on and prepare for professional development that week. I then attended professional development opportunities with Lillian and/or Diana to gather data that would inform our planning the following week. Lillian and Diana's initial professional development design relied on the condition that after living and working in the new space for about one month, teachers would be ready again to engage in rigorous, curriculum-driven professional development as they had been used to in the old school building. The start of Wednesday morning professional development was meant to reestablish their previous professional development norms.

From data collected in the first cycle of professional development we tried to engage in with the teachers around curriculum and instruction, however, we realized that teachers were in desperate need for more time to figure out the logistics of living and working in the new space. Even with Lillian's and Diana's extensive preparation and systematic plan for helping teachers make sense of and transition into the new environment, it was jarring to actually move into the new space, and their vision for systematizing professional development after a month for settling in proved unrealistic.

From our field notes and Tuesday meeting conversations, we saw that so many of the norms of schooling, teaching, and learning that the teachers and students had followed for so long no longer worked, or didn't work in the same ways. For the first time, teachers had to work very closely together and share almost all decisions to negotiate teaching in the new environment. This was hard. Diana reflected:

We think about why teachers go into teaching and they are control freaks and (laughs) they're in charge and they're bossy and it just can't be that way anymore in this new building. (Diana, Interview)

Our field notes in those early days looked like logistical laundry lists (Figure 6-1). Organizational and logistical issues such as naming spaces, behavior expectations like walking in lines and volume levels, furniture arrangement, shelving, materials, and classroom libraries all took a lot of time, effort, and compromise from entire communities of teachers to work out. So did issues like filling out individual professional development plans when they were no longer working alone, negotiating the responsibilities associated with the traditional class lists they had been handed within the new community where they were expected to share all students, and deciphering ways to communicate the constant and necessary changes to parents as they had to figure out how to work in the newly designed community learning center.

As a result of analyzing our data, Lillian, Diana, and I had the disconcerting realization that even after a month in the new building, the immediate needs of teachers were only those for survival in the new space. As Diana put it, “the constant struggle between logistics and content continues and the content always takes the back seat” (Diana, Interview).

One of the initial findings we gleaned from the early formative analysis of our data was that Lillian’s and Diana’s roles had considerably changed from those they had in the old school building. Whereas before, they had been responsible for professional learning focused on curriculum and instruction, after moving into the new building, the new environment meant Lillian’s and Diana’s roles became essential in supporting emotional wellbeing and in making the logistical and relational decisions typically associated with school administrators.

Diana remembered the emotional distress of teachers coming into a learning community space and not having a designated place to call their own. Since P.K. Yonge teachers had often thought of their classrooms as extensions of their homes, there was a great sense of loss and “homelessness” as teachers moved in:

I think people were really shocked in the first few weeks of living here. For example, one teacher took all of her things out of boxes and put them in “a” room as she would have done in the traditional school space, and the rest of the community was like, “You can’t do that!” There was this sense of everybody had to depersonalize. I don’t think we anticipated how much of a shock it would be. That was tremendously difficult to overcome...the phone would ring and, “Such and such is crying can you please come down and help,” or “I can’t deal with this.” All of that was way more than we anticipated. (Diana, Interview)

Diana could empathize, as she remembered the shock she felt when she first stepped out of her own classroom to become the school’s curriculum coordinator and started working alongside teachers in their classrooms. For the first time she had a

bird's eye view of what teaching was like throughout the school. "I was just blown away by what was happening in classrooms and what teachers perceive of each other, because you don't really know, you've never seen anybody else teach" (Diana, Interview). In the new space teachers were suddenly thrown into a similar situation, but in the case of the new building, not only were they seeing one another teach for the first time, they were having to expose their teaching practices in a new space and in a new teaching approach that was unfamiliar, plus, they had to trust one another with collaborative teaching and shared students. This caused difficult and volatile emotional reactions within every learning community.

So mired down in logistics and survival, "the teachers (didn't always) realize that ways of work aren't the same for everybody" (Field Notes, 08/28/12), so Lillian and Diana were expected to facilitate compromise. Teachers used Lillian and Diana as life supports to try and see past conflict within their communities. Teachers trusted and relied on Lillian and Diana. There was no one else who they believed could truly understand or offer real support. "Nobody gets it unless you live it and I feel a lot of times like we aren't adequately supported outside of the new building just because there's just a lack of awareness of understanding of how difficult what's happening in here is" (Diana, Interview).

In addition to supporting emotional wellbeing, therefore, Lillian's and Diana's closeness to the experiences of living and working in the new space also meant that they took on much more administrative responsibilities relating to the daily operations and interpersonal issues of the school and faculty. Administrators, who were now housed in a separate administration building on campus, did not have the same inside

perspective anymore. Hence, Lillian and Diana were looked to for leading more of the traditional administrative duties. Diana explained:

Lillian and my role has changed in that we are much more involved right now in the day to day operations, and administration kinds of things in this building than we were ever directly involved with before...I think the building is what instigated (the change in our role). There has been such a major shift in what happens in school every day and I think that the leadership knew that there wasn't anybody else equipped to (deal with) it, so we were tapped to do it. (Diana, Interview)

Whereas before moving into the new building, administrators would have made lunchtime and recess weather decisions, checked that classrooms were cleared after fire drills, and dealt with faculty conflict resolutions, Lillian and Diana now took on many of these responsibilities because of their intimate knowledge of life in the new building.

Our realization that Lillian's and Diana's roles had significantly shifted during this early formative analysis of inquiry data also demonstrated that the ways in which they had been handling their new roles in the first few weeks were unsustainable, most notably when it came to dealing with emotional and logistical issues. To meet the needs of the teachers they worked with at the beginning, Lillian and Diana had purposefully spent the first month in the new space working on helping to rebuild a sense of confidence, community, and comfort in teaching and learning. Diana reflected, "I mean we can't have people in this constant stage of fight or flight, which is where they are, is in survival mode right now" (Diana, Interview).

While in survival mode, professional development opportunities on Tuesday and Wednesday afternoons were occasions to discuss logistics such as organizational issues, management strategies, and team building (i.e., Figure 6-1). What we noticed as we analyzed Lillian's and Diana's reflection from those first few weeks was that they

accomplished this by juggling each incident as it arose, but this was very difficult to maintain:

When I reflect on it, I just keep coming back to feeling like, “I don’t have enough time to keep all these balls in the air.” The teachers need support, encouragement, and constant reminders about procedures. I am constantly saying, “No, no, remember, this is how we do this; No, no, remember this is how we do this” and nobody’s doing that because there’s just no continuity of thought or process. (Diana, Interview)

While Lillian and Diana had always needed to be flexible in order to meet the needs of their school, our initial data analyses made us realize the extent of the role shifts they were going through in the new space. While their titles stayed the same, they were really doing very different jobs. We could see in our field notes and reflections that typical ways of facilitating the curriculum-and-instruction-focused professional development would not suffice so early in the move. We decided that although they had planned for moving into the typical curriculum-driven professional learning they were used to providing after the first month in the new space, that this professional development plan was not longer appropriate. Teachers were still dealing with pressing challenges associated with moving into a newly designed community learning center. They were unfamiliar with the spaces, approaches to teaching, and styles of professional collaboration. The day-to-day operations of the new building had to take precedence over the professional development Lillian and Diana were used to providing. Their role as professional developer in the old building had morphed into the roles of counselor and administrator in the new building, as time was consumed by alleviating teacher stress associated with the move and attending to the logistics of navigating the new space.

It was through this formative analysis of the data collected for our inquiry that we were able to articulate and understand this shift in roles, acknowledge the necessity of the shift, but not allow Lillian and Diana to get stuck in solely functioning as counselors and administrators during that first year in the new building. We knew we needed to address the survival stage of development while simultaneously working to push past it so that teachers could begin fulfilling the vision for teaching and learning that the new space encouraged.

Hence, Lillian, Diana, and I began to focus our inquiry meetings purposefully on shifting professional development time solely from stress management and figuring out the logistics of the new space to meaningful discussions about curriculum, instruction, and student learning. To do so, we took into consideration our knowledge of effective professional development from literature, and turned to strategies that had been successful in the past for P.K. Yonge educators in professional development around curriculum and instruction. We then applied these effective professional development strategies and familiar professional development experiences to help teachers unpack their state of survival in the new space. We hoped that this would not only recognize and push past survival mode, but that it would also prime teachers' readiness for engaging in the more rigorous 21st century curriculum and instruction professional development Lillian and Diana had originally envisioned taking place in the new building.

One strategy we implemented that we knew facilitated powerful professional learning opportunities from both our reading of the literature (i.e. McDonald, Mohr, Dichter, & McDonald, 2003) and P.K. Yonge professional development history was the

use of protocols. Protocols are “a series of timed steps for how a conversation among teachers on a chosen topic will develop” used to ensure “focused, deliberate conversation and dialogue by teachers about student work and student learning” (Dana & Yendol-Hoppey, 2008, p. 7). By applying the use of protocols to the survival mode phase of teacher professional development in the new building, Lillian and Diana felt they could better systematize logistical conversations and help develop priority and focus in teachers’ needs.

For example, in a meeting that Diana facilitated in October with the kindergarten teachers, which was intended to discuss a reading conceptual framework they would be using (Florida Reading Initiative, 2011), the agenda was waylaid by emotional complaints about the management of students’ independent reading time in the new building space and structures for typical reading routines. The two-hour professional development meeting time persistently concentrated on logistics until, about thirty minutes into the discussion, Diana suggested the group use a protocol to make decisions about the logistics of reading time and move into the meeting’s intention, the reading conceptual framework (Florida Reading Initiative, 2011). The protocol Diana used that day, and that Lillian and Diana used in logistics conversations with all other grade levels, is summarized from my field notes below:

Logistics Conversations Protocol

Step One: Just the Facts (Approximately 5 minutes): Facilitator names the logistical dilemma that has emerged and poses the question to the group, “What are the facts?” Teachers brainstorm facts as facilitator lists them on chart paper.

Step Two: React (Approximately 10 minutes): Each teacher, in 2 minutes or less, shares his/her reaction to the facts as articulated on the piece of chart paper.

Step Three: Reflective Listening (Approximately 2 minutes): Facilitator summarizes reactions beginning with the phrase, “So I heard you say...”

Step Four: Action Plan (Approximately 10 – 15 minutes): Teachers develop an action plan to address the logistical dilemma. The plan is written on chart paper, saved, and referenced in future logistics conversations. (Field Notes, 10/10/12)

With the use of protocols like this one for engaging in logistical conversations, Lillian and Diana were able to corral and contain many of the logistical complaints so the teachers could begin to focus some of the professional development time they had together on curriculum and instruction.

The Continuation of Our Inquiry into The Work of Professional Development in a 21st Century Community Learning Center: New Configurations and Focus for Professional Development Time

At our next inquiry meeting, we returned to the data we had been collecting keeping in mind the teachers’ readiness to begin to focus on curriculum and instruction and had an epiphany. From looking through field notes and teachers’ Google Doc meeting notes, it occurred to us that grade levels were meeting alone for small group professional development as they had always done, as exemplified in the kindergarten meeting described above. We realized that we, just like the teachers, were being constrained in the ways we conceptualized professional development time in the new space by the way things had always been done in the past when we were organized by single grade-levels teaching in individual classrooms. Working mostly within grade levels in the new space was not conducive to developing the concept of the K/1, 2/3, and 4/5 learning community where teachers would collaborate cross-grade level in innovative ways to personalize instruction and better meet the needs of all students.

Professional development time had to be held at more macro levels: first within the two grade levels in the learning communities, and second within the whole elementary faculty. We developed a Professional Development Time Flow Chart: initial professional development must happen at the learning community level first, then move into vertical team professional development time (with one teacher per grade level in kindergarten through fifth grade), and then move into school-wide, long-range planning dialogue (Figure 6-2).

A second epiphany we had in relationship to a close and careful examination of the data we had collected so far was that in functioning in survival mode during the first phase of our inquiry, teachers' professional development time and planning was always almost completely consumed by what the teachers needed to do to survive tomorrow. This, in turn, meant teachers did not have time to reimagine teaching in the new space. In constant survival mode, they simply tried to fit old practice into the new space which did not work well and did nothing to help the teachers actualize the potential the new space had for rethinking teaching and learning for the 21st century.

Therefore, we tackled the issue, "How do we provide professional development time for future planning and still have time for teachers to focus on immediate planning so that student learning does not suffer?" (Field Notes, 10/09/12). After much brainstorming and consideration, we came to the following action plan:

- We need to devote Tuesday afternoons for K/1, 2/3 and 4/5 learning communities to focus on immediate instructional planning and logistics.
- We need to replace the individual grade-level logistics-oriented Wednesday morning professional development time that was occurring every six weeks while a grade level's students were in art/music/PE classes. We will replace them with K/1, 2/3, and 4/5 learning community time every three weeks. The focus of these Wednesday mornings will only be for goal setting and future-oriented dialogue.

- We need to use student early-release Wednesday afternoons to serve as a bridge. Take the future-oriented goals discussed during each learning community's Wednesday morning professional development time into consideration and revisit plans made on Tuesday afternoons to meet immediate student needs. Tweak as needed. (Field Notes, 10/09/12)

After developing these action steps, we were satisfied with our plan for new configurations and focus for professional development time. Lillian and Diana felt confident in presenting the idea to administration first, and the art, music, P.E. and media teachers next, to assess their willingness and schedules to free up each learning community's teachers every three weeks by having the two grade levels' special classes combined. Because Lillian and Diana so believed in this change, and because they had inquiry data to support their decision, it wasn't long before community Wednesday morning release time was a reality.

At the end of October, community Wednesday morning professional development began. The first community to join together was the second and third grade team. The morning was co-facilitated by Diana and the learning community leader, Katie, and was focused on reading instruction. To begin, the community celebrated the change in professional development that allowed them to work as a community rather than a single grade-level, with breakfast. Over breakfast, the two grade levels caught one another up on their reading workshop structures. They used the following questions, prepared in advance by Diana and Katie, to look for areas of similarity and difference:

1. How are we meeting the needs of our students?
2. Do we have all of the reading components from the conceptual framework?
3. What do they look like?" (Field Notes, 10/31/12)

After breakfast, Diana and Katie guided the conversation into planning for rethinking teaching and learning for the 21st century in the new 2/3 learning community

space. They introduced a guiding question to focus the meeting: “What are our next steps for coming together as a community? What are some ways we can start to bring the 2/3 team (students and teachers) together on a more regular basis?” (Field Notes, 10/31/12). To begin to consider the changes and shifts that needed to occur, they first looked at beginning of the year testing data together and then discussed the “whats and wheres” of current reading instruction based on what they now knew about 2/3 student needs and 2/3 reading conceptual framework structures. From here, each member of the community then had an opportunity to write down their hopes and fears for more intentionally coming together, and share them out to the group. Some of their hopes, based on the critical dialogue and data analysis they had engaged in during this meeting included:

- I **hope** we can think about bringing together 2/3 students and teachers through buddy reading, math games, and field trips.
- I **hope** we can try experimenting with the space at least one day a week so we aren't just staying in our rooms all the time. I hope we could be creative with the shortened student schedule on Wednesdays for this.
- I **hope** we can use each other for instructional coaching – we have a lot more to learn from each other and I hope we can better use this space to intentionally observe each other teach for the purposes on informing our own teaching practices. (Field Notes, 10/31/12)

Some of their fears included:

- I **fear** students and parents will struggle to view us as all of their teachers.
- I **fear** that the grade specific class lists we started with will constrain our efforts of coming together as a 2/3 learning community.
- I **fear** it will be difficult for all seven of us to communicate effectively for planning, parent communication, student progress. (Field Notes, 10/31/12)

The articulation of their hopes and fears, in conjunction with their focused data-driven discussions that morning, pushed the 2/3 learning community teachers' thinking

from an almost exclusive focus on logistics and immediate planning for tomorrow to envisioning the possibilities for how they could begin to work together as a learning community, and the implications that might have for themselves and the children they teach.

As Lillian, Diana and I analyzed the data collected from this meeting, as well as the other learning community's meetings that were structured in the same way, we began to see real shifts in the nature of the dialogue teachers were having about working in a 21st century community learning center. We continued to use what we were learning from our data to plan future learning community professional development time, as well as design other vertical planning and full faculty professional development efforts. When Lillian and Diana saw a need for even more professional development time, they once again were able to use the data from our inquiry to make a case to administration and make it a reality.

Professional development time was beginning to resemble the professional development efforts that had been made in preparation to enter the new building. The teachers in each K/1, 2/3 and 4/5 learning community began to function as a professional learning community, as they met regularly to engage in critical, reflective dialogue about their teaching practices. Critical discussions of concepts, such as Assessment for Learning and the Responsive Classroom, that they had explored prior to the move into the new building began to reappear as the time teachers spent engaging with one another during professional development was again more focused on actualizing the vision for the 21st century community learning center that they had worked for so many years to develop prior to entering the space.

Rediscovering the value of practitioner inquiry as a professional development process from their experiences working with me to study their own practice as professional developers, Lillian and Diana even began implicitly structuring some of the professional development meeting times as mini inquiries. For example, Lillian framed one meeting with the 4/5 learning community with the question, or wondering, “How can we better remember the reasons behind this building and keep the vision in mind as we continue to plan? What can we learn from the other learning communities to help with this?” (Field Notes, 12/12/12). She had arranged for the 4/5 teachers to visit the K/1 and 2/3 communities that day. By visiting the other learning communities, the teachers were able to collect data to inform their wondering by observing some of the strategies the K/1 and 2/3 teachers were using as they worked in the 21st century community learning center. The 4/5 teachers spent fifteen minutes in each of the other learning communities carefully observing and taking notes on clipboards. Afterwards, the 4/5 teachers collaborated to analyze what they had seen and how it would impact their own future work. With these analyses, they then set an explicit goal for trying something new with the school’s vision in mind:

We will better monitor student work in autonomous time by improving our use of Assessment for Learning. We will help students learn to more effectively demonstrate their progress toward goals by analyzing the work they do independently by adding the sentence stem, “this is my best evidence of learning because...” to their self-reflection logs. By adding this sentence, we will help students engage more metacognitively with the texts they are reading and we will better be able to see the progress they are making toward their reading goals on the days we aren’t conferencing with them. (Field Notes, 12/12/12)

This mini cycle of inquiry gave teachers the chance to make measured decisions about how they might move forward in their 4/5 learning community to improve their teaching practices for teaching and learning in the 21st century community learning center.

As the 2012 – 2013 school year and my study were ending in May, professional development opportunities that offered real hope for transforming the ways teachers and students worked with one another in the 21st century were just beginning. In contrast to the overwhelmed state in which the year began, Lillian and Diana believed the future was quite bright. They knew they had a long way to go as the educators responsible for teacher professional growth and development to truly actualize a vision for 21st century teaching and learning, but they had come a long way that first year.

Bringing Closure to Our Inquiry into The Work of Professional Development in a 21st Century Community Learning Center: Sharing Our Story

Every year, the faculties at P.K. Yonge Developmental Research School and the University of Florida's College of Education join to share relevant research and innovations in an academic conference style gathering. Lillian, Diana, and I felt that the inquiry we had conducted into the support and mediation of teacher learning in the new space was an important story to share with our colleagues. After a summative analysis of all of the data we had collected throughout our inquiry we understood that:

Through professional development in the first year in the new space, teachers were both supported and pressured to move from living in the new space to teaching in the new space. Through interlacing cycles of pushing teacher learning forward while attending to immediate needs, the professional development allowed teachers to build confidence as they grew into professionals who are revolutionizing education in this new space together. (Field Notes, 03/18/13)

To prepare for sharing with our colleagues, but also to extend our own learning, we developed an inquiry write-up, presentation, and handout. These documents of our inquiry work are presented in this dissertation as Appendix A, B, and C respectively. By presenting our inquiry to colleagues, we were able to look back and see that after living and teaching in the new space for several months, Lillian, Diana, and I were confident

that the structures of professional development that came from understanding the experiences of creating space for 21st century learning, were impacting the teachers, and in effect, the students at P.K. Yonge. In line with the vision for the new school, teacher collaboration was indeed completely different than it was before. Through the ways we mediated and supported teacher learning in the new environment, teachers were joining together to prepare for lessons, discuss their students, and engage in critical, professional dialogue. Teachers were now working on teams of professionals to personalize learning experiences for their students and one another. As the faculty at P.K. Yonge continue to move forward in their newly designed 21st century community learning center, they are doing it with a more calm, self-motivated confidence that demonstrates an understanding that has developed of the new space and the teaching approaches they are using there.

The Inquiry Story: An Analysis

Lillian, Diana, and I used practitioner inquiry as a mechanism for untangling the complexity of facilitating professional development in a new school environment that uses space differently. We wished to engage in inquiry in order to better support the faculty as they worked to make sense of the newly designed 21st century community learning center and new teaching approaches the space encourages. Through my involvement as a hermeneutically oriented researcher during our inquiry, I carefully worked to both bind and distance myself from the experiences of professional development in P.K. Yonge's new environment so that the implications of this work could be more globally-oriented in order to contribute to the growing lived experiences of professional development in the 21st century. Several important understandings arose from our inquiry journey, including 1) the importance of intentionality in studying

the practices of professional development, 2) the necessity of flexibility in professional development to adapt to teachers' changing needs, 3) the importance of inquiry data for communicating professional development needs to others, and 4) the utility of structuring professional development as inquiry.

Intentionality

By using practitioner inquiry to understand the experiences of supporting and mediating professional development in a newly designed school space, Lillian, Diana, and I systematically and intentionally studied our practices and the impact of our practices on the professional growth and development of teachers at P.K. Yonge. The intentionality of our work was especially important for professional development to evolve during the first challenging year P.K. Yonge worked in the 21st century community learning center.

By choosing to deliberately focus on our own practices as professional developers, Lillian, Diana, and I were able to maintain a tight and explicit focus on teacher learning in the new space, ensuring we could both support teachers in the challenge of moving into the new space, while also facilitating the necessary questioning and work to change traditional views of teaching and learning. Recall from our inquiry experience shared earlier in this chapter that because Lillian, Diana, and I intentionally studied our practice as professional developers, we were able to recognize our own needs, teachers' needs, and the shifts in teaching and learning that the new space required. By taking the time each week to systematically analyze inquiry data and discuss our experiences in professional development, we were able to purposefully adapt professional development to better meet the needs of teachers in the new school space.

Flexibility in Professional Development

As a result of the intentionality of our study into professional development, Lillian, Diana, and I came to understand the importance of flexibility in professional development for adapting to teachers' needs in the tumultuous transition to teaching in a 21st century community learning center. Since we were systematically studying professional development, we were able to pay close and careful attention to teachers' needs and then shift professional development practices to better meet those needs.

Recall from our inquiry story, for example, how Lillian, Diana and I realized that the content-focused professional development plan Lillian and Diana had originally prepared to begin in the new school building after the first month was no longer appropriate due to teachers' survival mode when first moving there. Because of our inquiry into professional development, we were able to shift professional development in order to first support teachers' in their feelings of uncertainty and stress, while at the same time helping to push past survival mode in order to enact some of the strategies that would fulfill the vision for the new space. To do this, we began applying strategies familiar in effective curriculum and instruction professional development (for example, protocols) to professional development around school space logistics and conflict management.

Communicating Professional Development Needs with Inquiry Data

Another understanding we developed as a result of our inquiry was in the importance of inquiry data for communicating our needs in adapting professional development structures to others. As we studied professional development, we gathered extensive data surrounding the facilitation of and participation in professional development (i.e., facilitation materials, teachers' GoogleDoc notes, charts generated

during professional development experiences). Since we were intentionally studying our practices as professional developers in order to best meet teachers' changing professional needs in the new school environment, we found that we could use inquiry data to communicate our needs regarding school structures and times with teachers and administrators.

As was described in detail earlier in this chapter, one instance where inquiry data became especially important was when Lillian, Diana, and I realized we were constraining professional development by traditional school structures in that teachers were still meeting by single grade levels, although they were now teaching within two grade levels. With our analysis of data (professional development facilitation notes, reflective emails, teachers' Google Doc notes, and P.K. Yonge schedules) that reflected the need for learning communities' two grade levels to have professional learning time together, Lillian and Diana were able to share evidence with administration as well as art, music, P.E., and media teachers to develop a schedule where K/1, 2/3, and 4/5 teachers could meet with their learning community colleagues for professional development.

Using Inquiry as Professional Development

One final understanding gleaned from our experiences in inquiring into professional development in the 21st century community learning center was the utility in structuring professional development as inquiry. As Lillian, Diana, and I engaged in the process of inquiry to reflect on our work as professional developers, Lillian and Diana were transferring the processes of our inquiry work into their facilitation of professional development. Although they were not calling the pedagogy of their professional development "inquiry," they were clearly using the processes of practitioner inquiry to

guide reflective, data-driven, action-oriented professional development experiences for the teachers they worked with. As Lillian, Diana, and I engaged in practitioner inquiry as it is discussed in the literature (defining a wondering, collecting and analyzing data to gain insights into our wondering, taking action for change and sharing our work with others), Lillian and Diana were engaging teachers in inquiry during professional development times, too.

Recall from the end of our inquiry story in this chapter, for example, how Lillian structured one 4/5 learning community professional development experience as a mini inquiry cycle investigating the reasons behind the new building, their vision for it, and what the teachers can learn from one another. The 4/5 learning community teachers collected data by visiting the K/1 and 2/3 learning communities. They analyzed this data in small groups, and then shared the implications of their data collection for their future work as teachers in P.K. Yonge's newly designed 21st century community learning center.

Conclusions

The purpose of this study was to understand the ways in which practitioner inquiry can serve as a mechanism for mediating and supporting teacher growth and development in a new environment that uses space differently. This chapter shared the story of the inquiry experience Lillian, Diana, and I engaged in during the first year P.K. Yonge Developmental Research School moved into their newly designed 21st century community learning center. In doing so, it discussed the ways in which the three of us used inquiry as a mechanism for untangling the complexity of professional development in the new school environment in order to better support the faculty as they worked to make sense of the new space and new teaching approaches the space encourages.

This chapter discussed the ways in which Lillian and Diana approached professional development in the new space with more developed understanding that was strengthened and magnified from the pre-understanding they brought with them into the new space. This chapter, therefore, revealed the study participants' understanding of professional development in the newly designed school building as it unfolded through the process of practitioner inquiry. When insights go beyond original intentions or knowledge, as they did for Lillian and Diana through their inquiry into professional development in the new school environment, new understandings can advance the experiences of participants, interpreters, and outside readers of these experiences. As more is learned about each experience and when it is thought about more and more deeply to form new understandings, the experiences are more objective and valid in informing future practices (Crotty, 1998). Chapter 7 will share the new understanding that emerged from this study for Lillian, Diana, and me, and for the field of education.

Kindergarten Professional Development Meeting
September 26, 2012

In attendance:

- Annie
- Jeanne
- Sarah
- Amy
- Diana
- Rachel

Space organizational issues:

- Trays (like cubbies)
- Make independent books more manageable
- Stools in classroom – we need more, shorter
- Shelves in classroom – which shelves are for nap supplies, book bins, personal student office supplies, classroom office supplies, teacher only supplies?
- Shelves in teacher planning area - who gets which shelves? How many can we each have?
- Learning Loft – what should we use this for? Reward? Independent reading? Small group instruction?
 - Taking up too much room
 - Let's "close" it for now.

Student organizational issues:

- "Who is 'my class'?"
- Should we be separating grades?

Professional Development Plans:

- No more Individual Professional Development Plans (IPDPs), instead relate to Marzano domains
- "We share all 54 kids, so do we have the same goal?"
- Tied to evaluation – area to improve on (very personal to the teacher, focused on teaching practice) goal based on domains

Figure 6-1. Field notes from early kindergarten professional development meeting



Figure 6-2. Professional development time flow chart

CHAPTER 7 IMPLICATIONS FOR PROFESSIONAL DEVELOPMENT IN A 21ST CENTURY COMMUNITY LEARNING CENTER (NEW UNDERSTANDING)

Introduction

So far in this dissertation, I have introduced and shared the significance of this study (Chapter 1), reviewed the literature on practitioner inquiry (Chapter 2), described the theoretical lens I utilized to approach this work (Chapter 3), explained the methodology used to gain insights into the research questions that framed this study (Chapter 4), and shared the findings that emerged from my analysis of data (Chapters 5 and 6). Consonant with the hermeneutic theoretical framework that guided this research, my findings represented the participants' pre-understandings (Chapter 5) and understandings (Chapter 6) of the phenomenon under study. When insights go beyond original intentions or knowledge, new understandings can advance the experiences of participants, interpreters, and outside readers of these experiences. As more is learned about each experience and when it is thought about more and more deeply to form new understandings, the experiences are more objective and valid in informing future practices (Crotty, 1998).

Hence, the final chapter of this dissertation serves to share the new understanding that emerged from this study. To establish a foundation for the presentation of new understanding, I begin this chapter with a succinct summary of each prior chapter before presenting the new understandings that emerged from this study.

Dissertation Summary

Predominant debates in the field of education surround an argument for reforming schools to better meet the needs of students in the 21st century. Chapter 1 of

this dissertation described this debate and focused on one way to think about reforming education and better professionalizing teaching through a reimagination of school spaces.

As discussed in Chapter 1, P.K. Yonge Developmental Research School took the charge to reform education for the 21st century by working with Fielding and Nair International (2012a; 2012b) to develop a unique community learning center. As they moved into their new school space in the 2012-2013 school year, traditional ways of teaching were called into question as teachers were expected to collaborate in ways they had never done before. Professional development became essential in teachers' transition to this new school space and approach to teaching. Since there is not another school space with which to compare this new building, the two elementary curriculum coordinators at P.K. Yonge, who are responsible for professional development, recognized the complex challenge effective professional development would bring in their first year in the new school building. They decided to utilize practitioner inquiry to systematically study their practices in providing professional development during this challenging time.

The purpose of this research, therefore, was to study the ways in which these two professional developers could use practitioner inquiry as a mechanism for mediating and supporting teacher growth and development in the new environment that uses space differently. The research question that guided this study was:

- In what ways do those responsible for the growth and development of teachers within a newly designed 21st century community learning center use practitioner inquiry to understand their experiences in supporting and mediating teacher professional learning?

As practitioner inquiry was a central construct to this study, Chapter 2 reviewed the literature on practitioner inquiry defined by Cochran-Smith and Lytle (1993; 2009) as the systematic, intentional study by educators of their own practice. While the field of education continuously sees innovations come and go, Chapter 2 discusses the history and longevity of the practitioner inquiry movement and the research that reveals inquiry to be a promising form of professional development for teachers despite some tensions that emerge when teachers engage in the process. For this reason, the infusion of practitioner inquiry into professional development efforts makes logical sense, and the role practitioner inquiry could play in professional development efforts at P.K. Yonge as teachers moved into a new 21st century architecturally designed school building became the focus of this study.

This dissertation study of practitioner inquiry is theoretically oriented in hermeneutics. Chapter 3, therefore, explained hermeneutics as a method for holistically interpreting phenomena by continuously circling between global perspectives and personal reflection (Crotty, 1998; Koro-Ljungberg, et al., 2009). By cycling through wholes and parts of understanding, researchers and research participants are better able to interpret events by considering preconceptions with new, critical direction (Rich, 1990). Hence, applying a hermeneutical lens to the professional development work designed and implemented as teachers moved into a new 21st century architectural space enabled the participants in this study to assess their pre-understandings as well as develop understanding and new understanding of professional development efforts in the new school building.

Since this dissertation research on practitioner inquiry was theoretically oriented in hermeneutics, Chapter 4 explained the alignment of inquiry and hermeneutics that was used in this study. By providing an explanation of this alignment, a general sense of the way the study unfolded was presented. In sum, the participants and I engaged in practitioner inquiry to understand professional development practices and how they were playing out for the teachers as they transitioned into the new building and the new configurations for teaching and learning within it. As we engaged in practitioner inquiry, we moved back and forth between parts of experience and whole experience by engaging in the hermeneutical circle of self-reflecting/questioning, reading, experiencing, reflective writing, and dialogical/social interpretation.

Also included in Chapter 4 was more detailed descriptions of the research methodology including the participants (background information on the two curriculum coordinators and myself), the procedures (we met weekly over a seven month time period to assess how teachers were doing in the transition and plan the next professional development session), data collection (field notes and artifacts from our meetings and teacher professional development time, formal and informal interviews with the participants, and email communications), and data analysis (an iterative process of reading about, planning for, facilitating, and interpreting what happened related to all of our professional development efforts).

Chapters 5 and 6 reported the findings of this study. Chapter 5 provided a description of the study participants' pre-understanding. The chapter began with a description of P.K. Yonge's 21st century community learning center and explained the vision for the space. Grades K/1, 2/3, and 4/5 would each share a large multi-functional

flexible space of the new building with all teachers collaborating to individualize learning for all students across two grade levels. The chapter described how the study's participants used professional learning communities to prepare teachers for the shifts in practices that would be necessary in the new space to actualize the school's vision.

Chapter 6 revealed the ways in which the study participants' pre-understanding informed their understanding of professional development in the newly designed school building as it unfolded through the process of practitioner inquiry. The chapter began with a reconstruction of the inquiry experience that the participants and I had during the first year in the new school building as we wondered:

- What are the professional development needs of teachers when they are transitioning into a new architectural space designed to facilitate collaborative teaching and learning, and how do we, as professional developers, meet these needs?

Through our inquiry analyses we were better able to make informed decisions about professional development time, configurations, and responsibilities to move professional development from focusing solely on the logistics and emotions of teaching in the new school building during early survival mode to returning teachers' focus to the vision for the building and how to use it. We came to understand the value in effective professional development strategies typically used for curriculum and instruction for professional development about 21st century community learning center logistics. In addition, we learned to intentionally scaffold the focuses of professional development toward goal-oriented dialogue, and came to recognize the value of implicit mini-inquiry cycles with teachers.

Chapter 6 ended with an analysis of our inquiry experience. Several important understandings arose from our inquiry journey. Discussed in detail in Chapter 6, these

understandings include, 1) the importance of intentionality in studying the practices of professional development, 2) the necessity of flexibility in professional development to adapt to teachers' changing needs, 3) the importance of inquiry data for communicating professional development need to others, and 4) the utility of structuring professional development as inquiry.

Chapter 7 will now discuss the new understandings that developed from our inquiry into professional development in the new school space as a result of those understandings. Table 7-1 aligns the new understandings that will be discussed in this chapter with the understandings discussed in Chapter 6. This chapter will discuss the 1) the value of inquiry for professional developers, 2) the need for professional development to be supportive of chaotic transitions during 21st century reform efforts, 3) the importance of inquiry data for renegotiating existing school structures to ensure teachers have time for successful engagement in school improvement efforts, and 4) the value we found in implicit inquiry by describing the differences between explicit and implicit inquiry and the ways these two forms of inquiry played out in professional development at P.K. Yonge during their first year working in the new space. This chapter will conclude with implications for the field of education as we move forward with 21st century school reform efforts.

New Understandings

Practitioner Inquiry for Professional Developers

Recall from Chapter 6 that as Lillian, Diana, I engaged in inquiry, we began to understand the importance of intentionality in studying our work as professional developers. Related to this understanding, the first new understanding I will discuss is the importance of practitioner inquiry for professional developers.

Inquiry is a popular form of professional development for pre-service teachers (i.e., Burbank & Kauchak, 2003; Dawson, 2007; Donnell & Harper, 2005; Merino & Holmes, 2006), in-service teachers (i.e., Cochran-Smith, Barnatt, Friedman, Pine, 2009; Crockett, 2002; Dana, Dawson, Wolkenhauer, & Krell, 2013; Ermeling, 2009; Poekert, 2011), and school administrators (Dana, Thomas, & Boynton, 2011; Dana, Tricarico, Quinn, 2010) that has been studied and well documented. While previous discussions of practitioner inquiry have added to prevalent literature on professional development for these groups of educators, very little research has been done on the ways in which those responsible for professional development have opportunities to engage in continued professional learning themselves. This dissertation research adds to the conversation about professional development in the literature, as it demonstrates the ways in which those providing professional development can use practitioner inquiry themselves to glean information about personalizing professional development and modeling inquiry for those they are providing professional development for.

As seen in this study, Lillian and Diana engaged in practitioner inquiry during a particularly challenging year as the faculty at their school moved into a newly designed 21st century community learning center. By systematically studying their work as professional developers in this space, they gained a better understanding of their everyday beliefs, assumptions, and practices; consequently being able to make more informed professional decisions while informing the practice of the other educators they work with (Oberg, 1990). By using inquiry to support the ways in which they were supporting and mediating teacher professional learning in the new environment, Lillian and Diana had a core decision making tool that enabled meaningful shifts in

professional development that helped teachers move past survival mode and into more collaborative work on teams of professionals to personalize learning experiences for their students and one another (Valli & Price, 2000; Zeichner, 2003). Additionally, as the study was ending we saw evidence that by engaging in inquiry themselves, Lillian and Diana had begun modeling the professional development process for their teachers as they began implicitly structuring some of the professional development they provided as mini inquiries. By giving the teachers they work with similar tools for untangling the complexity of teaching in a newly designed school space, they are giving teachers permission to question, experiment, and work to make informed change in their teaching practices for their students.

Practitioner inquiry was necessary for Lillian and Diana as professional developers to glean information about personalizing professional development and modeling inquiry for those they were providing professional development for. As Lillian and Diana cycled through wholes and parts of understanding, they contributed to the interpretation of teaching in the newly designed school space by considering preconceptions with new, critical direction (Rich, 1990). The process of questioning, analyzing data, and taking new action through inquiry opened up possibilities of meaning that contributed to their understanding of the experience of mediating and supporting teacher growth and development in a new environment that uses space differently (Gadamer, 1989).

Professional Development During Times of High Stress

In Chapter 6 I discussed the understanding that there must be flexibility in professional development in order to adapt to teachers' constantly changing needs, especially when those teachers are first learning to work in a newly designed 21st

century school space. Related to this understanding, the next new understanding I will discuss is the importance of professional development during times of high stress.

We learn from this study that no matter how much preparation goes into a 21st century reform effort like designing, building, and moving into a community learning center, one can never expect to be fully prepared. Those responsible for professional development in 21st century reform, therefore, need to be ready to recognize, honor, and move past the imminent chaos of negotiating logistics in transitions to newly reformed school buildings like that at P.K. Yonge Developmental Research School. We see from this dissertation study that research-based professional development pedagogies typically designed for teachers' curriculum and instruction needs also help facilitate teachers' emotional and logistical needs when they first move into newly designed 21st century spaces (Darling-Hammond, 2010; Lasky, 2005). Without these sound professional development structures, it would be easy to see how teachers could get stuck in survival mode and for reform efforts to fail.

As seen in this study, for example, when teachers were unable to have conversations about curriculum or student learning because they were so mired in the practicalities of surviving in the new school space, Lillian and Diana applied the conversation protocols they typically used in curriculum-and-instruction-oriented professional development to engage teachers in productive conversations about logistics (McDonald, et al., 2003). By applying the use of protocols to the survival mode phase of teacher professional development in the new building, Lillian and Diana were better able to systematize logistical conversations and help develop priority and focus in teachers' needs. In shifting the focus away from content at first, Lillian and Diana were

able to honor the complexity of the changes to teaching and learning the new environment encouraged, while helping to supportively push teachers past survival mode and back into professional development focused on student learning.

Professional development that was supportive of P.K. Yonge's chaotic transition during their 21st century reform effort was essential. As Lillian and Diana used inquiry to analyze teacher need and develop data-driven action plans, they considered pre-understandings of professional development and the specific teachers they worked with to bring critical, new direction to the practices of effective professional development they had known (Rich, 1990). Through their understanding of professional development for 21st century reform, they could be confident in using the research-based professional development pedagogies typically designed for teachers' curriculum and instruction needs to help facilitate teachers' emotional and logistical needs when they first moved into the newly designed school spaces (Darling-Hammond, 2010; Lasky, 2005). Their innovative use of professional development pedagogy contributed to the understanding of the experience of mediating and supporting teacher growth and development in a new environment that uses space differently (Gadamer, 1989).

Professional Development and the Importance of Time

Another understanding of the inquiry Lillian, Diana, and I conducted into professional development in P.K. Yonge's newly designed 21st century community learning center was the importance of inquiry data for renegotiating existing school structures. A new understanding we developed from our use of inquiry data to do so was that teachers needed significant time to successfully engage in professional development in the new school space.

Research clearly indicates that effective professional development provides the time and space to form and nurture collaborative relationships. Consistent time provided for ongoing collaboration is associated with changes in knowledge and practice (Borko, 2004; Desimone, 2009; Fullan, 1993; Guskey & Yoon, 2009). Although this is well known, a persistent issue for professional developers continues to be the lack of time dedicated for professional development in schools, and subsequently, the effective use of the limited time they do have with teachers. When professional developers engage in practitioner inquiry, it is possible that the data they collect can demonstrate need for time, and provide an assessment of ways in which they are using that time (Allen & Calhoun, 1998). The problem-solving cycle of inquiry can lead professional developers to purposeful understanding about the need for dedicated collaborative time for teachers in order to make informed decisions about what works and what needs to be changed in the future (Cochran-Smith, 1991; Dana, Yendol-Hoppey, & Snow-Gerono, 2006; Emerling, 2009).

As teachers at P.K. Yonge made sense of the new space and teaching approaches in their newly designed 21st century community learning center, they needed extensive collaborative time for immediate planning and constructive goal setting. Because they engaged in practitioner inquiry during the difficult first year in the new space, Lillian and Diana had carefully assessed the needs of teachers as they unfolded, and were better able to evaluate what it was they needed to be supported and motivated. Having inquiry data as evidence, they were better able to justify their desire to adapt time structures to the administrators and art/music/PE/media teachers' in order to advocate for more effective uses of teachers' time (Cochran-Smith & Lytle, 1993;

2009). Through our inquiry data, Lillian and Diana could clearly align teacher and student needs with the necessity of providing teachers with more time to engage in future-oriented conversations that would help them more successfully actualize their vision for 21st century schooling in the new space.

The importance of inquiry data for renegotiating existing school structures to ensure teachers have time for successful engagement in professional development for school improvement efforts was clear in this study. As Lillian and Diana used inquiry data to justify their decisions in developing alternative school structures that might provide more meaningful uses of professional development time, they considered pre-understandings of professional development research and the specific teachers they worked with to bring critical, new direction to the time dedicated to effective professional development in their school (Rich, 1990). Through their understanding of professional development for 21st century reform, they could be confident in standing behind their requests for changes in schoolwide time structures. Their innovative use of professional development time contributed to the understanding of the experience of mediating and supporting teacher growth and development in a new environment that uses space differently (Gadamer, 1989).

The Value of Implicit Inquiry

Recall from Chapter 6 that another understanding we developed from our inquiry was the usefulness of inquiry as professional development. We came to a new understanding from this finding that there is value in the use of implicit inquiry with teachers. In this section I will describe the new understanding developed around implicit inquiry and how this proved valuable for professional development at P.K. Yonge.

When Lillian and Diana invited me to join them in the systematic study of professional development during the first year their school transitioned into a newly designed 21st century community learning center, although initially disappointed that we weren't going to be facilitating the teachers' engagement in practitioner inquiry, I believed that the process of inquiry was going to be a valuable tool for the three of us to come to deeper understanding of the role professional development would play in the new school building that used space differently. As I anticipated, the process of inquiry proved an important mechanism for Lillian, Diana, and I to untangle the complexity of professional development in the new school building, and helped us move teachers beyond their initial state of survival in order to focus more on curriculum, instruction, and student learning.

As I discussed at the beginning of Chapter 6, one reason Lillian, Diana, and I decided to use inquiry to understand the experiences of mediating and supporting teacher professional growth and development in the newly designed 21st century community learning center was that Lillian and Diana were intimately familiar with practitioner inquiry before we began this study. From our first meeting about inquiry on August 28, 2012, I noticed the ways in which Lillian and Diana had strong professional positions as practitioner inquirers. Practitioner inquiry was their way of being as educators, which Cochran-Smith and Lytle define as inquiry stance (1999; 2009).

When they first introduced the term in their seminal book about practitioner inquiry, *Inside Outside: Teacher Research and Knowledge* (1999), Cochran-Smith and Lytle described it as follows:

In everyday language, "stance" is used to describe body postures, particularly with regard to the position of feet, as in sports or dance, and

also to describe political positions, particularly in their consistency (or lack thereof) over time...In our work, we offer the term inquiry as stance to describe the positions teachers and others who work together in inquiry communities take toward knowledge and its relationships to practice. We use the metaphor of stance to suggest both orientational and positional ideas, to carry allusions to the physical placing of the body as well as to intellectual activities and perspectives over time. In this sense the metaphor is intended to capture the ways we stand, the ways we see, and the lenses we see through. Teaching is a complex activity that occurs within webs of social, historical, cultural, and political significance. Across the life span, an inquiry stance provides a kind of grounding within the changing cultures of school reform and competing political agendas. (pp. 288-289)

According to Katzenmeyer and Moller (2001), teachers with strong professional positions “lead within and beyond the classroom, identify with and contribute to a community of learners and leaders, and influence others toward improved education practice” (p. 5). As leaders, these educators develop strong active voices. Through continual processes of making practice problematic and questioning the accepted ways that knowledge and practice are constructed, evaluated, and used, practitioners with inquiry stance are empowered to work individually and collectively for educational and social change (Cochran-Smith & Lytle, 2009).

Before our inquiry journey even started, Lillian and Diana understood that inquiry is not simply a cycle of steps to follow as professional development, rather they had critical habits of mind toward practices that are continually reflective, data-driven, and public (Dana, 2013). Lillian and Diana have inquiry stance. They are professionals who work under constantly changing educational conditions, dealing not only with technical problems, but also with complicated, adaptive challenges that “require creating the knowledge and the tools to solve problems in the act of working on them” (Cochran-Smith & Lytle, 2009, pp. 158 – 159). Lillian and Diana’s professional roles depend on their ability to make purposeful, measured decisions about teaching and learning in the

21st century (Cochran-Smith & Lytle, 2009). They choose to do by positioning themselves professionally in inquiry.

Since inquiry was already their way of work, as Lillian, Diana, and I engaged in the process of inquiry to reflect on our work as professional developers, the process of inquiry began serendipitously creeping into the work Lillian and Diana were doing with the teachers. I was almost immediately struck by the ways these two curriculum coordinators were transferring the processes of our inquiry work into their facilitation of professional development. Although they were not calling the pedagogy of their professional development “inquiry,” they were clearly using the processes of practitioner inquiry to guide reflective, data-driven, action-oriented professional development experiences for the teachers they worked with. As Lillian, Diana, and I engaged in practitioner inquiry as it is discussed in the literature (defining a wondering, collecting and analyzing data to gain insights into our wondering, taking action for change and sharing our work with others), Lillian and Diana were engaging teachers in inquiry during professional development times, even though they weren’t calling it that. I refer to these two parallel uses of the inquiry process observable in Lillian’s and Diana’s practice as explicit and implicit inquiry.

Explicit inquiry refers the process of professional development that has been well documented in the literature as a successful mechanism for teacher professional growth and development (Burbank & Kauchak, 2003; Donnell & Harper, 2005; Merino & Holmes, 2006; Poekert, 2010; Snow-Gerono, 2005). Explicit inquiry, as it has been experienced, studied, and written about for decades, is a cyclical process for systematically and intentionally studying one’s practice as an educator (Cochran-Smith

& Lytle, 2003; 2009; Dana & Yendol-Hoppey, 2009). Explicit inquiry uses specific steps and processes to engage educators in reflective analyses of their practice in order to make changes in practice based on data. As previously discussed, when inquiry is done in an explicit manner, educators define a research question or wondering, collect and analyze data, take action for change based on what is learned from data, and share their work with others (Dana & Yendol-Hoppey, 2009).

Implicit inquiry, on the other hand, uses the constructs of explicit inquiry without naming the specific methods typically associated with explicit inquiry work (i.e., wondering, data collection and analysis, action, and sharing), while applying the principles of reflective, data-driven approaches to professional learning in specific situations. This dissertation study brings new understanding to the field of practitioner inquiry by demonstrating the value of implicit inquiry as professional development. This new understanding is one actualization of inquiry stance, taken by Lillian and Diana in this study. Hence, the term “implicit inquiry” gives language to one of the actions we frequently see teachers with inquiry stance taking, but have few clear, concrete examples to define what that action is (Crockett, 2002).

It is interesting to note that at first Lillian and Diana were resistant to engaging the teachers in inquiry. Recall from Chapter 6 that in our initial conversation about using inquiry as professional development in their new school building, Lillian and Diana were insistent that the teachers could not be expected to engage in inquiry during the first year in the new space. Diana noted:

Teachers feel like they can't do one more thing. If I asked them to write five words on a paper they would say, “No way, can't do it.” (Diana, Interview)

Performance pressure from the changes instigated in the new building, time constraints, and the stress of survival mode made inquiry seem like one more professional expectation when teachers' expectations were already overwhelming due to the transition in that first year. It is not uncommon for inquiry to be dismissed at first due to restrictive school conditions like time and professional balance (i.e., Burbank & Kauchak, 2003; Cochran-Smith, et al., 2009; Stuart & Yarger-Kane, 2000; Torres, 1996). Therefore, it was not surprising that Lillian and Diana were not interested in using inquiry as professional development with teachers in their first year in this new school environment.

Expecting that the extent of our inquiry work would settle in the systematic study of our own practices as professional developers, I was struck then, to recognize that, although doing so implicitly, Lillian and Diana were consistently using inquiry as professional development with the teachers they worked with.

Through my observations of professional development at P.K. Yonge, I noticed that Lillian and Diana regularly structured professional conversations, activities, and reflective exercises using the principles inherent in practitioner inquiry: questioning, studying text, student work, and teacher work as data, analyzing data to make decisions for new action, and then repeating the cycle by questioning, studying, and reflecting on the new action. An example of these implicit inquiry cycles was shared in Chapter 6. Recall the 4/5 learning community professional development meeting where the teachers visited the K/1 and 2/3 learning communities to gather "data" guided by the questions Lillian posed to frame the afternoon's professional development session, "How can we better remember the reasons behind this building and keep the vision in

mind as we continue to plan?” and “What can we learn from the other learning communities to help with this?” After teachers visited the K/1 and 2/3 learning communities, they returned to analyze their observations and discuss strategies they observed that offered promise for their own learning community, and they began planning for how to use them. At each professional development experience where I noticed implicit inquiry structures being used like the one described in Chapter 6, I analyzed the meeting field notes afterwards, and reorganized them for Lillian, Diana, and I within the explicit inquiry cycle in order to reflect on and interpret our experiences.

For example, Figure 7-1 shows an excerpt from the synthesized field notes I shared with Lillian and Diana after our professional development meeting with the 4/5 learning community teachers on January 15, 2013. One of the modifications the teachers in this learning community had made to their practices in order to better individualize learning experiences for their students was restructuring reading instruction. When we met on January 15, 2013, their reading instructional time had recently changed to a three-part learning workshop in which teachers shared teaching responsibilities within the three parts. In Part One of the workshop, students attended a teacher-led lesson with a large group of about twenty students from both 4th and 5th grades. In these lessons, teachers introduced, or reinforced, a reading comprehension skill, and students set individual goals for their own reading to occur during the second segment of the workshop. In the second part of the workshop, students worked independently in what the learning community called “autonomous time.” During autonomous time, students worked on individual goals around the large group lesson’s comprehension skill, reading different texts that were matched to their interest and

reading level, and wrote about their reading experiences as they practiced particular skills. Also during this time, teachers circulated and met with students one-on-one, or in small groups, to conference about the progress they were making toward their individual goals. Finally, in the third part of the workshop, students returned to the larger group and shared evidence of the work they completed during autonomous time.

Figure 7-1 describes the professional conversation we had around the 4/5 learning community's reading time reconfiguration and the professional development session Lillian had led to help teachers assess how it was working. The figure demonstrates the ways in which I applied explicit inquiry language to the professional development experience in notes to Lillian and Diana. The excerpt comes from an email I sent to them after analyzing my field notes from that week and making connections between their work and explicit inquiry. The inquiry words seen in bold in Figure 7-1 (i.e., wondering, data collection, data analysis, sharing insights, action) were never used in the actual professional development experience, but clearly from the conversations and exercises that Lillian took these teachers through, they followed the processes and principles of practitioner inquiry.

First, Lillian framed their professional development meeting with the questions: "Who is this building working for? Who is reading time working for?" Next, she led the teachers in looking at student assessment data to determine student progress in reading comprehension and vocabulary. After organizing assessment data, the teachers collaborated to make sense of the data by carefully reading through the scores and sorting them in different ways (i.e., perceived ability, grade levels, student accommodations, assigned teachers). With a deeper understanding of the data, they

then reflected on the meanings of the student assessment data and what they believed next steps should be.

Through engaging in analysis of the student assessment data and discussion, the teachers found a disconnection in their understanding of what was happening during large group lessons and autonomous student work time. From here, the teachers decided they needed to better match the individual reading conferences they were having with students during autonomous times with the large group lessons. They decided to videotape their student conferences so they could learn from each other. By the end of the meeting, although having done so implicitly, teachers had even developed a new plan for another inquiry cycle in which they would analyze their conferences through video analyses and collaborative reflection.

Lillian never explicitly named each step of the inquiry process with the teachers during this meeting, but the process of implicit inquiry she took them through had much of the same purposeful values that we see in the process of explicit inquiry. The implicit inquiry structure honored the complexity of teaching and made it worthy of being questioned and studied. It offered a powerful professional position for the teachers as they were given a tool for professional learning that served as a mechanism for expanding their knowledge base for teaching and raising their voices in the educational reform efforts they are engaging in at P.K. Yonge (Cochran-Smith & Lytle, 1993; 2009; Dana & Yendol-Hoppey, 2009; Meyers & Rust, 2003; Snow-Gerono, 2005; Zeichner, 2003). Implicit inquiry ensured the teachers had active roles in making meaningful progress toward relevant, effective teaching practices for successful student learning in the 21st century.

Although I frequently synthesized my field notes and reorganized them within these inquiry structures before sharing them with Lillian and Diana (Figure 7-1), for much of the school year they continued to think of this implicit actualization of inquiry as something very different from the more explicit process of inquiry the three of us were engaging in. Even with their sophisticated understandings of inquiry and inquiry stance, Lillian and Diana often thought inquiry as professional development would be an additional, and unwelcomed, expectation of teachers' practice in the first year in the new school space. They reasoned against using inquiry at the beginning of the year because they saw the process as apart from teachers' regular professional development expectations. Ironically, however, because Lillian and Diana had inquiry stance, inquiry had become their way of work as educators. Inquiry was a part of their everyday practices and, thus, they used implicit inquiry to structure professional development experiences for teachers from the very beginning of the year, but they did so unconsciously. Diana reflected on her perceived lack of inquiry in professional development during year one in the new building by saying:

Systematic inquiry could help us tremendously. Collective inquiry could help us tremendously. We have just got to figure out a way to make it happen... it's hard to think about everything we don't do, and I don't know how we got so far off track with inquiry. (Diana, Interview)

While Lillian and Diana had a difficult time at first seeing that the ways in which they were actualizing inquiry implicitly was impacting teacher learning, from experiencing the utility of engaging in practitioner inquiry themselves in order to understand their practices the first year in the new building, they came to realize the ways that they were actualizing inquiry implicitly all along, without naming it as such,

was perhaps just as powerful as the process of explicit inquiry they had been so familiar with for years.

In sum, the new understanding developed from Lillian's and Diana's use of implicit inquiry during their first year of professional development in the new space was that their implicit use was perhaps just as purposeful and powerful as it would have been if they used the language of inquiry, and a more systematic and formalized cycle with the teachers. We learned that it was less important that the steps and procedures were named (i.e., "wondering", "data collection and analysis", "sharing", "taking action") and more important that the teachers were given an opportunity to utilize the processes of questioning, reflecting on their practices, and making data-driven decisions to untangle the complexity of learning to work in the new environment so that student and teacher learning could continue to progress. When Lillian and Diana used implicit inquiry to structure their professional development efforts during the first year in the newly designed space, teachers learned to work collaboratively to make measured decisions that honored the vision for the school and help improve teaching practices for teaching and learning in the 21st century community learning center.

Lillian's and Diana's initial disconnection between the implicit inquiry that they were facilitating with teachers and the more explicit process they had learned about in graduate school and had engaged in throughout their careers, indicates that there is more work to be done in order to understand the relationship between inquiry stance and use of both explicit and implicit inquiry. Since Lillian and Diana understood inquiry as the formal explicit systematic cycle discussed in a very particular way in the literature (i.e., Burbank & Kauchak, 2003; Donnell & Harper, 2005; Merino & Holmes, 2006;

Poekert, 2010; Snow-Gerono, 2005), it was difficult for them to see the ways they were embedding the inquiry process in their teacher professional development sessions to help teachers come to richer understandings of their work. As they developed new understandings about inquiry and the ways they had been enacting the process with teachers implicitly throughout the school year, they realized the teachers might indeed be ready to enact the inquiry process in an explicit way, and made plans to introduce explicit inquiry to the teachers during the following school year.

As Lillian and Diana consider shifting from implicit inquiry activity to explicit inquiry activity in professional development in subsequent years, this study indicates the importance of better understanding the influence of implicit inquiry before explicit inquiry activity begins. Since the formal steps of inquiry seemed less important than their engagement with the principles of inquiry this year, it will be interesting to study the effect of making inquiry visible after it has already been their way of work for several months. With this new understanding of inquiry as both implicit and explicit developed during the seven months of this study as a springboard, Lillian and Diana plan to inquire into the explicit use of inquiry with teachers during the upcoming school year.

Conclusion

I end this dissertation in the same way it began, with a reminder of the prevalent call for change in the current educational climate. Prevalent new paradigms emphasize the need for more powerful learning opportunities that meet the needs of 21st century learners, however these paradigms have not yet been clearly reflected in our education system. Most schools in the 21st century continue following early factory models and do not meet the diverse and demanding needs of life, work, and citizenship in the 21st century (Darling-Hammond, 2010; Darling-Hammond & Bransford, 2005; Hutchison,

2004). This study demonstrates the ways in which the field of education can begin to reimagine school spaces to better meet the needs of 21st century learners, and the professional development needs of teachers as they prepare for and move to new architectural spaces designed to support 21st century learning models.

By coming to a deeper understanding of the ways in which professional development mediated and supported teacher growth and development in a newly designed 21st century community learning center, this study develops new understandings for the field of education as it adds to the growing body of literature around 21st century school reform. This study indicates that with meticulous preparation and intense professional support, teaching and learning can be reformed for the 21st century, but this study also demonstrates that it will not be easy.

While professional development helped teachers make progress toward reforming education in their school toward improved student learning for the 21st century, a significant focus of Lillian's and Diana's professional development endeavors during the first year in the new space was on making sense of teacher need and redeveloping professional development structures to support the logistical and emotional turmoil the move to the new building necessitated.

The timing of this dissertation study, during P.K. Yonge's first seven months of working within a one-of-a-kind school space, was not conducive to discovering deep, rich connections between professional development and 21st century learning – what it looks like, how it can play out in new architectural spaces for school buildings, and the impact of 21st century teaching approaches on student learning. During their first year in the new environment, teachers spent much of their professional learning time working

to understand unfamiliar logistics and to figure out how to work with one another in cross-grade level learning communities. While we do learn from this study about the value of practitioner inquiry for professional developers, the need for professional development to be supportive of chaotic transitions during 21st century reform efforts, the importance of inquiry data for renegotiating existing school structures to ensure teachers have time for successful engagement in school improvement efforts, and the value of both explicit and implicit inquiry related to professional development efforts, we learn little about the specifics of what learning looked like for the children in this new space and the ways it was consonant with what the literature suggests for 21st century school reform (Darling-Hammond, 2010; Dede, 2009; Prenskey, 2010). Future studies should focus on what student learning for the 21st century looks like in practice. With continued and deeper study into the movement of schools into 21st century spaces, we may come to new understandings for what it is teachers need to be supported in these transitions, be better able to facilitate the necessary changes in practice more quickly, and begin to discover the specific ways teaching and learning looks when it is reconfigured for the 21st century.

As Lillian and Diana worked with the teachers at P.K. Yonge Developmental Research School during their first year in the newly designed school building, they utilized inquiry to see past the inherent frustrations and challenges of moving into a reformed 21st century space because they believed that their students deserved to learn in an environment that honors and cultivates their interests, intelligence, and social wellbeing. With the new understandings they developed through inquiry during their first year in the new space, Lillian and Diana continue to work diligently toward

developing substantial professional development agendas to better meet student needs and to actualize the complete vision for the new school building. Plans have already begun to focus the 2013-2014 school year's professional development more deeply into an exploration of what it's like to teach in the 21st century for 21st century learners.

Lillian describes these plans by saying:

So for next year, here's what we're thinking. We'll use Learning Community Leaders more purposefully to ensure we are tightly connecting professional learning with student learning. Learning Community Leaders (one from each K/1, 2/3, 4/5 learning community) will have their own professional learning community meetings once a month. These leaders will support each other in taking greater responsibility for the professional development of the teachers in their K/1, 2/3, or 4/5 learning community.

Diana and I will help the Learning Community Leaders as they take the lead in planning and facilitating professional development. Teachers will engage in "just in time" planning for logistics and for a weekly rotational schedule of content area focuses: math, language arts, science, and social studies. Additionally, once a month, teachers will have dedicated time to work on explicit inquiry with other teachers who have similar wonderings. We're calling the teachers in these inquiry groups "critical friends."

In addition, we will continue to work on our vertical conversation plan with opportunities for communication and collaboration within K/1, 2/3, 4/5 learning communities, vertical teams of K-5 teachers, and the whole elementary faculty. (Email, 06/19/13)

As the educators at P.K. Yonge continue to work toward 21st century school reform, their school environment is a context ripe for study in informing the work of other education systems interested in reforming their structures, policies, and practices to better meet the needs of 21st century learners. As this study ends, this process is just beginning, and offers promise to truly actualize a 21st century education for all children.

Table 7-1. Understandings and New Understandings

Understanding	New Understanding
Intentionality	Practitioner Inquiry for Professional Developers
Flexibility in Professional Development	Professional Development During Times of High Stress
Communicating Professional Development Needs with Inquiry Data	Professional Development and the Importance of Time
Using Inquiry in Professional Development	The Importance of Implicit Inquiry

...

The inquiry structures seen in today's meeting were:

Wondering

Who is this building working for? Who is reading time working for?

Data Collection

Look at the scale score on student evaluations (SAT 10) for vocabulary and reading comprehension

- Scale Score = estimates - did they improve or not?

Each teacher is looking through his/her "homeroom" list of students individually (Lillian created worksheets to guide them) and then shared their "homeroom" data with the teachers they share students with during reading instruction.

Data Analysis

Lillian - "Now together, take your test data, analyze it, and make an action plan."

- Teachers are waiting for each other to collaborate on this.

Sharing Insights

Lillian guided share with this structure: Why do you think the data is the way it is? What do you think we should do now?

1. Silent reflection (individual)
2. Why? share:
 - I don't have anything to compare to (we're teaching in such a new way)
 - Tighter autonomous time is needed
 - 4th grade is benefiting from getting bumped to 5th
 - Accountability and ownership over students' own data
 - Conference, set goals
 - Our goals have shifted in this space
 - Grouping of kids - I'm not conferencing with all the kids I'm doing large group lesson with
3. Now what? - Whole group discussion
 - What do your student conferences look like?
 - Look at more data - is this a pattern, consistent?
 - Increase ownership, responsibility, accountability with students- goal setting
 - Tighten up conferencing - more individualized
 - Student partners holding each other accountable, too
 - Share more with each other (teachers) - video, etc.

Action

- Better match conferencing and mini lesson
- Videotape our student conferences so we can learn from each other; develop a focus you want us to watch for. **(This indicates another cycle of inquiry: I wonder how I'm _____ as I conference, video as data, group analysis, take action to adjust practice.)**
- Peer advisors for students

Figure 7-1. Professional development inquiry structures

APPENDIX A INQUIRY WRITE-UP

Supporting Teacher Learning in a New Space

Background and Purpose

P.K. Yonge Developmental Research School emphasizes learning within a community that is accepting, respectful, and promotes success. By “collaborating to meet the needs of each child” (P.K. Yonge Developmental Research School, 2012), P.K. Yonge promotes teaching that emulates exactly the kind of learning we hope to provide for our students. For nearly seven years, P.K. Yonge has developed, designed, and built a school to our exact specifications. Teams of students, teachers, administrators, architects, and interior designers have worked together to create a space that nurtures 21st century learners. The new school is a community-learning center designed by Randall Fielding and Prakash Nair that utilizes open space, technology, and nature to foster playfulness, warmth, and sense of community to ensure students and teachers are provided with every opportunity to engage in authentic, inquiry-oriented learning that is complex, relevant, and stimulating (Nair, Fielding, & Lackney, 2009).

The 2012-2013 school year was the first year teachers and students in the P.K. Yonge elementary division began using the new space. Rather than typical grade level and classroom structures, the school is organized in learning communities based on Fielding and Nair’s principle of providing 4:100 classroom ratios. P.K. Yonge students and teachers in kindergarten and first grade; second and third grade; and fourth and fifth grade each have their own wing of the school in which all students and teachers from the community’s two grade levels aim to collaborate in all teaching and learning.

The learning communities' spaces are designed to support collaborative learning among students and teachers where "different students learn different things from different people in different ways at different times and in different places" (Nair, et al., 2009, p. 27) so that their spatial, psychological, physiological, and behavioral needs are always met. There is not another school with which to compare this exact organization or architectural structure. Therefore, the teachers and students at P.K. Yonge Developmental Research School are embarking on a new phenomenon in the field of education. As elementary school teachers at P.K. Yonge began working in new ways in this newly designed architectural space, traditional ways of teaching have been called into question and professional development has played a large role in the ways teachers are making sense of and using this new space and approach to teaching.

As the curriculum and instruction coordinators and a university partner, we are responsible for supporting teachers in this transition to the newly designed space, and for mediating teacher learning. By engaging in practitioner inquiry to study our preparation for, and facilitation of, teacher learning, we hoped to systematically study our own practices to better understand professional development opportunities in the new space by considering preconceptions and critical new directions for professional learning (Laverty, 2003; Rich, 1990 in Crotty, 1998). The purpose of this inquiry, therefore, was to study the ways in which we mediated and supported teaching and learning in a new environment that uses space differently.

Wondering

With this purpose, we wondered: In what ways might we mediate and support teacher learning in a new environment that uses space differently?

- What are we doing to help support the goals of the building?
- Where do we find time and space to deliberately discuss the ways in which the new space supports and limits teacher (and student) learning with the teachers?
- How do we facilitate forward planning?

Methods and Procedures

To gain insight into our wonderings, the three of us met on Tuesday afternoons. In these meetings, we reflected on professional development that had occurred the week before. We looked through observational notes, teachers' Google Doc notes, meeting agendas, and previous professional development planning documents. In addition, we took the history of the teachers' learning and P.K. Yonge professional development into consideration, and spent time discussing the new space, the goals of that space, and the philosophies behind its purposes.

With these reflections, we planned for professional development in two ways. First, we did immediate planning for the week's professional development opportunities. We prepared big questions, planned protocols, developed agendas and presentations, and made lists for gathering supplies. It was often during this immediate planning that we communicated with communities and/or their community leaders for what to expect and what to prepare for the week. The second kind of planning we did was future-oriented. In order to ensure we were deliberately discussing the ways in which the new space might support or limit teacher and student learning in the long-term, we dedicated some of our time together to talk about the overall progress of professional development in the new space and how we envisioned it contributing to teacher and student learning in the future. With the mission of P.K. Yonge and the new space in the forefront of our

minds, we set big goals for moving the teachers toward these objectives with a balance of support and pressure.

During each professional development opportunity, Lillian and/or Diana took the lead in facilitating, often including teacher leaders in the process. Rachel attended professional development days on Wednesdays, as well as learning community professional development release days. She contributed when appropriate and took notes throughout. At the end of each week, Rachel sent synthesized versions of her notes, with reflections, to Lillian and Diana. These notes and reflections were then used to inform our practices in professional development moving forward.

Statement of Findings

As a result of analyzing our data, three important findings that emerged about what we learned about mediating and supporting teacher learning in a new environment that uses space differently were:

- Professional development must be multifaceted. It needs to be continuously provided as a job-embedded, community-based, inquiry-oriented experience.
- Professional development must shift in order to meet the needs of teachers, but also the goals of the school.
- Teacher leadership is essential.

Finding Statement One

In order to mediate and support teacher learning in a new environment that uses space differently, professional development must be multifaceted. It needs to be continuously provided as a job-embedded, community-based, inquiry-oriented experience. Coherent, cohesive systems with clear, well-defined goals for tasks,

materials, strategies, and student and teacher outcomes have greater opportunity for educational improvement (Darling-Hammond & Bransford, 2005; Desimone, 2009; Lawless & Pellegrino, 2007; Villegas & Lucas, 2002). Successful systems have common, explicit visions (Borko, 2004; Hughes & Ooms, 2004; Lawless & Pellegrino, 2007). They align with federal and state goals, standards, and assessments while specifically focusing on district, school, teacher, and student goals. Successful professional development takes place when it is explicitly connected to student learning (Borko, 2004; Lawless & Pellegrino, 2007) while recognizing that powerful adult learning leads to powerful student learning.

Professional development at P.K. Yonge occurs continuously and as a part of teachers' practice in order to best reach their students. Just as we expect our students to continuously learn, our teachers engage in continuous professional learning as well. Each Tuesday afternoon, the Learning Community meets to collaboratively forward plan for the coming week. This meeting usually focuses on the actual lesson planning and logistics necessary for the collaborative nature of teaching in this environment. On Wednesdays, the elementary faculty meets in vertical teams focused on analyzing student work samples around a particular subject area. This critical dialogue allows for teachers to better understand the learning progression of our students and plan accordingly. Each Wednesday has a different subject area focus. In addition to the whole faculty Wednesday afternoons, each Wednesday morning, one Learning Community is released for a two-hour session for professional learning. This time is used to plan forward and take the time for "big picture" planning that moves us closer to our goals of more personalized learning for students.

As the previous description emphasizes, almost all of the professional development offered at P.K. Yonge is offered on site and is situated as a part of, and not apart from, teachers' everyday practice. Teachers engaged in job-embedded professional development experience immediate, relevant, and authentic learning every day so that every student achieves (Cheek, 1997; Garet, Porter, Desimone, Birman, & Yoon, 2001; Jonassen, Howland, Moore, & Marra, 2003; Learning Forward, 2012;). By investigating problems of practice and questioning new theories and technologies, teachers continuously refine and strengthen their knowledge, practices, and beliefs (Hughes & Ooms, 2004). Having space to reconsider beliefs and enact new practices with regards to instructional innovation, like teaching in this new environment, fosters ownership, confidence, and professional engagement (Lawless & Pellegrino, 2007). Since all of the professional learning is job-embedded, there are clear connections to the everyday work of each teacher. For example, student work is analyzed weekly in a vertical team. This allows teachers to immediately put into practice what is discussed with their colleagues regarding instructional shifts.

P.K. Yonge elementary division's new environment promotes effective professional development that provides the time and space to form and nurture collaborative relationships (Lawless & Pellegrino, 2007). Ongoing collaboration that is consistent and collective is associated with changes in knowledge and practice (Desimone, 2009; Heibert, 1999). Teachers who identify with a collaborative group are more willing to dedicate time, energy, and expertise to professional development (Hughes & Ooms, 2004; King, 2002; Smeetes & Ponte, 2009; Snow-Gerono, 2005). Each learning community in the P.K. Yonge elementary division was designed with

open spaces and transparent walls in order to invite teachers to collaborate throughout the day (Figure 1).

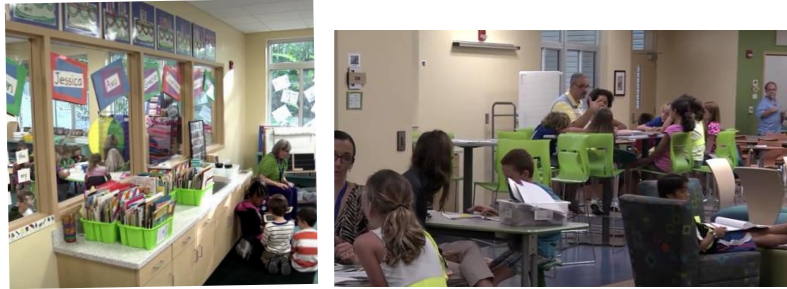


Figure 1 (Photos courtesy of fieldingnair.com)

The learning communities make it possible for teachers to inspire one another to take the risks necessary to explore the implications and complications of teaching in the new space (Hughes & Ooms, 2004; Mouza, 2009). Teachers are better able to nurture a willingness to try new things; encourage each other, and hold each other accountable for what they believe will help them grow professionally because they are able to immediately share expertise, watch one another teach, and co-teach throughout each school day. For example, as teachers in one community began thinking about how they might better meet the goals of the space during reading block, one teacher asked, and was enthusiastically invited, to observe what's happening during the reading block in other parts of his community now. He wanted to better inform his future practice by understanding what the other teachers are already doing (Field Notes, 10/31/12). Because the space is built to encourage job-embedded, collaborative professional development, this teacher was able to easily integrate this observation into his usual teaching practices. There was no need to get permission, obtain a substitute, or wait for

a time his students were at lunch, as would have been the case in a traditional space. Through collegial support and collective participation, teachers in this space are pulled out of the typical isolation we see in schools in order to develop deeper knowledge of teaching and learning (Mouza, 2009). By engaging in critical dialogue and sharing their practice, teachers within each learning community are collaborating to spark cultures of highly engaged learning (Dana, et al., 2011). Since these communities will develop even greater power by inviting others into their work (Dana, et al., 2011; McLaughlin & Talbert, 1993; Putnam & Borko, 2000), teachers also have opportunities to collaborate across learning communities, with other schools, and with university partners during release days and full elementary faculty professional development opportunities. New learning can grow and develop in the real world of teacher and student lives through meaningful sources of community knowledge that generate strength and relevant information (McLaughlin, 1998; Wenger, 1998). For example, after one team's cross community visits, Rachel wrote in her field notes, "They really enjoyed seeing the other learning communities in action and the implications that they came up with for their own practice showed that their points of views may be opening up (Email, 12/04/12)."

Finally, professional development that mediates and supports professional learning in an environment that uses space differently is inquiry-oriented. One particularly strong model of professional development is practitioner inquiry. Inquiry gives educators a powerful professional stance (Cochran-Smith & Lytle, 2009; Zeichner, 2003) that encourages them to seek out change by reflecting on their own practice while expanding the knowledge base of teaching and learning (Cochran-Smith & Lytle, 1993, 2009). To do so they engage in cycles of questioning, data collection and analysis that

lead to action based on new learning and the sharing of findings with others (Dana & Yendol-Hoppey, 2009). Professional development that is inquiry-oriented approaches learning as an opportunity for developing a “critical habit of mind that informs professional work in all aspects” (Cochran-Smith & Lytle, 2009, p. 121). This inquiry stance encourages educators to engage in multiple and continuous cycles of inquiry that make practice problematic and public (Feeney, 2009; Hargreaves, 1999; Harris & Muijis, 2003; York-Barr & Duke, 2004). P.K. Yonge has a long and rich history of inquiry-oriented professional development. Since teachers moved into the new space, an indirect form of inquiry has been constantly utilized. Each professional development opportunity has been framed through felt difficulties or burning questions. For example, one community spent a Wacky Wednesday wondering, “Who is this building working for? Who are learning communities working for (Field Notes, 01/15/13)?” Teachers then used student work, test data, examples of pedagogy, parent communication, literature, and organizational concept maps to come to deeper understanding of their question. For example, when wondering who the new environment was working for, teachers took student work, standardized test scores, and organizational concept maps to analyze who was or wasn’t making learning gains, in what areas, and through which learning structures (Field Notes, 01/15/13). After analyzing data, teachers then change practice based on what they have found and take those changes in practice back to full faculty meetings during the student work analysis protocols. In the previous example, teachers restructured conferences with students in order to more explicitly share their progress as they learn in the new space. They also moved some students’ schedules around to ensure they were receiving a more effective balance of autonomous time,

teacher time, and peer collaboration (Field Notes, 01/15/13). With inquiry embedded into their professional development, educators are given permission to wonder and make decisions, influencing the experiences of their students as well. Inquiry-oriented learning empowers exploratory, passion-led learning experiences for all members of the learning community.

Through our inquiry, we found that in order to mediate and support teacher learning in a new environment that uses space differently, professional development must be multifaceted. It needs to be continuously provided as a job-embedded, community-based, inquiry-oriented experience.

Finding Statement Two

In order to mediate and support teacher learning in a new environment that uses space differently, professional development must shift in order to meet the needs of teachers, but also the goals of the school. As is clear in the professional development literature, teachers must see a clear connection to their own context in order to enact new practices (Desimone, 2009). By consistently focusing on where the teachers needs were, we were able to provide the professional learning opportunities that the teachers needed, but were able to keep our eyes on the long-term goals of the school. This constant tension between meeting them where they were while still pushing to the next level was a constant struggle. However, only through this struggle, we were able to truly begin to see change.

Our Wednesdays were always dedicated to facilitating professional development. Due in part to our systematic study of professional development practices, this Wednesday professional development evolved over the school year. At first, we met

with one grade level each Wednesday morning in what we called “Wacky Wednesdays,” while students attended specially scheduled classes with music, library, and physical education teachers. After reflecting on the first round (K – 5), however, we realized that it was causing an unnatural division within each learning community to meet with grade levels separately. Additionally, in early October, the three of us discussed an important nagging question, “How do we meet the needs of our teachers without interrupting other time/conversations (Field Notes, 10/09/12)?” We discussed in length ways to rectify these issues and came up with the following action steps:

- Tuesdays need to be dedicated time for learning community logistics.
- We should give up our old logistics-oriented Wacky Wednesday conversations for more future-oriented conversations. Use Wednesdays only for goal setting and forward planning.
- To move into learning community Wacky Wednesdays we need to get approval from school administration and we need to find three more places for students to go. First try asking teachers and interns to lead Chinese, bullying prevention, and art classes. (Field Notes, 10/09/12).

In an email to Lillian and Diana on October 17, 2012, Rachel wrote, “Excitingly, since the last time we met, one of our action steps was actualized! Community Wacky Wednesdays were approved and Lillian introduced them to the faculty today as a way to take the weight off of Tuesday planning and move the focus of Wednesdays to more forward thinking and planning for the new space.”

With our plan realized, we began meeting with one *community* (K/1, 2/3, or 4/5) each Wednesday morning. Wacky Wednesdays had always had a specific content

focus. For example, in the first round, we studied the reading conceptual framework, in the second conferencing with students, etc., but through our inquiry work, we also shifted the focus of Wednesday morning meetings to be purposefully turned on forward thinking and future planning. In this way, we could study the ways in which the specific content focus might be pushed more closely toward the goals of the school.

On Wednesday afternoons, we met with the whole elementary faculty. These meetings also followed the specific content focus of the round. These meetings rotated between structured student work analyses and new learning. In the structured student analyses, teachers met on vertical teams, with one kindergarten through 5th grade teacher in each small group. Each teacher brought a sample of student work and the group used the Student Work Analysis protocol (Figure 2) to discuss the ways in which the student work informs teaching practices in the new space.

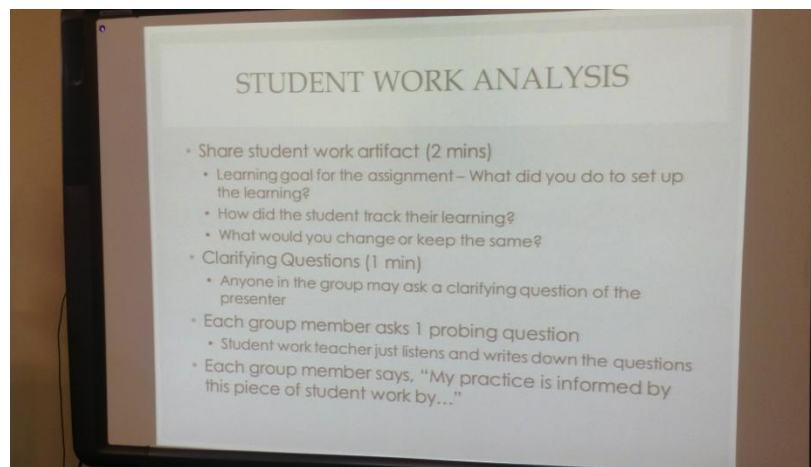


Figure 2 (Photos courtesy of Rachel Wolkenhauer)

When new learning opportunities were provided, teachers, university partners, or school administrators brought in new information to share and activities that ensured teachers got immediate hands-on use of the new information. For example, in one new learning

workshop, teachers engaged in a simulated inquiry-oriented lesson for science called a “driving question board.” Not only did they learn about a new strategy for teaching science, they experienced it as their students might. As the literature suggests (Banilower et al., 2007; Carpenter et al., 1989; Desimone et al., 2002; Duffy, et al., 1986; Firestone, Mangin, Martinez, & Polovsky, 2005; Harwell, D'Amico, Stein, & Gatti, 2000; Landry et al., 2009; McCutchen, et al., 2002; McGill-Franzen et al., 1999; Penuel et al., 2007; Rosemary et al., 2007; Van Keer & Verhaeghe, 2005), this active aspect of professional learning is necessary for teachers to transfer new practices into their classroom.

One other aspect of professional development that emerged from our inquiry was the addition of learning community release days. “Lillian and Diana advocated to get the teachers full release days that would be tacked onto Wacky Wednesdays so that they have additional time together for future planning (Field Notes, 11/07/12).” With these release days, teachers from each learning community had substitute teachers for a whole day immediately before or after their scheduled Wacky Wednesday. In this way, teachers had a day and a half to work together on future planning, a much needed and necessary addition to their professional learning.

It became clear through our inquiry that in order to mediate and support teacher learning in a new environment that uses space differently, we needed professional development plans that could easily shift in order to meet the needs of teachers, but also the goals of the school.

Finding Statement Three

In order to mediate and support teacher learning in a new environment that uses space differently, teacher leadership is essential. According to Katzenmeyer and Moller (2001), teacher leaders “lead within and beyond the classroom, identify with and contribute to a community of learners and leaders, and influence others toward improved education practice” (p. 5). As leaders, these teachers develop strong active voices. By fighting for what they know is best for every student, teachers recognize that they must cultivate the skills necessary to meet the unique challenges of schools and become researchers, scholars, problem solvers, and advocates. Recognizing the importance of developing lasting change, these teachers share their experiences while acting as allies. Together, teacher leaders, their colleagues, and their students are practicing interventions and developing supportive connections that can motivate persistent change efforts.

The Learning Community Leader (LC Leaders) role is not new this year, but the role expanded and refined to meet the needs of the teachers in this new environment. In the past, the LC Leaders were mostly a conduit for communication between administration and the teachers. In this new building, the LC Leaders began to take on the role of facilitator of their peers. In the beginning, they acted more as the “reporter”, by giving us the “no holds barred” version of what their LC needed and wanted in their professional learning. As the year progressed, they began to take on more facilitation of their peers as well as designing the learning. This shared leadership structure really began to accelerate what we were able to accomplish.

Concluding Thoughts

It was through this inquiry that we came to realize how essential professional development is for school reform. The P.K. Yonge elementary division is embarking on a new phenomenon in the field of education. Through this newly designed architectural space, that declares, “tomorrow’s world demands a whole different kind of learner and worker” (Fielding and Nair, 2012a), P.K. Yonge is “really thinking about how we are going to educate a person who is going to grow up in the 21st century, in a global society, which is in a very different way of teaching and learning that we’ve had for the past 100 years” (Fielding and Nair, 2012a). By shifting the focus away from teachers as experts and instead thinking of teachers as facilitators of learning, teaching is radically different and is producing radically different learning environments. At the beginning of our inquiry, teachers were in survival mode. It took every ounce of energy just to figure out how to live in the new space. Through carefully crafted professional development that was continuous, multifaceted, and centered around teacher needs and school goals, the teachers were both supported and pressured to move from *living* in the new space to *teaching* in the new space. Through interlacing cycles of pushing teacher learning forward while attending to immediate needs, the professional development allowed teachers to build confidence as they grew into professionals who are “revolutionizing education” (Diana, Interview) in this new space.

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APPENDIX B
INQUIRY PRESENTATION



THE NEW SPACE

- **Community Learning Center**
 - 2 traditional grade level communities
 - Bright colors, new furniture, lots of space
 - Natural light, connections to the outdoors
 - Responsive flexibility
- **Nurtures 21st Century Learning**
 - Collaborative Learning
 - Teachers as Facilitators
 - Self-Regulation and Goal Setting
 - Autonomy, individualization



BACKGROUND

- Preparation for teaching in the new space began 3 years before the move.
 - PLCs
 - AFL
- Complexity of the new space and approach to teaching made responding to immediate needs essential. It was hard to maintain perspective of the goals of the school and the long-term needs of teachers.
- Lillian, Diana, and Rachel began using inquiry to more intentionally study the move into the new space and the ways in which professional development might support and mediate teacher growth and development in the new space.



WONDERING

- In what ways might we mediate and support teacher learning in a new environment that uses space differently?
- What are we doing to help support the goals of the building?
 - Where do we find time and space to deliberately discuss the ways in which the new space supports and limits teacher (and student) learning with the teachers?
 - How do we facilitate forward planning?



METHODS

Binding and distancing ourselves from the experiences of professional development.

- We met Tuesday afternoons to reflect on professional development from the week before.
 - Formative Data Analysis: Rachel's field notes, reflective emails, Google Docs, meeting agendas, PD planning documents, history of PD at PKY, literature and knowledge of quality PD
- Professional Development planning
 - Immediate
 - Future-Oriented
- Professional Development Opportunities
 - Lillian and/or Diana facilitated with learning community leaders
 - Rachel attended and took reflective notes



Professional development must be multifaceted. It needs to be continuously provided as a job-embedded, community-based, inquiry-oriented experience.

- Tuesday afternoon – learning communities planning for immediate lessons and logistics in the new space
- Wednesday morning – 2 hour release time for one community to do “big picture” planning
- Wednesday afternoon – faculty meets in vertical teams to analyze student work to better understand learning progression and plan accordingly



FINDINGS

- Professional development must be multifaceted. It needs to be continuously provided as a job-embedded, community-based, inquiry-oriented experience.
- Professional development must shift in order to meet the needs of teachers, but also the goals of the school.
- Teacher leadership is essential.



Professional development must shift in order to meet the needs of teachers, but also the goals of the school.

- Grade level 2 hour release every 6 weeks → Community 2 hour release every 3
- Immediacy for Survival → Distinction between immediate and forward planning
- Before and after school + 2 hour release → Before and after school + 2 hour release + full day release once a quarter



Teacher leadership is essential.

- **Learning Community Leaders**
 - Decision makers and advocates for the professional development their communities needed.
 - Facilitation in PD opportunities
 - Designers of PD opportunities



CONCLUDING THOUGHTS

Professional Development is essential for school reform.

- Through this newly designed architectural space, that declares, "tomorrow's world demands a whole different kind of learner and worker," P.K. Yonge is "really thinking about how we are going to educate a person who is going to grow up in the 21st century, in a global society, which is in a very different way of teaching and learning that we've had for the past 100 years" (PKY video, 2012).
- Through PD this year, teachers were both supported and pressured to move from *living* in the new space to *teaching* in the new space. Through interlacing cycles of pushing teacher learning forward while attending to immediate needs, the professional development allowed teachers to build confidence as they grew into professionals who are revolutionizing education in this new space.



APPENDIX C
INQUIRY PRESENTATION HANDOUT



CREATING SPACE FOR TEACHER LEARNING



P.K. YONGE DEVELOPMENTAL RESEARCH SCHOOL



K/1 Learning Community



4/5 Learning Community

P.K. Yonge Developmental Research School has changed the way teachers

In the 2012 - 2013 school year, elementary teachers at P.K. Yonge moved into a new building designed to promote collaboration in order to meet the needs of every child. In the new space, teachers and students in 2 grade levels work together in learning communities. Kids are coaching kids and teachers are coaching teachers. Professional development (PD) in the space had to change to support the new approaches to teaching that the space promotes.

Therefore, we wondered: *In what ways might we mediate and support teacher learning in a new*

environment that uses space differently?

To gain insight into our wondering, we met weekly to analyze and reflect on PD practices. With these recursive analyses we planned for PD in two ways: immediate preparation, and big picture goal setting. Lillian and Diana then facilitated PD as Rachel attended and took reflective notes that contributed to weekly analyses and informed next steps.

After a summative analysis of our data, we found:

PD must be multifaceted. It needs

to be continuously provided as a job-embedded, community-based, inquiry-oriented experience.

PD must shift in order to meet the needs of teachers, but also the goals of the school.

Teacher leadership is essential.

This inquiry reminded us how important PD is for school reform. Through interlacing cycles of pushing teacher learning forward while attending to immediate needs, the PD allowed teachers to build confidence as they grew into professionals who are "revolutionizing education" (interview, 2012).



TRANSPARENT WALLS



GROUND FLOOR PLAN



TEACHER WORKSPACE

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BIOGRAPHICAL SKETCH

Rachel Wolkenhauer is an educator and scholar in the field of teacher education. Rachel graduated from the University of South Florida with a bachelor's degree in elementary education and graduated from the University of Florida with a master's degree in curriculum and instruction. She began her teaching career at Dunedin Elementary School where she taught third and fourth grade. As a doctoral student, Rachel served as the Lastinger Center for Learning Teacher-in-Residence. Her research interests include practitioner inquiry, job-embedded professional development, and preservice teacher education.