1-1-2015

A Case Study of Teachers' in Professional Learning Communities in a Campus Preschool

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by

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A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Department of Childhood Education and Literacy Studies
College of Education
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Date of Approval:
February 23, 2015

Keywords: Professional Development, Project Approach, Teacher Learning Communities

Dedication

This is dedicated to my children Noah, Avery, and Lukas. The absolute loves of my life. They have motivated me to keep working despite the difficulties and challenges throughout this process. I also dedicate this to my mother, Georgia Adams. Her support and assistance has been immeasurable. I could not have completed this without her continuous support and encouragement.

Acknowledgments

This has been a team effort to reach my destination in this long journey. I could not have completed this adventure without all of the support from my committee. A special thank you to my major professor Jolyn Blank. Her guidance, support, feedback, and time were above and beyond the call of duty. I could not have chosen a better major professor to take this voyage with. To Ilene Berson, for her expertise and knowledge in the field and academia. I have learned so much from you through all five years of my doctoral study. To Valerie Janesick, who made me work harder and dig deeper into qualitative research. To Diane Yendol-Hoppey, her work in field and expertise in teacher research has been of enormous inspiration to my dissertation and future research.

My gratitude goes to my mother, who has been a part of this ride along with me. She listened to me cry and complain, and then encouraged me to continue on. Her support in helping me with my children is the only reason I was able to make it through this process. My gratitude also goes to my children Noah, Avery, and Lukas. They were supportive and adaptive to my ever-changing schedule and need for quiet. A special thank you to my Aunt, Betty Stephentich. Her help with transcription and editing were very appreciated and needed. To the rest of my family, who provided support and encouragement along the way.

I must recognize my cohort that was a part of this process as well. What an amazing team to be a part of! I learned so much from all of you. A special thank you to Susan Weber.

She was my rock that I could talk to and cry to, and she completely understood. Additionally, I must acknowledge my remarkable group of friends. I am so lucky to have you all in my life! You were the village that helped to raise my children when work and school got in the way. My children and I could not have gone through all of this without you all serving as surrogate parents at times.

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Abstract

The purpose of this multi-case study was to describe and explain teacher learning within school contexts by exploring the nature of teachers' experiences in learning communities. This study explored the ways in which teachers participated in professional development sessions using the project approach as a framework for facilitating and engaging in professional learning communities by answering: What is the nature of teachers' experiences in inquiry-based professional learning communities? In what ways and under what conditions does documentation play a role in teacher learning? For data collection I used semi-structured interviews, audio recordings of professional development sessions, teacher documentation, teacher daily sheets, and my researcher journal. I applied a constructivist approach using a social lens for the data analysis to make sense of teachers' learning experiences (Vygotsky, 1935; Rogoff, 1995). The findings indicated that group dynamics play a pivotal role in how teachers' experience professional learning communities. Teacher's struggled to foster inquiry into their own practice. The findings also indicate documenting children's learning is essential in developing a deeper understanding of children. Despite the positive role of documentation within the professional learning community, teacher's needed favorable conditions to continue using documentation for teacher learning.

Chapter One

Introduction

Early childhood teachers have a complex role that encompasses many facets. As the field has evolved and requirements have changed, teachers are faced with high demands and minimal opportunities to grow in their new role. Early childhood education as a field has historically dealt with tensions between care and education, as well as developmental approaches versus academic approaches (Blank, 2010). Exploring these tensions in terms of the purposes of early schooling has become increasingly important as the number of preschool age children in early childhood education contexts grow; particularly as more women enter the workforce (Lombardi, 2003; National Association for the Education of Young Children [NAEYC], 2003). The increased funding by state and local governments for Head Start and Early Start has increased accountability issues for early childhood education programs nationwide (NAEYC, 2003). Beyond accountability, renewed emphasis on quality programs within the field places a greater importance on professional development by showing that children's early experiences with teachers are imperative to the healthy development and a child's readiness for school (Beck & Zaslow, 2006).

The emphasis on defining teacher quality has led to a surge in effective teaching literature. However, much of the research focuses on teacher impact of student achievement rather than on a broader picture of early childhood teaching. Students are expected to know more and show a deeper understanding of content; however, teachers are struggling at taking

information from professional development sessions and connecting this knowledge to the classroom in order to promote student learning (The National Council for Accreditation of Teacher Education [NCATE], 2001). The necessity to enhance teacher development to improve student learning has brought the need for quality long-term professional development to the forefront (Zaslow et al., 2010).

The demands in the field have led to the call for high quality professional development experiences for teachers as well as paraprofessionals. There is a staffing crisis for qualified teachers because the increased expectations in the field are not counter balanced by incentives and professional development (NAEYC, 2003). NAEYC (2003) states, "Ongoing professional development is a key to helping staff implement evidence based, effective curriculum and assessment systems for all children, responding to children's diverse needs, cultures, languages and life situations" (p. 17). Teachers need to be provided the time to access professional development and collaborate in order to critique their curriculum and assessment practices to meet children's needs in the classroom. Professional development also needs to be job-embedded (NAEYC, 2003). This allows for teachers to identify real problems, relative to them and their own classroom. Stremmel (2012) stated,

> We live in an age of accountability, and more than ever teachers, schools, and school
> districts are being held accountable for the policies, programs, and practices they
> implement. Teachers must be able to make informed decisions about what they do in the
> classroom; therefore, they need to be much more deliberate in documenting and
> evaluating their efforts, teacher research is one means to that end. (p. 4)

Traditional professional development for teachers often included workshops, conferences, or even hired speakers to come in for a few hours to enlighten teachers on what they

should be doing in the classroom (Henderson, Meier, Perry, & Stremmel, 2012; Neuman & Kamil, 2010). However, much of the research contends this is not an effective approach of professional development that transforms to classroom practice. Helterbran et al. (2004) describes characteristics of high quality professional development that include a holistic approach, collaborative, and contextual in teachers' everyday lives. This approach situates teachers as lifelong learners and professional development never concludes. Therefore, for professional development to be effective it must strengthen the authentic voice of the teacher by revolving around interests and important issues for the teacher (Helterbran et al., 2004).

One approach to holistic job embedded professional development is teacher inquiry or teacher research. Teachers who engage in inquiry see their classrooms in a different way, opening themselves up for change (Meier & Henderson, 2007). Teacher research promotes new dispositions in intellectual ways increasing practitioner knowledge (Katz, 2006). This is especially true when they can engage in discussions with their peers. Teachers' benefit when they are able to carry out long-term professional development in learning communities with their peers (NAEYC, 2003). This evidence has led to an increase in ongoing professional learning communities for the purpose of professional growth. Meier and Henderson (2007) note that professional learning communities involving teacher inquiry, open teachers to different ways of looking at children, schools, and society. This serves as a means of professional development and perhaps even educational reform.

The Project Approach is a gateway to teacher research and inquiry, through the eyes of children (Meier & Henderson, 2007). Documentation itself is a form of teacher research because it requires teachers to generate data that provide a way for teachers to interpret their work. The steps required in the Project Approach and documentation collection process somewhat mimic

the notions of teacher inquiry. However, some teachers consider teacher inquiry as another addition to all the work they are already required to do.

Currently there is limited empirical research on teacher's experiences as they engage in professional learning communities exploring inquiry, and the role of documentation in teacher learning within the early childhood context. It is important to understand teacher perspectives on professional learning communities engaging in inquiry to gain a greater understanding of how teachers perceive these groups and how they are incorporated into real world settings.

Background

My interest in early childhood teacher professional development stems from my experiences as a preschool teacher working with children with special needs, their families, and ultimately teachers that worked with these children. It was when I began providing professional development to both teachers and parents alike in local preschools that I came to understand its power and importance. I became acutely aware of the lack of impact I was able to have by engaging in one day or single weekend trainings. The gap between the "trainings" I delivered and classroom practice drove me to want to learn more about the kind of professional development experiences that are more meaningfully connected to teachers' day-to-day classroom lives.

Later, as I worked through my doctoral study, one of my primary roles was to serve as a liaison for the university partnership preschool. The preschool has identified inquiry approaches to teaching and learning as central to its vision/mission. In partnerships like these, schools and universities are striving to make connections and engage in meaningful collaborative research to enhance both student and teacher learning. Partnership schools are seen as an outlet to meaningfully connect research and classroom practice, allowing teachers to have a voice in their

own process of inquiry (Dana, Silva, & Snow-Gerano, 2002). Partnership schools seek to

support teachers, on their use of inquiry as a part of ongoing professional learning, with the

overarching goal of enhancing student learning (NCATE, 2001).

Concurrently through my doctoral study, I was introduced to the Project Approach (Helm

& Katz, 2001) as a framework for facilitating inquiry with young children. I became intrigued

with the idea of utilizing Project Approach as a framework for teachers to engage in inquiry

processes in order to enhance their practice. Therefore, this qualitative study will describe and

explain how teachers engage in professional development that utilizes the Project Approach as a

framework for teacher learning**.**

Statement of the Problem

Many of the existing practices in early childhood professional development draw from a

deficit model. Professional development models have primarily focused on how to "fix" teacher

practices. Many use a one size fits all technical approach, where the "expert" comes in to

transmit knowledge, where the teacher can absorb the information, then apply the expert

techniques within the classroom. Webster-Wright (2009) states, "the term professional

development is part of a discourse that focuses on the professional as deficient and in need of

developing and directing rather than on a professional engagement in self-directed learning"

(p.712). There must be a shift in discourse on professional development and supporting learning

communities for teachers to engage in rather then older models of directive teaching (Webster-

Wright, 2009).

Teaching has historically been considered an isolated, independent practice that occurs

behind closed classroom doors (Blank, 2009). There are limited opportunities for teachers to talk

about teaching practices and engage in collaborative work, resulting in a lack of teacher

empowerment (Desimore, 2009; Neuman & Kamil, 2010). In order for teachers to instill the disposition of life long learning in children, teachers must consider themselves lifelong learners (Katz, 1990). Yet, isolation and deficit approaches to teacher learning leave teachers out of school reform efforts. In contrast, more recent literature has shown the need for professional development that is meaningfully embedded within teachers' shared experiences in schools (NAEYC, 2003; Webster-Wright, 2009).

A growing number of early childhood teacher educators are exploring an inquiry approach to professional development in school contexts. Teaching as inquiry is described in many different ways, including *teacher research, action research,* and *reflective practice* (Adger, Hoyle, & Kickinson, 2004; Dana & Yendol-Hoppey, 2008; Desimone, 2009; Helterbran & Fennimore, 2004; Neuman & Kamil, 2010; Webster-Wright, 2009). A central shared idea is that inquiring teachers pose questions to their practice and engage in study of their own classroom teaching experiences in order to inform practice. Collaboration is paramount in inquiry based professional development. The use of collaboration within a teaching context links directly to teacher learning (Parsons & Stephenson, 2006).

Ongoing professional development with teachers using an inquiry stance is shown to provide long-term growth and changes in classroom practice (Dana & Yendol-Hoppey, 2008). Adger et al., (2004) found that teachers who engage in rich dialogue and interacted with each other demonstrated knowledge that linked to classroom practice. The teachers' conversations helped to build pedagogical knowledge. Inquiry-based communities of teachers within the same school context allow teachers to take what is learned in professional development sessions and experiment with their own classrooms (Dana & Yendol-Hoppey, 2008). The ability to experiment in the classroom and then regroup for discussion and further reflection allows

teachers the ability to further apply learning. The use of professional learning communities provides an outlet for teachers to gain their own autonomy and stance in the profession of early childhood education (Castle, 2012). This is especially important in the early childhood classroom because it provides a way for teachers to study the specific contexts in which they work, make improvements on their practice, and promote necessary educational changes necessary within classroom circumstances (Hatch, 2012).

Long term, inquiry-based professional development is important to allow teachers to practice what is learned in their professional development sessions (Neuman & Kamil, 2010). However, more understanding is needed about the kinds of experiences that support teachers in professional learning communities as a form of professional development. There is still debate and a need for additional understanding of the ways in which teachers engage in this kind of practice and the nature of the conditions that support it. Although professional development is considered a top priority by NCATE (2001), there is little empirical research on early childhood teacher professional development that occurs in school contexts, especially utilizing a framework such as Project Approach.

The *Project Approach* is a framework that provides students in the classroom the opportunity to engage in in-depth studies that provide comprehensive learning on a particular topic (Helm & Katz, 2001). The principles behind Project Approach offer a lens for teachers to reflect and learn regarding daily occurrences in the classroom. The Project Approach provides a launching board for discussions among teachers that can lead to improvements in professional practice in the classroom. Using the Project Approach as professional development aligns with notions about focusing on teacher learning in the context of their experience, and provides avenues for teachers to inquire into their practice. In particular, the Project Approach lends itself

to ample documentation for teachers to collect and reflect upon to bring to the professional development sessions. This form of professional development coincides with the findings of the literature regarding long term, inquiry based methods (Zaslow et al., 2010). Although there is ample literature supporting the enactment of embedded, inquiry based professional development, there is a need for research to describe and explain such approaches in action within early childhood contexts. Exploring teacher's experiences can shed light on the realities of professional learning communities in early childhood settings. This study will contribute to this need by describing and explaining how teachers engage in professional development that utilizes the Project Approach as a framework for teacher learning and the role of documentation in teacher learning.

Purpose and Research Questions

The purpose of this study was to describe and explain teacher learning within school contexts by exploring the nature of teachers' experiences in learning communities. This study explored the ways in which teachers participated in professional development sessions using the Project Approach as a framework for facilitating and engaging in professional learning communities. The questions that guided my research included:

1. What is the nature of teachers' experiences in inquiry-based professional learning communities?

2. In what ways and under what conditions does documentation of classroom practice play a role in teacher learning?

Importance of the Study

This research addressed questions pertaining to teacher learning in school contexts. Understanding the nature of professional learning communities and how to foster and support it

carries implications for teachers, teacher educators, and school leaders. The understanding of how teachers develop an "inquiry stance" through the process of reflection and inquiry in professional learning communities explores the potential for future professional development frameworks in early childhood programs. The sessions should change shape and form as the professional development progresses allowing the teachers to take ownership of their knowledge and developing inquiry in their own classroom and in their own professional community (Moran, 2007). By investigating how teachers reflect and act upon professional development sessions using the Project Approach as a framework, researchers and professional development developers can gain insight into the ways in which teacher inquiry in professional learning communities occurs in an early childhood context. This study will contribute to a deeper understanding of how the use of Project Approach as a framework in professional learning communities can foster inquiry-based teaching and teacher learning.

Operational Terms

In-service teacher: An individual who provides learning experiences and care to children in the classroom with a minimum of an Associate Degree in Early Childhood Education.

Preschool: A school that provides care and learning experiences to children from the ages of 2-5 years.

Professional Development: Ongoing, weekly meeting involving in-service teachers, (those who are already working in the field) as well as a coach/ mentor, that uses systematic, and intentional efforts to embed teacher learning.

Inquiry: A cycle that includes teachers identifying a problem, developing questions and examining assumptions, gathering data, analyzing data, interpreting data and creating new questions.

Reflection: The replaying of experiences that adds to the meaning of the experience that results in a direct course of action for future experiences.

Collaboration: The gathering of peers to enable deeper thinking about teaching practice in an atmosphere that is supportive and constructive in nature, while providing honest feedback.

Communities of Practice: A group of teacher learners/ researchers that gather in collaborative groups to reflect and engage in inquiry.

Professional Learning Community: A group of teachers that meet together and discuss child and teacher learning.

Project Approach: A framework for facilitating inquiry with young children that involves conducting in-depth investigation into a deliberately focused topic of interest.

Documentation: Samples of a child's work at several stages of completion: photographs showing work in progress; comments written by the teacher or other adults working with children; transcriptions of children's discussions, comments, and explanations of intentions about the activity.

In the following chapter the literature related to study is addressed. The review begins with professional development as a whole, and then narrows down into inquiry based teacher learning. Within the realm of inquiry based learning lies the constructs of reflection, collaboration, and communities of practice. The literature on the Project Approach related to teacher learning, as well as the role of documentation, will also be discussed.

Chapter Two

Literature Review

The purpose of this study was to describe and explain teacher learning within school contexts by exploring the nature of teachers' experiences in learning communities. This study explored the ways in which teachers participate in professional development sessions using the Project Approach as a framework for facilitating and engaging in professional learning communities. The questions that guided my research included:

1. What is the nature of teachers' experiences in inquiry-based professional learning communities?

2. In what ways and under what conditions does documentation of classroom practice play a role in teacher learning?

Theoretical Perspective

This study explored teachers' experiences as they engage in professional development in learning communities. Constructivism is the theoretical framework that informed my research questions, review of the literature, and selection of qualitative case study methods. For the purposes of this study, I define constructivism as "an interpretive stance which attends to the meaning-making activities of active agents and cognizing human beings" (Paul, 2005, p. 60). The constructivist theory focuses on understanding of meaning-making processes and "lived experiences" (p. 60). From this perspective, teacher knowledge is something that involves personal, social, and contextual meaning making.

Social interaction is a construct that drives the historical perspectives of constructivism and links to support for inquiry-based teacher learning. Vygotsky's (1935) constructivist learning theory implored the importance of social interaction for the transformation of knowledge. He discussed how our beliefs and ideas are shaped by our culture. Learners have the ability to imitate and model others through the use of observation. The use of social interaction and discourse with others allows for deeper understanding and knowledge. Through discussion, facilitators can provide support and promote learning. Vygotsky purported social interaction as the key to learning in all individuals. The use of collaboration is derivative of learning for both adults and children alike. The use of collaboration allows for learners to work together and reflect together leading to deeper learning. When learners participate in a range of activities in learning communities and internalize the effects of working together, this leads to acquiring new strategies and knowledge relating to the culture of the school (Vygotsky, 1935, 1978).

Teacher inquiry is a related stance that recognizes this by emphasizing the teachers' active role in their learning, by using inquiry and documentation as a facilitator of that knowledge (Dana & Yendol-Hoppey, 2003). From this view, teachers are more likely to construct an idea that builds on prior knowledge within their classroom, rather than transforming thinking through a one time- top down approach to professional learning. Teachers empowered to use their prior knowledge encourages teachers to explore and learn more about themselves, the classroom, and the children. This construction of knowledge of their own practice can lead to experimentation and further knowledge within their classrooms. The use of the Project Approach and inquiry-based teacher learning encourages teachers to construct knowledge

through problem solving and classroom experimentation (Stremmel, 2012). This places value on teachers' knowledge as professionals in the field.

Drawing from constructivism as a theoretical and interpretive stance, inquiry-based teacher learning is the conceptual framework that serves as a lens for understanding professional development in this literature review. In this chapter I begin with a general discussion of what is known about the conditions that support early childhood teacher professional development. This literature highlights general approaches taken to professional development and provides recommendations for high quality professional development. Next I will focus in more depth on the stand of literature pertaining to processes of teacher inquiry. I will address the following aspects of inquiry-based teacher learning: reflection, collaboration, and community. Finally, I will review the literature specifically pertaining to the Project Approach as a framework for facilitating inquiry. This section will focus two central themes: the Project Approach and teacher learning and the role of documentation in professional development. I conclude the chapter by describing how this study builds upon the existing literature and providing an explanation of the research questions and choice of research design.
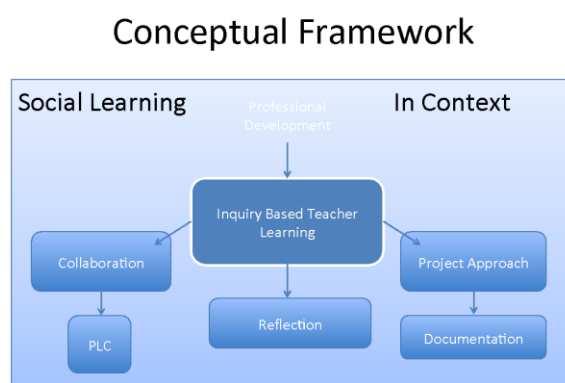
Figure 1. Conceptual Framework

Professional Development

Professional development can take on many forms within an early childhood education program. Traditional professional development for teachers included workshops, conferences, or even hired speakers to come in for a few hours to enlighten teachers on what they should be doing in the classroom (Henderson, Meier, Perry, & Stremmel, 2012; Neuman & Kamil, 2010). However, within the last decade it has become apparent that this type of professional development does not have lasting change on teacher's classroom practice. Other more in-depth forms of professional development can include formal education, coaching, communities of practice, and on the job in-service training (Sheridan et al., 2009).

Sheridan et al. (2009) suggest that professional development should be defined as an experience that will advance knowledge, skills, and dispositions as well as practice within the classroom. Therefore, the goal of all professional development should be to promote a culture for ongoing growth as a teacher, increase practitioner knowledge, skills, and dispositions (Sheridan et al., 2009). Riley and Roach (2006) pose that we need to first look at *HOW* staff learn and grow in the field of education. According to Helm (2007), professional development should initially come from the outside, however it should progress where a group of teachers take ownership of their own learning and growth. The facilitator of professional development then should then have the goal of "working out of the job," transferring leadership onto the staff of the school over time (Mezirow, 1997).

Helterbran et al. (2004) describes the kinds of conditions under which effective professional development occurs according to the literature. There are numerous descriptors that characterize high quality professional development in the early childhood context: It is holistic, collaborative, ongoing and contextual, reflective, and grounded in a theoretical perspective.

Holistic professional development should take place within the school walls using real world issues within each individual school. Han (2014) insists that professional development must consider the contextual needs of the teacher. This indicates that job embedded professional development is key for early childhood educators.

A common recommendation from examination of this literature review is the need for professional development to be directly related to classroom practice (Webster-Wright, 2009). Despite this, traditional professional development is often hierarchal in nature and does not promote the idea of teachers having a stance and learning based on their own questions and experiences (Snow-Gerano, 2005). These traditions have created obstacles for teachers to engage in research because of the beliefs about teachers and learning in the field (Cochran-Smith & Lytle, 2001). However, this approach of including teachers to help create the content of the professional development sessions allows for a deeper attainment of knowledge and change (Helterbran et al., 2004). This holistic approach aligns with the idea that teachers are life long learners and professional development never concludes. Therefore, for professional development to be effective it must strengthen the authentic voice of the teacher by revolving around interests and important issues for the teacher (Helterbran et al., 2004). This form of professional development provides opportunities to implement new ideas into the classroom concurrently and receiving constructive feedback, which is important to teacher learning (Han, 2014).

NAEYC (2003) indicates professional development needs to be collaborative in nature and ongoing in nature. The idea of one-time workshops is not effective and therefore need to be eliminated in the scope of what is considered professional development. In addition, teachers should not be isolated in their quest for development and knowledge. Teachers should work

together as a unit to discover how to shape learning for the benefit of young children. The use of long term learning for teachers and the ability to work together, and this type of work is valued, the culture of teaching within early childhood changes and shifts (Henderson, 2012).

Larivee (2000) notes that reflection is linked to an examination of theory. The use of reflection as a tool for professional development is essential to engage the teacher in order to elicit change in classroom practices. There is a need to make the tactic explicit, and utilize real life problems to be brought to life and studied to develop as a teacher and create changes in learning for both students and teachers (Loughran, 2002). Wood and Bennett (2000) utilized data to understand how teachers change their perspectives as well as their practice, finding that these changes occurred in the school context where teachers were able to problematize their own practice and problem solve accordingly. This problem solving strategy within a holistic context allowed a re-alignment in both their theories of teaching as well as their practice (Wood & Bennett, 2000). Webster-Wright (2009) implored that we need to re-conceptualize professional development all together, and refer to it as *professional learning*. He states that professional learning must constitute a holistic experience rather just interrelated information.

Inquiry-Based Teacher Learning

A strand of literature pertaining to professional development focuses on inquiry approaches. Teaching as inquiry is described in many different ways, including *teacher research* and *action research* (Adger et al., 2004; Cochran-Smith & Lytle, 2001, 2003; & Yendol-Hoppey, 2008; Desimore, 2009; Helterbran & Fennimore, 2004; Neuman & Kamil, 2010; Webster-Wright, 2009). A central shared idea is that inquiring teachers pose questions to their practice and engage in critical study of their own classroom teaching experiences in order to inform practice. There is strong evidence of the effects of teacher learning when teachers are

allowed to bring their own problems, discuss them, and then take them back to the classroom (Zaslow et al., 2010). Teaching is an exceedingly complex activity that is social as well as political in nature (Cochran-Smith & Lytle, 2001). When teachers are able to engage in inquiry they engage in opportunities to theorize about their practice and investigate what they feel is important (Cochran-Smith & Lytle, 1999, 2001). Teachers shift in the way they view themselves as professionals, seeing themselves as creators of knowledge. Teachers then become learners as well as knowers (Henderson et al., 2012).

The use of inquiry-based teacher learning implies the need for life-long learning within the profession of teaching. Inquiry is vital to both perspective as well as experienced teachers to understand new learning situations (Cochran-Smith et al., 2001). Broadly defined, teacher inquiry is systematic, data based, and intentional inquiry that is carried out by teachers (Cochran-Smith, 2001, 2003; Hatch, 2006). Teacher research is a form of professional development for both teachers as well as teacher educators which can lead to more effective teaching, as well as professional contributions to the field as a whole (Castle, 2012). There is a need for professional development experiences to be driven by interpretations and ideas that are brought to light as a result of inquiry. Teacher research provides an authentic means of professional development than more traditional approaches that rely on an outside expert (Dana & Yendol-Hoppey, 2003). The use of inquiry-based teacher learning implies building an inquiry stance as teachers to work together within their professional community to build knowledge and practice (Cochran-Smith & Lytle, 2001). This allows teachers to come together to find meaning in their work.

In the early childhood context, when teachers undertake research or inquiry within a collaborative setting, it not only changes what professional development looks like, it shifts the identities of teachers as professionals within their field (Henderson, 2012). Teacher research

gives teachers the opportunity to shape their own professional development through the process of inquiry; this in-turn validates, affirms, and improves practice (Henderson, Meier, Perry, & Stremmel, 2012). This process of inquiry creates teachers who think about how they affect children, and think about their actions and the ways in which they can make a difference (Castle, 2012). While formulating and answering questions teachers understand child learning and make necessary changes to meet children's needs, creating personal professional development experiences (Castle, 2012).

Inquiry-based teacher learning is consistent with the cycle of inquiry which starts with developing meaningful questions, gathering data, analysis, interpretation, planning new practices and/ or procedures (Henderson, Meier, Perry, & Stremmel, 2012). This translates into the teacher being an active learner in context with the skills consisting of careful observer, listener, and an inquirer of teaching and classroom life. This form of teacher learning is within context, with real issues for educators to inquire collaboratively about the assumptions and values of the schools (Cochran-Smith, 2003). Inquiry as stance therefore provides the opportunity for teachers to develop intellectually by learning from and about the practice of teaching through systematic inquiry.

One approach toward inquiry-based teacher learning is the idea of using *action research* in context as a form of professional development allows teachers to articulate and better understand their own learning process (Zaslow et al., 2010). One facet of action research is a focus on changing practice. The notion of action research implies the need for life-long learning in a climate of constant change within the classroom. Action research is not a one-time experience that will be life changing for the teacher. Teacher research can take on many forms and can be conducted for many purposes, however the primary aim should be a greater

understanding of teaching and learning from those who enact in the daily life of the classroom (Stremmel, 2007). Neuman et al., (2010) implore the need for ongoing, contextual learning experiences for teachers. They appeal the importance of ongoing action research and how it relates to the cycle of changes within the system. Dana, & Yendol-Silva (2003) discuss the importance of job embedded action research for effective professional development and ongoing teacher learning. Desimone (2009) believe some of the most powerful learning experiences for teachers can happen in teachers' own classroom, through self-reflection and inquiry. This movement of teacher research has helped teachers to utilize inquiry as a viable means of gaining knowledge and insight into teaching and learning (Stremmel, 2012). The use classroom life and records of classroom practice such as documentation, provides powerful tools in forming a deeper understanding on identifying problems and solutions. Inquiry provides situated learning experiences that help teachers think about and interpret relevant issues and challenges in the classroom (Caudle, Moran, & Hobbs, 2014). The reason for this is the holistic nature that allows for the learning to be content focused and active in nature.

A study conducted by Luft (2010) used a mixed methodology to look at 14 science teachers. The data collected included the Extended Inquiry Observational Rubric (EIOP), standardized interviews, semi standardized interviews and documents. The participants attended a one-day workshop to provide an orientation to inquiry based science instruction. Following this, the participants were a part of another workshop that was five days in length in which they explored and engaged in the inquiry cycle. The teachers were then provided with four different follow up opportunities as they engaged in inquiry within their own classrooms. The findings indicate the changes in beliefs and behaviors of the teachers as a result of the study. There were statistically significant changes in their extended inquiry practices; however, there was not a

statistically significant change in their beliefs. The participants did change their assessment and use of inquiry in the classroom, and the students showed improvements in their communication skills while engaged in their inquiry projects.

Another study conducted by McLaughlin and Zarrow (2001) looked at the role of teachers' inquiry as a part of the BASRC (Bay Area School Reform Collaboration) initiative over the course of five years. The five-year reform effort included 118 schools within the district. Data was collected while following the process of "re-culturing" schools to integrate teacher inquiry, analysis, and action. The teachers were required to collect baseline data, and then data throughout the study regarding classroom experiences. These documents were then used in inquiry sessions where the teachers would "analyze" the data together. The study found a significant amount of learning occurred with teachers as a result of the BASRC initiative. Inquiry was identified as the most important aspect of what was learned according to the teachers and researcher. The use of inquiry led to a new understanding about their practice within the classroom, which motivated the teachers to engage in more inquiry and an increased commitment to the school. Teachers that initially complained about collecting data on their students were later excited to have tangible proof of their children's growth and learning in the classroom.

Stokes (2001) participated in another reform initiative that became a five-year self-study. The study took place in at the Will Rogers Learning Community in Santa Monica, serving about 12,000 students. The grants and initiative supported 144 schools total. The grants supported time allotments for teachers to engage in inquiry based learning and change. The inquiry groups were voluntary and met in structured bi-weekly dialog sessions, with support of a "critical friend" outside of the district. There were three forms of inquiry that took place through the

course of the study. First, was a school assessment involving the entire school. The entire

school generated data so there was a common understanding of where children were at currently

in their learning. Second, there were small group action research projects. Teams developed

their own approaches to answer their own questions. This was used to inform inquiry within

small groups. Third, there was individual reflection with small group support. Teachers

involved in the critical reflection of their own practice and explored values as well as beliefs.

These meetings were gently facilitated by the external friend, which met with teacher bi-weekly.

The teachers became empowered through the inquiry process. The teachers realized they had the

power to make a difference for the children in their classroom as well as their own professional

lives. It was a difficult process, and took five years of struggle and triumph to form a culture of

inquiry within the district.

In a study conducted by Dana et al. (2002) the culture of inquiry was explored through a

professional development schools. Data was collected from an earlier ethnographic pilot case

study. The data was collected over an 18-month period and included journal entries, field notes,

email correspondence, audio taped recordings, questionnaires, and informal and formal

interviews with mentor teachers. The purpose of professional development school partnership

was to explore the transformation of inquiry within a professional development school. The goal

was to develop an inquiry as stance into the culture of the professional development school.

Findings indicated that mentor teachers were initially unfamiliar with inquiry and there was little

inquiry happening due to teacher discomfort. When one teacher shared an inquiry idea she was

met with negative energy, which led to no additional discussion of inquiry. When space was

created for inquiry with three different options for mentor teachers to choose from based on their

comfort level there was some change. Mentor teachers grew as inquirers by observing their pre-

service teachers and problematizing their practice, this led to an inquiry stance toward teaching. The teachers began to engage in lengthy discussions about teaching and learning which led the teachers to action in the classroom.

A study conducted by Hobbs, Williams, & Sherwood (2012) looked at the role of 24 preschool teachers that served as teacher researchers for a funded project by the National Science Foundation. Five researchers worked with the preschool teachers throughout the course of the study. The teachers were regarded as teacher researchers that were collaborators in the process of data collection, data analysis, and by providing insight and expertise regarding four-year-old children. Professional development was used in order to help teachers construct the necessary science content and implementing the science curriculum. During the professional development sessions the teachers and mentors both asked questions as equal partners. Hobbs et al. (2012) found that the teachers were eager to have a voice and participate in the research. Teachers recognized their improvement in questioning, watching children, and documenting children learning. The implications of the study note the importance of collaboration for teachers under the condition of having the opportunity to learn, and inquiry takes a great deal of time and commitment.

Castle (2012) conducted a hermeneutic phenomenological theme analysis through interviews with three teacher researchers in lower elementary grades. Each teacher was interviewed for a two-hour period with audio recording and transcription. The purpose of the study was to describe the stance of autonomy though teacher pedagogical research. The findings bring to light seven themes for teachers. The first theme was the notion of teachers to feel that something is not quite right in their classrooms that warrant further investigation. This in turn leads to the teachers questioning what is the phenomenon that is taking place. From this point,

the teachers would seek out knowledge from others, typically as a part of a collaborative learning community. The teachers that engaged in pedagogical research would then take risks and try something new in their classroom. Following the implementation of the new idea the teachers would reflect on what took place as a result of the change in the classroom. This process of reflection led to teacher feeling more confident on their teaching ability and practice. Teachers then expressed an increased understanding of the children's understanding and learning. This understanding leads to teachers feeling empowered to take action and change things up in the classroom. Teachers then share their results with the others within their learning communities; this sharing with others in turn enables them to articulate their rationale for teaching more clearly. As a result, teachers are able to articulate a rationale for doing pedagogical research. When teachers are able to articulate how they feel and what they believe, they are able to respond to the criticism brought about by others who do not understand the process of teacher research. As teachers gain experience with experimenting with practice, they often carry this over into the classroom allowing the students themselves to engage in research. The implications of this study show the importance of autonomy as a benefit to teacher research through the process of inquiry.

Reflection

Reflection is a widely used term in the world of both teacher educators as well as in early childhood programs. Reflection is often linked to inquiry approaches, but it means many different things to many different people. Fendler (2003) argued that reflection is merely "hocus pocus," where people have their own definition of reflection and make it into something it is not (p. 23). This creates an atmosphere where there are so many different interpretations of the term reflection; no one actually knows what it means. This has caused some in the field of early

childhood to negate the importance of reflection with teachers because for many researchers and practitioners it lacks a concrete measurable definition. Despite the disagreements in a specific definition of reflection, Brookfield (1995) believes the reflection literature offers a variety of approaches to examining practice in the classroom, and leads to the discovery of assumptions that influence our practice. Hargreaves, Moyles, Merry, Patterson, and Esarte-Sarries (2003) state that reflection and dialog of reflection allows for many possibilities in expanding teaching practices. Teaching inquiry begins with the act of reflection, where teachers look at the way things are going in the classroom and seek out answers to improve (Henderson, 2012).

In the professional development literature definitions of reflection come primarily from Dewey (1938) or Schon's (1983) theoretical views. For the purposes of this research I will align myself with Dewey's view of reflection and what it means for teacher education. Dewey (1938) defines education itself as "the reconstruction of experiences which adds to the meaning of experience, and which increases ones ability to direct the course of subsequent experience." He referred to education as a verb, rather then a noun. A part of this process of learning is surrounded by the idea of reflecting on ones work. Dewey considers reflection similar to scientific inquiry, and handles reflection aligning with the format of the scientific method (Rodgers, 2002). Dewey (1938) defines reflection as, "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends (that) includes a conscious and voluntary effort to establish belief upon a firm basis of evidence and rationality." According to Rodgers (2002), there are six stages of reflection: an experience, the spontaneous interpretation of that particular experience, labeling the problem or the question, generating possible explanations, creating a hypothesis, and then testing the hypothesis.

The term reflection can be traced to Descartes who described it as "the ability to see oneself as objective" (Fendler, 2003). Since then, understandings of reflection have shifted. For example, Dewey (1938) explained that one cannot separate thought from experience; learning is holistic in nature. Experiences do not happen in a vacuum and therefore the process of both education and reflection should be social and collaborative in nature (Dewey, 1935).

The use of collaborative reflection permits teachers to reveal person knowledge and their own personal theories about the action of learning itself. Collaborative reflection creates a space for social discourse to understand the classroom experience (Caudle et al., 2014). The process of reflecting helps teachers to critique their own thinking by discussing their ideas with others. Fostering reflection with teachers it allows for the relationship between time, experience, as well as expectations of learning through reflection (Loughran, 2002). The process of reflection allows us a way to see and engage in teaching as ongoing learning. These experiences lead to highlighting one's own assumptions about teaching (Powell, 2005).

Many teacher educators have tried to create a concrete sequence of the process of helping teachers engage in reflection. Reflection is taught as a step-by-step process, as if it is linear. Yet, according to Dewey (1938) reflection is anything but linear. Larivee (2000) proposed a framework to foster the growth of what he termed a *critical reflective teacher.* Using Dewey's ideas and definition he created a filter system of actions for reflection that includes both critical inquiry as well as self-reflection. Individuals are involved in a particular situation or experience. They then look back and make connections to past personal experiences. This makes it possible for personal values and beliefs to be less tacit, leading to assessing personal assumptions and feelings. Following Dewey's ideas of reflection, a person must have self-awareness in order to reflect (Rodgers, 2002). A person typically will consider their personal agendas and how it

affects the situation at hand. All of these are considered before a response to the situation is considered. Larivee (2002) proposes then there are stages of the reflection process that include examination, struggle, and perceptual shift. Reflection therefore is an iterative, a process that spirals from practice to theory and then theory to practice.

The use of Dewey's (1935) ideas of reflection has led to teacher learning in professional development programs. For example, Parsons & Stephenson (2006) created professional development sessions where teachers had to reflect and then collaborate with other teachers regarding their classroom experiences. The findings indicate that teachers engaged in a higher level of thinking and had an increased awareness of their own learning in the classroom as a result of the sessions using reflective practices. This suggests that collaborative reflection supports teachers' awareness of their own practice. Teachers can monitor their own thinking, understanding, and knowledge regarding teaching while developing other ways of thinking by working with other teachers with differing beliefs (Parsons & Stephenson, 2006).

Powell (2005) used a similar style of professional development while using video as a tool for reflective dialogs, with similar findings. The use of reflection of classroom videos allowed the teachers to articulate both their thinking and feelings about the progression of learning. To go beyond the idea of professional development and toward inquiry based teacher learning, we must go deeper to understand the role of collaboration as a critical component of professional learning. Literature in the field points to several benefits of using reflection as a component of teacher learning and development, recent research highlights the use of video as a reflective tool.

Powell (2005) conducted a study with in-service teachers at different schools, ranging in grade level from kindergarten through high school. There were a total of 18 participants in case

study. The teacher's videotaped their classroom teaching that was used to stimulate the reflective dialogs with the teachers as a group. The findings indicate that teachers found the use of video as an effective tool to spark reflection and discussion. Reflection allowed for the teachers to reveal their own personal knowledge, highlight their own assumptions, and critique their thinking and practice. The teachers felt that by discussing videos together they were able to share their experiences and gain a deeper understanding from differing points of view.

Wood and Bennett (2000) looked at nine early childhood teachers' theories of play and their relationship to practice. The collection of the data in the study, and discussion of the data provided a platform for reflection, changing the ways the teachers viewed their teaching. The data collected in this mixed methods study consisted of a pre-observation questionnaire of teacher intentions, videotaping play associated with the teacher's intentions, and a post-activity interview while the teacher viewed the videotape. The findings indicate that teachers gained insight into their practice and changed their practice in some situations. The change that occurred with the teachers happened in three phases which included:

1. The teacher first reflected on how knowledge arises in the context of the classroom.

2. They problematize their practice based on what the teachers see as restraints.

3. Teachers re-align their practice as a result of their reflection.

In another study conducted by Hong and Broderick (2003), instant video revisiting was used for both teachers and children to promote reflective thinking. Two preschool classrooms used this approach to reflection for the course of a semester with children aged 2-5 years. The video camera is used in the life of the classroom daily throughout the case study. The findings indicate the use of video as an important tool for reflection of the classroom. Teachers found

that it was especially beneficial for them regarding social conflicts within the classroom. The ability to go back, watch, and reflect allowed teachers to understand why some children were struggling socially in the classroom and what can be changed within the environment to reduce these occurrences. Children were also able to benefit from the immediate feedback the video provided for their work and gave them the opportunity to reflect and re-visit their work.

Reflection is a powerful tool in teacher learning and developing an inquiry stance. The use of reflection as a part of professional development in a learning community allows for teachers to take their experiences and not only share them, but expand and think deeply toward future practice. This idea of reflection lends itself to the need for collaboration among teachers.

Collaboration

Given the shift toward understanding reflection as a social process and the identification of collaboration as a central condition of high quality professional development (NAEYC, 2003), collaboration has emerged as a theme in the literature. The use of the term *collaboration* has theoretical underpinnings of the social construction of knowledge. Vygotsky (1935) stressed the need for social experiences in order for learning to occur. Social interaction and learning in groups is beneficial to both children and adults. The use of language plays a pivotal role in developing an individual's understanding of any content area. Rogoff (1990) implored that social interaction itself advances thinking for an individual working in a group setting. This process of group learning leads to changes in knowledge and skills as well as their overall level of understanding. Therefore, collaboration can serve as a clear way to create a shared meaning that is both socially constructed and communicated throughout the group participating in teacher learning.

Descriptions of collaboration in terms of professional development take on many forms such as meeting informally, small groups, or as a community of learners. There are many forms of collaboration yet, "the aim of collaboration is to enable deeper thinking about practice in an atmosphere of supportive and constructive but honest feedback" (Parsons & Stephenson, 2006, p. 95). A great deal of the research discusses the ways in which collaboration aids in learning for adults. One of the primary benefits of collaboration is the use of conversation as a format to co-construct knowledge. Teachers perceive working in collaborative groups related to inquiry as imperative for their own development (Broderick, & Hong, 2011). The use of collaborative groups benefits the group as well as the individual teacher, when allowed to address immediate challenges within their own classroom context (Henderson, 2012). Collaboration (sometimes referred to as co-inquiry) can provide new insight into teaching and learning through everyday action in classroom learning to improve teaching practice (Abramson, 2008).

Adger et al. (2004) worked with a group of teachers in a literacy program in this qualitative case study. The teachers were initially lectured about the program, however this shifted to watching clips of teachers in action and analysis of practice. Adger et al., (2004) found that teachers in collaborative groups engaged in rich conversation and were able to construct new knowledge through the use of social interaction. The conversations that teachers engaged in allowed for deeper understanding of pedagogical knowledge compared to teachers that did not participate in conversations and collaboration.

Parsons & Stephenson (2006) had similar findings by using a collaborative approach with pre-service teachers. Twenty-two students in field experiences with children aged 3-8 took part in the study. Questionnaires were distributed as a primary data source, asking about the use of collaboration and reflection throughout their field experience with other pre-service teachers. By

the pre-service teachers sharing ideas, as well as discussing both their success and failures together, gained a deeper understanding of their own teacher learning. These same future teachers were positive about the learning process and demonstrated a greater level of critical thinking.

Moran (2007) studied the emergence of collaborative inquiry with 24 pre-service teachers. Pre-service teachers were randomly assigned to groups of four to undertake a project in their field experience classrooms. The pre-service teachers participated in interviews, and documentation. The students collaborated with each other to create lessons, implement a project, and then decided each day where to move forward with the students based on the project implementation the day before. The findings indicate pre-service teachers had an increased awareness of the value and need to share responsibility in creating classroom lessons. The pre-service teachers demonstrated a production of new knowledge that transcended what was realized in previous semesters. Moran concluded that both adults and child learners benefit from socially constructed knowledge through shared experiences.

Bennett (2001) discussed the role of both collaboration and reflection as to how teachers change their theories and practice which is an essential element in changing beliefs and classroom practice centers on the role of collaboration during the professional development sessions. The use of engaging in a shared discourse and juxtaposing theories allowed for the identification of discontinuities in the thinking process related to the classroom, in return changes in practice were visualized. Despite these research findings many professional development practices are still about delivering content versus the process of enhancing learning for teachers (Webster-Wright, 2009). Helterbran and Fennimore (2004) recommends a three-stage process of professional development. The use of action research with individual teachers, followed by the

use of collaboration to solve specific classroom issues with the use of concrete data, and finally

teachers and administrators coming together to make decisions based on the use of the data and

discussions. The conversations and group problem solving allows for empowerment of learning.

The need to support collaborative authentic professional learning opportunities is evident in the

research.

Communities of Practice

The use of teacher inquiry, which is considered an important component to successful

professional development, relies on the use of collaboration in order to develop an inquiry stance

by teachers (Dana & Yendol-Hoppey, 2008). Given the emphasis on professional development

that is embedded in teachers' actual classroom experience and that is collaborative in nature, a

line of research explores the creation of collaborative learning communities that allow for the

formation of tension and discomfort while transformation occurs (Snow-Gerano, 2005).

Community of practice (COP) is a key term utilized to describe the kinds of contexts that support

collaborative reflection. Communities of practice is a framework that has informed a growing

body of research that takes a more social stance to understanding teaching (Blank, 2009). This

assumes that communities of practice will foster an ideal of collaborative culture that in turn will

support teacher learning.

The use of collaborative learning communities or COP's within professional development

is considered imperative for the success and implementation of teacher inquiry and changes in

our schools (Cochran-Smith, 2003; Dana & Yendol-Hoppey, 2008). The use of dialog and

discourse as a source for professional development through collaboration allows for a

sustainable, satisfying, as well as effecting form of professional development for teachers. This

is further addressed by Desimone (2009) who noted that communities of learners are able to engage in interactive feedback with others to provide active learning experiences for teachers.

In order for collaboration to be successful there must be special care taken in forming communities of learners within an early childhood program. There is no one size fits all formula for professional development in the ECE world, because each school is unique, with unique teachers and needs. Teachers are more open to professional development and change when they feel that the learning experience was crafted for them, rather then a top down approach where they feel something is being done to them (Helterbran et al., 2004). Utilizing communities of learners as a form of professional development encourages teachers to take ownership of their own learning (Clark & Huber, 2005). Dana et al. (2008) states that it is essential to build trust among group members for establishing comfort among teachers. This allows teachers to understand and embrace collaboration within an unthreatening environment.

The effectiveness of collaboration depends on strong relationships between the leader of the professional development sessions or mentor and teachers (Neuman & Kamil, 2010). There is a need for reciprocal communication where there is not a top down model informing teachers what to think and do. While working among collaborative groups, mentors must pay careful attention to both group dynamics as well as the way power is balanced (Dana & Yendol-Hoppey, 2008). Effective learning communities give the teachers the power to create their own knowledge and therefore seen as less top down (Murphy, Bryant, & Ingram, 2014). In order for effective collaboration there must be a shared vision in which everyone in the program is working for. This assures that although a collaborative learning community might start from the outside in, it can eventually shift to an inside out program allowing for long-term use (Sheridan et al., 2009).

The Project Approach

The Project Approach is a framework for facilitating inquiry with young children that involves conducting in-depth investigation into a deliberately focused topic of interest. Katz and Chard (2000) state that good project work should engage children in extended investigation of worthwhile topics. One primary component of the Project Approach is for children to understand their everyday environments more fully. In this section, I will provide a description of the approach, followed by a discussion focused on two central themes: the Project Approach and teacher learning and the role of documentation in professional development.

The Project Approach is nothing new, in fact Dewey (1938) advocated for this type of work in the classroom early in the 20th century. However, many teachers are unfamiliar with projects in as a means of educating young children. Teachers tend to teach as they were taught which has led to difficulty in the cultural shift necessary of teaching towards inquiry (Catapano, 2005). Although the ideas and principles behind the Project Approach have been around for some time, there has been limited attention as to ways of supporting teachers in enacting this approach, which has limited its use in the classroom (Blumenfield et al., 1991). Castle (2012) notes the use of Project Approach as a viable means for professional development and inquiry within the early childhood context. Children asking questions and engaging in inquiry provide a perfect opportunity for the teachers to engage in inquiry as well. There is a need to understand both the nature and extent of teacher knowledge and what it means within the complexity of the classroom that currently promotes performance rather than the mastery of how to learn.

Project-based learning has been at the center of the discussion around high quality early childhood programs. The early childhood programs of Reggio Emilia, Italy brought renewed attention to the approach. Educators around the world have taken note of the children's learning

taking place through inquiry and projects in the Reggio Emilia schools, resulting in a surge of literature describing "Reggio-Inspired" programs in the U.S. Not only is this approach widely considered beneficial for children, but the literature also indicates that teachers feel empowered by the process of inquiry involved in the projects (Catapano, 2005).

The Project Approach and the Reggio approach share philosophical roots. The Project Approach provides a framework for teachers and students to engage in quality learning experiences (Katz & Chard, 1996). There are three essential components that must be included for project-based learning. First and foremost, there must be a question that drives the learning and activities associated with it (Blumenfield et al., 1991). From the questions posed, children engage in activities that result in a series of artifacts. Finally, there is a culminating product that addresses the initial driving questions. In the framework of the Project Approach the three phases include getting started, fieldwork, and a culminating event (Helm & Beneke, 2003).

The primary purpose of phase one is for the teacher and students to decide their topic of study. Ideally this topic emerges from child interest; however, this is not always possible. At times the topic emerges from a controlled calendar decided upon administrators. No matter how the topic is decided the children and the teacher work together to create an anticipatory web. The process of webbing allows the teacher to gauge if the possible topic is appropriate for the children, as well as measure the level of interest in the given topic (Helm & Beneke, 2003). This web allows students and teacher to assess current knowledge, and decide upon areas of focal research questions. This gives the class a clear picture of where their project is going and how to work towards achieving their goals. The web explores possible questions of inquiry and curriculum opportunities. During this phase the students begin to brainstorm possible resources and possible sites.

During phase two, children engage in investigation in order to find out answers to the questions posed in phase one. This involves visiting field sites, talking to experts, examining artifacts, and conducting necessary experiments to answer questions. Teachers and children typically revisit the children's initial web and the questions posed. The teacher uses this information to consider ways to embed skills and concepts that are part of the curriculum within the context of the project. When looking for answers to the children's questions, field experiences serve as a critical component of exploration (Katz et al., 1996). Children must prepare for these field experiences, because this is not a mere field trip. The purpose of these first hand activities is for children to directly research and seek answers to their questions. This involves preparation beforehand by both students and teachers. Children might be involved in collecting data, such as tallying an amount of something. Children can be asked to photograph items for future reflection, or do onsite observational field sketches. Others in the classroom could be put in charge of interviewing an expert on the trip to seek answers for the group. Every child engaged in the project plays a role and collaborates with others in groups.

Once the investigation has taken place, it is time for the children to represent what they have learned to share with the rest of the classroom and beyond. Children represent what they have learned about the topic through writing, drawing, construction, dance, and dramatic play. This representation of learning is a critical component for both students and teachers. It allows the children to delve deeply into their area of interest within a topic, at the same time teachers may use the children's creations as a form of assessment to inform instruction (Katz & Chard, 1996). Phase two concludes as the children revisit their web once again. The children and teacher discuss the new knowledge about the topic and add it to their existing web.

In phase three of the Project Approach, debriefing, reviewing, and reflection culminates the project (Helm & Beneke, 2003). Phase three can begin when the teacher notices students having a diminished interest in the project. It is the time to review what has been learned, tell the story of the project and the events that took place, and determine ways to communicate what has been learned with others. A very common question to ask students in phase three is, "How will you share what you learned?" Children revisit the artifacts that have been created in phase two in order to share their learning experience. In this phase, the learning is made visible to children, teachers, parents, and administrators. Some possible forms of communicating what was learned in the project include an open house, a tour of an exhibit, video, book, or whatever the children and teacher dream of creating. This allows for children to reflect, discuss, and understand their own learning processes.

Teachers who have embraced this approach have been met with surprising findings with the children in the classroom. Dewey (1938) insisted learning is an active process and not a conduction of knowledge that is pre-packaged in nature. Learning is constructed through children's activities (Rinaldi, 2005). When children are able to learn through this framework, children transform as learners. The use of project work allows for students to be responsible for the creation of questions as well as the artifacts associated with the questions. This process of creation allows for the children to construct their own knowledge (Blumenfield et al., 1991). As the students are allowed to investigate and seek solving problems, they are able to learn principles and concepts in context.

Literature on the Project Approach in the classroom has yielded many benefits for student learning. Yuen (2009) conducted a study of the children in two classrooms through their first project. The teachers documented the phases and child progress throughout the project, as well

as their own. The project initially started with the teachers planning to study the human body, however interest seemed to focus in on feet and then shoes. The teachers were able to shift the project to shoes with great results. The teachers noted that the children were able to master both content and process through their investigation (Yuen, 2009). The children gained knowledge in real world skills such as problem solving, communication, and self-management. They noted that the children appeared to be intrinsically motivated and engaged in both formal and informal teaching with their peers. According to Ha and Yuen (2009), the teachers reported that when the learning was in the children's own hands, it created a valuable learning experience for both the children and the teachers.

Another study conducted by Dresden and Lee (2007) compared the use of teacher directed instruction and the Project Approach. A unit on animals was taught in two parts, the first was teacher directed focusing on farm animals and the second part was conducted using project work on a study of chicks. The findings indicate that the children immediately became more engaged with they began the project portion. The teachers took data regarding utterances and communication of the students will engage in the lessons. The data indicate that the students had much more to say when they were engrossed in project work.

Barron and Darling-Hammond state (2012) that there is a growing body of research that shows that students demonstrate deeper learning when they are able to use experiences that require engagement and collaboration to relate to real world problems. The use of active learning plays a pivotal role in student performance, more so than any other variable. The use of project-based learning creates student success because children are actually taught how to learn, rather than just being told what to learn (Barron & Darling-Hammond, 2012).

Teacher Learning

In this section I will focus on discussing the literature of teacher learning and the use of projects as a form of professional development. The primary themes emerging from the literature consist of the benefits to teachers using Project Approach, the challenges for teachers, and the skills needed for teachers to embark on this framework of learning. Although the research is somewhat limited, recent research shows that teachers benefit from the use of project-work within their classroom.

One predominant tenant is the idea that teachers are lifelong learners alongside the children in the classroom. Through the use of projects, teachers become the center of their own developmental process and take ownership of their own professional development (Bruner, 1996; Wesley & Buyesse, 2006). Teachers involved in project work are always in the process of observing, questioning, reflecting, interpreting, deciding, and acting which enhances the learning experience for teachers (Stremmel, 2012). When teachers are constantly rethinking and restructuring their lessons and what it means to teach in general, they are able to relate with the students in their classrooms. The practice of projects in the classrooms help teachers to recognize and interpret significant moments in the classroom which leads to a deeper focus of meaningful issues within the classroom context.

Teacher empowerment is a predominating benefit of project work for teachers. Henderson, et al., (2012) contend that projects posit teachers as researchers giving them a platform to validate, affirm and improve their overall practice. Inquiry gives teachers a voice and gives them pride in ownership of their professional work. There are many implications of benefits to teachers utilizing the Project Approach, however the research indicates there are an ample amount of challenges to implementing this approach.

The shift in culture encumbered in Project Approach lends itself to difficulties for many teachers. This shift in discourse and classroom culture can be difficult for some to adapt to. This can be increasingly difficult to achieve when we need to provide meaningful learning experiences with the current political climate of schools to perform based on rigid state standards and growing accountability (Dresden & Lee, 2007).

Blank (2012) states that "approaches to early childhood teacher education that understand teaching as ongoing learning and inquiry provide a framework for teachers to examine concrete issues in particular contexts in such a way that has immediate relevance and enhances the ways teachers make meaning of classroom life" (p. 402). Although there has been the predominating notion that a qualified teacher should hold a bachelor's degree (Spodek & Saracho, 2006), more must be involved in supporting teachers ongoing learning to alleviate some of the challenges in the continuing process of teacher learning. For many teachers it is difficult to enact projects because there is a lack of congruence of learning strategies and the current political climate of accountability (Geist & Baum, 2005).

There are many challenges noted in the research to enacting in project work in the early childhood classroom. Katz and Chard (2000) inform us there is not only one right way to implement project work into a curriculum or teaching style. Novice teachers and those unfamiliar to project work can be frightened by the ambiguity. Many teachers that lack support are frightened by the idea of projects because there is a perceived difficulty in using the approach (Dresden & Lee, 2007). Teachers can also feel the use of the Project Approach as a threat to their identity and beliefs as a teacher, causing many to resist change. This resistance to change can cause havoc on attempting Project Approach.

Time is another issue for teachers when using the Project Approach. The Project Approach requires a great deal of time for planning and reflection. Teachers must plan for what might occur in the project, and the possible directions a project could go (Katz & Chard, 2000). In addition, teachers must take time to reflect, collect and analyze documentation, as well as be ready to adjust when a project shifts. Teachers noted that one of the biggest issues in project work was the need for more time (Barron & Darling-Hammond, 2012; Beneke, 2000; Ha & Yuen, 2009). This need for additional time must be supported by the school administration to allow for the support to teachers. Suarez (2006) indicates the time needed for collaboration, critical thinking, and reflection necessary is crucial for both pre-service and in-service teachers. Teachers also need an ample amount of time to participate in ongoing professional development to support their learning (Toolin, 2004).

Teaching should not occur in isolation, as has been thought of in the past (Webser-Wright, 2009). The use of professional development in the process of the Project Approach aligns with the themes of the benefits of the Project Approach itself. The use of Project Approach lends itself to sharing experiences and artifacts with others within the school community (Katz & Chard, 2000). Teachers feel empowered with their role as a teacher educator through the collaboration with peers within a learning community. The use of projects as a tool for collaboration, reflection, and analysis can provide teachers with meaningful inquiry-based learning experiences. The literature below showcases the use of the Project Approach as a framework for professional learning.

Catapano (2005) conducted a case study of two teachers engaging in project work in a laboratory school. Each classroom contained 18 students. The teachers participated in an on-going outdoor learning project. The teachers journal their experiences, and shared these

experiences with the researcher. The teachers indicated they developed skills in many areas. Some of these skills include active listening, questioning, summarizing, and learning to restate what the children had to say about their own learning process. This promoted the teachers to gain a deeper understanding of how children learn. One teacher was truly amazed with the thought processes of the children during her gardening project, noting she had never attended to it before. She realized that if she gave the children the opportunity to solve problems, they could do so with limited coaching from her. Catapano (2005) noted that teachers felt increasingly empowered in their position as a teacher, and the opportunity to continue to learn through their experiences with their students. There are certain skills teachers must have in order to successfully engage in project work, and must be at the point in their own development that they seek to discover answers to their own questions. The teachers need a true understanding of child development, and have the capability to relate what they see from the children and use that to plan children in their classroom. Teachers must be at a place where they can understand what children are doing and why they are doing it. Teachers ready for project work are observers of children and use what they see to inform planning and practice as the overriding structure of their classrooms. Without these initial skills teachers are unable to view project work as an opportunity to expand on what they already know (Catpano, 2005).

In addition to a particular skill set for teachers, schools in general need to have certain practices in place to provide a location and culture for successful projects. Catapano (2005) discovered that the interest of the teacher in the Project Approach is paramount to the success of the project, lack of interest leads to merely teaching on the surface and lacking the reflection necessary. The discussion, planning, and evaluating what they have done in the classroom, and

sharing with colleagues participating in the same type of work enhances the experience of the projects themselves as well as teacher learning.

Ha and Yuen, (2009) responded to concerns from parents and teachers about children's learning in a case study. Six teachers participated in the study, only two having past experiences with project based learning. The teachers teamed up to discuss curriculum, learning activities, and the evaluation of the project during six group sessions. The findings indicate that through the project based learning teachers were especially impressed with student learning and became intrigued with the idea of learning more themselves as educators. They noted the activities led to increased interest and autonomy with the children and at the same time they found they were deeply interested in the process of the children's learning during the project. They felt a need to learn to ask better questions to the students and to hone in on communication skills. The teachers felt they were more motivated to learn along with their students. The teacher realized they had underestimated children's learning and were intrigued to learn more of what the children were actually capable of. The teachers in their study were excited with the Project Approach because they noticed the shift as facilitators versus being dispensers of conventional knowledge. The teachers found teaching to be more rewarding using the Project Approach and had no desire to go back to their old methods. The teachers involved in the study realized the opportunity to think and collaborate with others allowed them to feel like true professionals in the field of education (Ha et al., 2009).

Ha et al. (2009) found that the role of the teacher is very complex in Project Approach and the teacher must adopt the role of a listener, prompter, information giver, and knowledgeable of asking good questions. This complexity creates the need for support among staff and peers. Teachers indicated the most important factor of their success was the ability to collaborate with

other teachers and build trust among the teaching team. The teachers learned and felt valued as a result of the opportunity to meet, work, think, and solve problems as a team.

Beneke (2000) conducted a study with three preschools utilizing Project Approach. Each preschool served as a half-day program for young children. Three teachers from school one participated, and one teacher participated in the other two schools, making the total participants five. A multi-case study methodology was used. The teachers used documentation as sources of data, the researcher collected data from weekly meetings with the teachers as well over the course of the project. The findings indicate the teachers found benefit in using projects to enhance the quality of their teaching. They focused on how they thought about their lesson planning in a new way, the way they conducted assessments, and just the role of engaging in a new way of teaching. Beneke (2000) found that teachers spoke of improved program quality with the introduction on projects into the classroom. The teachers did note that time was a factor, and difficult to manage in a half day program. Teachers felt they would need additional supports to implement projects over time.

Vasconcelos (2007) conducted a study with a cohort of pre-service teachers in their final internship at the Libson School of Education. The case study looked at the collaboration between faculty, pre-service teachers, mentor teachers, and university supervisors in supporting project work in pre-service teachers final field experience. The researcher created a weekly class seminar focusing on the Project Approach, and gave the pre-service teachers the opportunity work in the field with the help of their mentor teachers to conduct a project themselves. The cooperating mentor teachers also were provided the opportunity to learn about project work. The cooperating teachers indicated that the pre-service teachers became more autonomous, took greater initiative, developed their own ideas, and took risks in the classroom. The pedagogical

act of the professional development experiences and the engagement in the classroom provided

teachers an understanding of the different teaching methods that are available. The use of

projects for pre-service teachers also sets the stage for them to understand that professional

development occurs in the context of the classroom and teaching involves lifelong learning

(Vasconcelos, 2007). Teachers come to understand that teaching should involve "learning

communities" and go on over time. The process of the professional development emerged in the

study as an opportunity to empower all of the participants (teachers as well as pre-service

teachers) through their participation, discourse, and the complexity involved in the projects.

Another study focused on the use of pre-service practicum as a source of professional

development for teachers and pre-service teachers alike. Moran (2007) conducted a study with

27 pre-service teachers. The teachers were divided into four teaching teams to work on a six-

week project in their practicum classrooms. The findings of the study indicate that pre-service

teachers formed an awareness of the importance of collaboration and working with other

teachers. The use of reflection-in-action and reflection-on-action (Schon, 1983) was useful in

the regulation of teaching behaviors. The teachers also realized the importance of documentation

in the learning process for both themselves as well as the children. The use of the Project

Approach and the professional development in combination allowed for the pre-service teachers

to see their initial failures as opportunities to learn and improve on ways to extend and provoke

children in their classrooms (Moran, 2007). Through the use of projects and collaborative

groups the pre-service teachers learned the need to think collaboratively and the importance of

ongoing inquiry in teaching.

The literature points to the possible benefits and challenges associated with the Project

Approach as a framework for professional development. There are implications from the

literature that the Project Approach as a form of professional development can be a viable source of inquiry-based teacher learning. A vital characteristic of successful project work is the use of artifacts or documentation to assess, analyze, and inform further classroom learning experiences for children.

The Role of Documentation

Documentation is a critical component of project work and teacher inquiry in the classroom. Katz and Chard, (1996) refer to documentation as, "typically including samples of a child's work at several stages of completion: photographs showing work in progress; comments written by the teacher or other adults working with children; transcriptions of children's discussions, comments, and explanations of intentions about the activity; and comments made by parents" (p. 2). Documentation provides a lens to see how children planned, carried out, and completed their work (Katz & Chard, 1996). Documentation of classroom learning is imperative in the process of inquiry (Abramson, 2008). Helm, Beneke, and Steinheimer (1998) believe that learning to document children's work is one of the very most important skills a teacher can develop in today's teaching climate. Documentation in essence is data sources from children, providing a lens into children's learning experiences (Castle, 2012). If teachers are able to understand the process of children's learning and are able to make it visible, they can greatly contribute to the child's overall development. Teachers who choose to take this stance as a teacher make a strong commitment to the process of inquiry, which can serve as a link to deeply understanding the children's learning and using it to develop meaningful curriculum (Lawson, 2000).

The impact on children through documentation can be very powerful. Malaguzzi (1993) indicates that through documentation children become more curious, interested, and confident as

they ponder and think about what they were able to create. The use of documenting or creating panels of children's work allows for children to revisit their projects allowing them to develop a new understanding that can be clarified and strengthened (Katz & Chard, 1996). The work of others stimulates children when they are able to view what other children are engaged in. Children themselves become the experts, seeking the advice of each other based on their work that is displayed. The use of documentation displayed throughout the classroom also indicates to children that their work is taken seriously; this in turn creates dispositions to approach their work with responsibility and care (Katz & Chard, 1996).

Making learning visible is a central tenant that is important to teachers, children, and parents. The use of documentation impacts everyone involved in the community by providing a means for improved communication and understanding of the overall importance of early childhood education (Abramson, 2012). Documentation can be viewed as a search for understanding, and the artifacts collected are data to which teachers and children can interpret (Lawson, 2000). A study conducted by Donovan and Sutter (2004) looked at the role documentation played within a group of classrooms within a school. The research used case study, with the school in collaboration with Project Zero being the case. Four classrooms of fourth and fifth graders, and their teachers participated. The findings indicate that documentation was useful to both children and teachers. Children reviewed the documentation and used it as a resource to reflect on their own as well as other students learning in the classroom. They found that the students asked more questions, and saw themselves as responsible for their own learning, and demonstrated the need to work together as a community of learners. Another result for children was the way in which students were able to evaluate their own work. Many students took the opportunity of looking at documentation, evaluating what

they created, and then worked to improve their work. The same study yielded many benefits for teachers as well.

Teachers found documentation as a pivotal aspect of their work in the classroom. The teachers used the documentation as a format for examining their own practice and then experimenting with their classroom practice as a result of their evaluations (Donovan & Suter, 2004). The teachers noted that documentation did not give them any specific answers; rather it often raised more questions amongst the teachers. Those questions caused ample discussion and led to a deeper understanding of both the children and their own learning. Another important finding that teachers noted was the way in which documentation brought about a culture of critique for both the students and the teachers.

Similarly, Goldhaber and Smith (1997) studied the role of documentation within their laboratory preschool, through three teachers. Each teacher served as a separate case within this multi-case study design. The teachers collected artifacts and documents throughout the course of their daily lives in their classrooms, and then shared their work with the other teachers in the school. The findings represent themes that are reverberated throughout the literature. Documentation played a powerful role in their overall professional development. The teachers felt that by documenting, they were observing with a purpose. "The expectation that observations will be shared in the public forum of documentation creates a compelling need to understand, in order to communicate their significance." (Goldhaber & Smith, 1997, p. 8). The documentation also promoted a climate of inquiry for the teachers. They felt they were building theories about children's theories by reflecting on their observations. The use of documentation and the forum to get together and talk about their work promoted collaboration. The teachers felt there was a shift in the mentality of the individual classroom door being shut off to the rest of the

world. Documentation also brought children, family, and schools closer together. The documents served as a forum to discuss children's work and promoted a sense of community.

In another study, Suarez (2006) found documentation to be a powerful tool for inquiry with pre-service graduate level teachers. The researcher transformed seminar time for the pre-service teachers as a time "co-construct" meaning in groups by following a protocol for looking at children's work. The study was a qualitative case study lasting the 16 weeks of the semester. Data included journals, focus groups, and audio recordings. The findings indicate the practice of collecting documentation and then talking about it led to a collective understanding and a culture of inquiry. The pre-service teachers described a link between their experience of making learning visible and children's learning. They felt the work involved in documentation and discussion played a role in extending children's learning experiences. The teachers found a value in the learning gained as a result of documenting and creating a culture of inquiry.

Utilizing documentation for development of pre-service teachers seems to be a growing trend. Kline (2008) studied teacher candidates in their upper level field experience. The pre-service teachers spend four hours a week in the class, and four hours a week on their field sites. The students were instructed and coached to observe and record critical moments of children's learning through the course of the semester. As a culminating project the students are to create a documentation panel demonstrating synthesis and analysis. The data in this case study consisted of the documentation panels created by the pre-service teachers, as well as field notes from the course. Kline (2008) concluded that observation and documentation are an integral part of the early childhood classroom. The role of observation and documentation provided a format for pre-service to connect with children individually. Through the process of observation, documentation, and analysis, the teacher gains meaningful insights into children's thinking

process and learning. The pre-service teachers' felt that documentation should be ongoing and supports teacher research, reflection, collaboration, and decision-making.

Although empirical research is limited, the literature suggests documentation should be a central aspect of early childhood education. The use of documentation brings to light children's learning in the classroom, as well as provides teachers with data to make informed decisions, and interpretations of children's learning. The use of documentation within the context of professional development allows for teachers to collaborate and reflect. This process allows for teachers to question and adapt their classroom practice.

Summary

The purpose of this study was to describe and explain teacher learning within school contexts by exploring the nature of teachers' experiences in learning communities. This study delved into the ways in which teachers participate in professional development sessions using the Project Approach as a framework for facilitating and engaging in inquiry. This study built upon the existing literature in the field. My conceptual framework began with professional development and narrowed to teacher learning communities. Under the scope of inquiry-based teacher learning lays several tenets of equal importance including: collaboration, communities of practice, reflection, and the Project Approach. All of these components are inter-related within the realm of professional development as inquiry-based teacher learning. There is limited empirical research available on teachers' experiences as they embark on this type of professional development especially within the context of early childhood education. This study will contribute to the literature need by describing and explaining how teachers engage in professional development that utilizes the Project Approach as a framework for teacher learning.

The use of a multi-case study design allowed me to gain a deep understanding of inquiry-based teacher learning within a preschool. In the following chapter I discuss my choice of using a multi-case study design and context of the study. I will discuss my pilot case study and the benefits of this experience towards my research. The chapter will explicitly state my data sources, data analysis, role as the researcher, and the responsibilities this role entails.

Chapter Three

Methods

The purpose of this study was to describe and explain teacher learning within school contexts by exploring the nature of teachers' experiences in learning communities. This study explored the ways in which teachers participate in professional development sessions using the Project Approach as a framework for facilitating and engaging in professional learning communities. The questions that guided my research included:

1. What is the nature of teachers' experiences in inquiry-based professional learning communities?

2. In what ways and under what conditions does documentation of classroom practice play a role in teacher learning?

Case Study

In order to address the questions and goal the study presented, qualitative multi-case study was an appropriate research strategy (Stake, 2006). The notion of describing and explaining rather than identifying cause and effect indicates a qualitative design (Stake, 2006). The primary purpose of case study is to describe and explain a phenomenon within a bounded system (Stake, 2006). The holistic nature of this approach allows for a rich portrayal of unique cases. Case study involves generating data in natural conditions; the data in this study will be generated during everyday happenings at a preschool. Multi-case study design allows for rich descriptive data and in-depth interpretive analysis of each individual case and a cross-case analysis that provides substantive, interpretive assertions (Stake, 2006). This study is situated

with the belief that teachers construct knowledge and meaning through social contexts.

Therefore it is important to begin with a single case analysis, and then look across cases.

Researcher Position

I have a vested interest in the partnership. In qualitative research the researcher serves as a vital instrument in the data collection process (Janesick, 2011; Stake, 2010). Therefore, it is important to understand who the researcher is and what has led to this interest of the topic. My extensive reading on professional development as well as my experiences as the preschool liaison for two years has led me to my beliefs on the importance of inquiry as stance for teachers as they undergo long-term professional development. I have been working as a member of the partnership team for over two years. I engaged in the supervision of pre-service teachers, leading seminars for pre-service teachers on the preschool grounds, weekly professional development sessions with the in-service teachers at the school, as well as participated in various partnership meetings.

I began my role at the campus preschool teachers as a "helper." I visited the preschool on a regular basis and provided assistance in the classroom. After a few months I began break out sessions with the teachers to work on a self-study for their NAEYC accreditation process. This provided a positive format for my role as facilitator rather than the "all knowing" provider of professional development. Over time we have formed a collegial relationship by everyone looking at their strengths and needed areas of improvements.

I have known and worked with the teachers who will participate in the study for a great deal of time. However, rather than attempting to distance myself as an "objective observer," I acknowledge that I engage with the participants as "active agents" rather than as "sources" (Paul, 2005, p. 63). I feel this will allow me to delve deeper into the nature of the teacher's experiences

because of the comfort level and mutual respect we have for one another. I realized early on as the liaison I was interested in studying the teachers' experiences of professional learning communities. Early on I began a reflective journal for my personal reflection as well as bracketing purposes. I have written on several occasions about the school and have engaged in journaling continuously throughout my experiences within the school. I will continue the journal throughout the course of the study to enrich the data and increase the rigor of the study. The use of journaling as a bracketing technique allows me to realize and acknowledge any preconceptions I have regarding the teachers (Tufford & Neuman, 2010). I have identified initial preconceptions and will continue to hone in the process of suspending judgments, regardless of what I find through my data analysis through the course of this study.

My understanding of the Project Approach has molded my opinions of the potential of this as a framework for professional development sessions. According to Stake (1995), the researcher takes on many roles in the process of case study making continuous decisions as to how much to emphasize each role. I too wore many hats in this particular case. My primary role in the case was to serve initially as a teacher, or teacher educator. Although all of the preschool teachers have differing levels of experience with the Project Approach, there has been little experience of using the approach as a framework for inquiry in their professional development. Therefore, a portion of my study required me to serve as a teacher initially. As the professional development sessions progressed, my role shifted to both an advocate as well as an evaluator (Stake, 1995). I supported and guided the teachers as they progressed with their projects and engaged in the process of inquiry. At the same time I evaluated the projects as they took shape and as data collection progressed. As I posed myself as an evaluator, I did not mean to imply that I evaluated their "performance" on reflection, inquiry, or engaging in the Project Approach

in their classrooms, rather, we worked jointly to discover what was working and not working in their classrooms as they worked through the phases of their projects.

Throughout the study I played the role of interpreter. Interpretation of the data required much time and consideration to generate overall themes and findings. The construction of knowledge also plays a large role in case study (Stake, 1995). According to Stake (1995), "the aim of research is not to discover #1, for that is impossible, but to construct a clearer reality of #2 and a more sophisticated reality #3, particularly ones that can withstand disciplined skepticism" (p.101). This resonates with me particularly as I did not seeking a specific answer within this multi-case study; rather I wanted to gain a deeper understanding of the teachers' experiences as they engaged in inquiry throughout professional development sessions and explored the Project Approach. The process of engaging in the case allowed me to interpret and construct my understanding of the case. I was an integral part in shaping the experience of the teachers and lived this experience with them. I served as researcher, facilitator, and peer as we pondered and questioned the Project Approach.

Pilot Study

In the spring of 2012 I conducted a pilot case study with one of the teachers at the Creative Beginnings Preschool. The purpose of the study was to describe and explain one teacher's perceptions of a university partnership school. The study took place over the course of a six-week period. The data sources included two interviews and field notes from the professional development sessions as well as interviews. The first interview took place at the beginning of the six weeks, and the second interview took place at the end of the six-week period. The interviews were semi structured lasting one hour each. The interviews were audio-recorded using iTalk on an iPad 2. The interviews were transcribed for analysis. The

transcriptions were then member checked with the participant in the study. The transcriptions were coded for emerging themes. Through the analysis process three themes emerged as critical. The key themes included; confusion, challenges, and potential. The findings indicate that the teacher felt the partnership was beneficial for the preschool and had the potential to create a powerful sense of inquiry within its culture. However, she also felt a great sense of confusion and challenges that come into play when refining a long-standing partnership with an updated vision and mission.

This pilot study provided me with the opportunity to interview, allowing me additional experience in audiotaping, transcribing, as well as coding data. I learned very quickly the importance of technique when audio recording for interviews, as well as the best ways to record and store data. The pilot provided me perspective on the amount of time, organization, and analysis that is needed to capture an individual's story for the purpose of research. Taking the time to prepare questions, truly listen during the interview, and take rich field notes takes careful consideration and expertise. The need to be methodical with organization is key to utilizing interview, as well as transcription as a data source. The pilot study honed my data collection and coding techniques. I was captivated by the stories the participant in my pilot study shared. I realized the responsibility of accurately depicting and interpreting the information shared. I gained an increased awareness and passion for case study as a result of my work on this pilot study.

Site

For the purpose of the study pseudonyms were used for the name of the school as well as all participants. The context of this study was a preschool affiliated with a College of Education at a large urban research university in the southeastern United States. The campus preschool sits

on a large property that is full of trees with a magnificent outdoor learning space on campus at the university. The preschool serves children of staff, professors, and students of the university. The school has a unique and diverse population due to the families it serves. The preschool has approximately 76 children 2-5 years of age. The preschool contains four classrooms serving two-five year olds. A lead teacher and a teaching assistant are assigned to each classroom, with the exception of the state-funded pre-K room which serves as a combined classroom for 4-5 year olds with two lead teachers and an assistant with 28 children in a large open space.

The campus preschool operates as part of an ongoing university partnership serving as a sight for pre-service teachers to complete internship experiences, as well as a site for university research. The partnership between the preschool and the university has been in progress for many years, however over the last few years the role of the partnership vision and mission has shifted. The relationship between the preschool, the college, and the university has evolved over time. At one time, for example, a faculty member from the Early Childhood Department served as the director of the preschool. The partnership now has multiple facets. The College of Education provides several services to the school. The primary assistance from the university includes providing a presence at the school to further the development of creating a site to demonstrate exemplary early childhood education practices.

Professional development is central to the partnership work. The college created a graduate assistantship in order to provide an opportunity for a doctoral student to work as a part-time as a lead teacher in the state-funded pre-K classroom reflecting the value placed upon school-based practitioner research. In addition, the partnership involved appointing a faculty member in the in the college of Education to serve in a liaison role of professor in residence, and providing a graduate assistant to serve as preschool liaison. I have been assigned to serve as the

graduate assistant liaison role for the last two plus years. The liaisons assist the director in areas

of need that are ever changing. Both liaisons provide professional development to both the

teaching assistants and lead teachers at the school. I have been engaged in the professional

development sessions with the preschool teachers over the past two years on a weekly basis. I

am an integral part of the partnership and have a vested interest in the partnership itself.

Over the years the goals and topics of professional development have evolved and

changed. NAEYC accreditation was an initial focus, resulting in the completion of teacher and

family surveys and the development of classroom portfolios for the self-study stage in the

accreditation process. In addition to gaining a greater understanding of the NAEYC guidelines

for DAP, a clear articulation of curriculum and assessment aligned with school vision/mission

was identified as a central need during the self-study process. This resulted in a focus on

curriculum in the preschool professional development, and the adoption and study of a criterion-

referenced performance assessment approach aligned with a revised vision/mission statement.

As the preschool evolved the needs of teacher's development has shifted and changed.

The ongoing changes in the school have led to differing paths for professional development

sessions. The preschool's vision/mission of developing teachers to exemplify developmentally

appropriate practice within an inquiry based curriculum has provided the over-arching guiding

philosophy of the professional development sessions. During the course of this study, the

preschool teachers will be learning and engaging in inquiry with children within their classrooms

based on the framework of the Project Approach defined by Helm & Katz, (2001).

Participants

The teachers at the campus preschool were the participants in the study. The teachers at

the preschool were diverse in both their education and in their experience and comfort level with

the Project Approach. Two of the teachers were in their first semester of doctoral coursework, one was working toward her master's degrees in early childhood, and two had bachelor's degrees. The other teachers working within the school have a minimum of their CDA certification. All of the teachers at the school have been employed for a minimum of two years at the preschool, with the exception of one new teacher being hired this year. The teachers all have more than three years of teaching experience.

Each teacher's experience engaging in professional development in the evolving school partnership context was viewed as a single case (Stake, 1995) in order to develop thick description of each teacher's experience and draw conclusions toward the overriding research questions. Out of the nine teachers at the preschool, three were selected as cases in order to deeply understand their teacher learning experiences. The three teachers were chosen based upon the following criteria: a) they were teachers in a 2-5 year old classroom at the preschool, b) they participated in ongoing professional development at the preschool, and c) they were willing to share their project work and documentation as part of this research. The teachers were meeting in small groups as teaching teams, divided into groups of three to five teachers at a time. For this reason, three teachers were selected based on their agreement to participate as well as teacher availability.

Professional Development Context

Each of the teachers participated in two-hour group professional development sessions that occurred weekly over a period of nine weeks. Professional development sessions were continuous throughout the school year at the preschool, provided by the appointed preschool liaison. During the study I was the facilitator of the professional development sessions. The nine weeks of professional development time for the study aligned with the same format used

throughout the rest of the school year with the exception of the focus on the Project Approach.

During the sessions teachers developed a class project using the Project Approach framework

developed by Helm et al. (2010). The time during the professional development sessions

focused on the planning and process of their projects. Teachers met every week to share

planning documentation from their classrooms, discuss individual classroom projects, and

consider next steps. The researcher served as a facilitator of the professional development

sessions. Table 1 provides details of each week's professional development sessions.

Table 1

Professional Development Sessions

	Aims	Resources	Researcher
1	Introduction of the Project Approach Teachers will leave the PD session with a basic understanding of the three phases of The Project Approach	Abramson S. (2008) Co-Inquiry: Documentation, Communication, Action Helm & Katz (2010). Young Investigators: The Project Approach in the Early Years. Personal Example of The Project Approach Power point slides of Katz Reggio slides	Introduction of the 3 phases of the Project Approach using Helm and Katz (2001) text. Handouts for each phase will be provided for each phase from the text Share slides and story of "The Weather Project" Share slides from Katz of projects conducted in Reggio Italy Ask teachers to read Abramson (2008) for the next week
2	Continued discussion of The Project Approach Teachers will leave the session with a clearer understanding of the three phases of PA Begin brainstorming classroom projects	Abramson S. (2008) Co-Inquiry: Documentation, Communication, Action Helm & Katz (2010). Young Investigators: The Project Approach in the Early Years. Project Slides	Lead discussion about Abramson (2008) article Lead discussion toward a deeper understanding of the three phases of PA Lead brainstorming session on possible classroom projects

Table 1 (continued)

3	Each teacher will leave the session with a decision of a classroom project Teachers will design a web of possibilities for their classroom projects Teachers will have an understanding in the role of documentation and project work	Helm & Katz (2010). Young Investigators: The Project Approach in the Early Years Helm, Beneke, & Steinheimer (1998). Windows on Learning: Documenting Young Children's Work Chard (1998). The Project Approach: Managing Successful Projects	Lead discussion on the role of documentation and the Project Approach Lead discussion of how we will go about collecting documentation for their projects Assist in the brainstorming and finalizing of project topics. Including discussion of possible issues with projects Assist teachers in creating a web for their projects
4	Teachers will leave session with a plan for conducting their classroom projects Teachers will have a plan in place for beginning phase 1	Past resources as needed for reference. Webs teachers created from past week	Facilitate discussion of each teacher sharing their classroom project Assist teachers in created a plan for implementing phase 1.
5	Teachers will have begun phase 1 before PD meeting. Teachers will formulate plans for next steps in phase 1, and begin planning for phase	Teacher webs created with the children from phase 1	Facilitate discussion of phase 1 in each classroom. Facilitate teachers' discussion triumphs and issues thus far in phase 1.
6	Teachers will begin phase 2	Teachers will bring documentation from phase 1 work, as well as beginning phase 2 documentation	Facilitate discussion of projects, and working toward phase 2 Will allow for teachers to take a more dominant role of the discussion, discussing issues with their projects, and formulating possible Solutions

Table 1 (continued)

7	Teachers will have begun phase 2 before PD meeting Begin planning for phase 3 culminating event	Documentation of children's work in phase	1. Facilitate discussion of interpretation and analysis of documentation 2. Teacher led discussion of classroom projects, issues, and solutions 3. Teacher discussion of appropriate phase 3 project for each classroom 4. Visit each classroom during "project time". Generate field notes and video for future reference.
8	Teachers will be ready to conclude projects with culminating event	Documentation of children working toward culminating project (dependent on each classroom)	Teacher led discussion of how the projects have taken shape Facilitate discussion of classroom projects, what would they do differently, or the same, what was learned through the role of documentation
9	1. Wrap up. Final thoughts	Teachers discussed their culminating event, and conclusions about projects	Allowed the teachers to share their experiences and thoughts on their individual projects

Data Sources

Audio recording. I took notes during the two-hour professional development meetings.

Because I participated in the conversations, I also audio recorded and transcribed each session.

The purpose of the recording was to investigate the teachers' talk during the sessions. The use of

audio recordings allowed for rich analysis of the conversations and reflections taking place

within the professional development sessions. These recordings provided a lens for the ways

that teachers engaged in the professional development sessions. This data source addressed both

my first research question dealing with the nature of the teachers' experiences in learning communities within the inquiry based professional development sessions.

In past research I have used audio recording as a data source along with transcription. I conducted audio recordings as a data source in a total of three studies. In the first study I recorded a preschool classroom for one hour a week for a total of six weeks. I learned a great deal about recording techniques through trial and error as part of this study. I realized quickly that it is difficult to record in large group settings with children. Some of the audio was inaudible and required follow up information from my field notes. The background noise made it difficult to pull out individual conversations forcing me to explore high quality recording devices. I experimented with different ways to record to yield the best results possible. In my following research projects I found the iPad application iTalk as a high quality tool for audio recording. I purchased a plug in microphone that can be inserted into the iPad to give increased sound quality. Using the iPad allows for all my recordings to be automatically uploaded to my iTunes account, and is saved in my iCloud. For recording within group settings it is imperative to have a high quality recording device with a microphone placed in the center of the group in a quiet room. While conducting the focus group or interview I have learned to keep copious field notes to fill in the context and general conversation topics to revisit following the interview or group session. Expanding on the field notes immediately after the sessions allows me to expand on details that I was unable to write at the time. I have found it beneficial to listen to the recordings on the way home from my interviews or group sessions as well before I begin the transcription process. Once listening to the recording I write in a researcher journal to assure that I have a rich description and understanding of the session that took place.

Documents and Documentation. Teacher-created documentation was collected to view and discuss during the professional development sessions in order to gain an in-depth understanding of the projects taking place in the classroom. The documentation included anecdotal records, children's work samples, and photographs. Clear and substantial documentation not only demonstrated child learning in the classroom, but for the purpose of this study it served to illicit teacher conversations regarding child learning and understanding of the Project Approach within the context of the classroom, as well as provide a lens of teacher learning through the use of documentation. These artifacts were used in the professional development sessions to facilitate discussion and happenings in the classroom. In addition, samples provided by the teachers will be collected for analysis. This data will be used to investigate my second research question pertaining to the role of documentation of classroom practice in teacher learning.

Interviews. The teachers were interviewed twice during the course of the study. Janesick (2011) defines interviewing as, "a meeting of two persons to exchange information and ideas through questions and responses, resulting in communication and joint construction of meaning about a particular topic." Semi-structured interviews lasted approximately 60 minutes. The use of semi-structured interviews permitted me to probe further for deeper understanding and depth (Janesick, 2011). Notes taken during interviews captured context, and the interviews were audio-recorded and transcribed. The first interview will take place at the beginning of the professional development sessions and a final interview will be conducted at the conclusion of their projects and professional development sessions involving Project Approach. The purpose of the interviews were not to uncover teacher beliefs but rather to gain an additional level of understanding of the teachers' experiences as they participated in professional development and

the process of the Project Approach in their individual classrooms. The interviews provided

important information for all research questions in the study.

       Researcher Journal. Throughout the course of the study a personal researcher journal

was used. The use of a researcher journal allowed for the process of gaining a deeper

understanding of myself, as well as the role of the researcher as an instrument in the research.

The use of a research journal embraces the idea of subjectivity within the realm of qualitative

research thereby creating an awareness of the self, the senses, and consciousness (Janesick,

2011). The act of writing daily while enmeshed in the process of research created the

opportunity of deep reflection leading to new questions in the research. The journal was written

in daily from the moment of approval from IRB, and carried out until after the conclusion of the

study. The researcher journal served to answer all of my research questions, as well as provided

a lens in the data analysis process.

Data Generation

Data Source	Total
Interviews	6
Professional Development Sessions	9
Work Samples	35
Daily Sheets	36
Researcher Journal	25

Figure 2. Data Generation

Data Analysis

I begin the discussion about data analysis by addressing the integrity of the data record. The data sources described above—transcriptions of audio-recordings of professional development sessions and descriptive field notes, interviews, researcher journal, and documents/documentation —were constructed into data records. The data was organized and contained on my computer as well as an external hard drive. A file folder was created for each teacher. All interview data was titled and dated and put into each teacher's file. The documentation the teachers collected and disseminated to me was scanned, dated, and added to their personal file. Another folder was created for professional development session audio files, as well as transcription. These were dated and collected over the course of the study. Field notes taken during the professional development sessions were also filed under the professional development folder. Data analysis was ongoing in the field in order to inform data generation. The case study reports and cross-case analysis were completed after fieldwork was completed.

According to Stake (2006), it is important to tease out themes of an individual case before making assertions across cases. Therefore, data records were analyzed initially to gain insight into each of the three case study teachers as individual cases. The data generated was coded in order to identify emerging patterns. Labels were created and listed as codes in the margins of data records. The codes were categorized across data sources in order to show that they are instances illustrative of a larger category. These themes were analyzed to gain a deeper understanding of the research questions posed (Stake, 1995).

Table 2

Data Collection Timeline

Week 1	● Initial interview with teachers	● 60 min each
	● PD session audio/ field notes	● 2 hours
Week 2	● PD session audio/ field notes	● 2 hours
Week 3	● PD session audio/ field notes	● 2 hours
Week 4	● PD session audio/ field notes	● 2 hours
	● Classroom documentation	
Week 5	● PD session audio/ field notes	● 2 hours
	● Classroom documentation	
Week 6	● PD session audio/ field notes	● 2 hours
	● Classroom documentation	
Week 7	● PD session audio/ field notes	● 2 hours
	● Classroom documentation	
Week 8	● PD session audio/ field notes	● 2 hours
	● Final teacher interviews	● 60 min each
	● Classroom documentation	
Week 9	● PD session audio/field notes	● 1 hour
	● Teacher group discussion	

The professional development sessions were analyzed a bit differently. In order to answer my research questions I looked at the transcriptions by time elapsed. I began with the first week of professional development sessions and moved through the transcriptions week by week. Each week I looked for themes of topics and discourse in the sessions, first for each individual case, and then across cases. I coded this data in the same fashion as my previous data looking for the ways in which the teachers engaged in professional development sessions as well as how they reflected.

I initially looked at each teacher individually, then across the group to generate findings. I began by compiling a data record for each individual teacher that consisted of transcribed interviews, the professional development session transcripts, documentation the teacher presented to me, daily sheets, and excerpts from my researcher journal. I read through each data

record multiple times. After I became familiar with the data record I began to read through the transcripts and writing my ideas in the margin using track changes (see appendix G). I then compiled a list of my ideas (see appendix H). After re-reading the data records and my list of ideas I categorized them into broad themes (see appendix I). I reviewed these categories and generated codes for each teacher, leading to themes for each case. Once I identified themes for each individual teacher I combined the data records and re-read them once again. I analyzed the combined data records and the individual themes to look across the cases. I then generated codes across cases, and developed themes across the cases. The data collected was then compared across the cases (teachers) to draw assertions. This involved looking for matching patterns rather then trying to find one "conclusion" (Janesick, 2011). Figure 3 demonstrates my analysis process.

Case Analysis

- Single Case Analysis
- Generative coding for each teacher
- Themes emerged for each teacher
- Generation of codes across cases
- Developed themes across cases
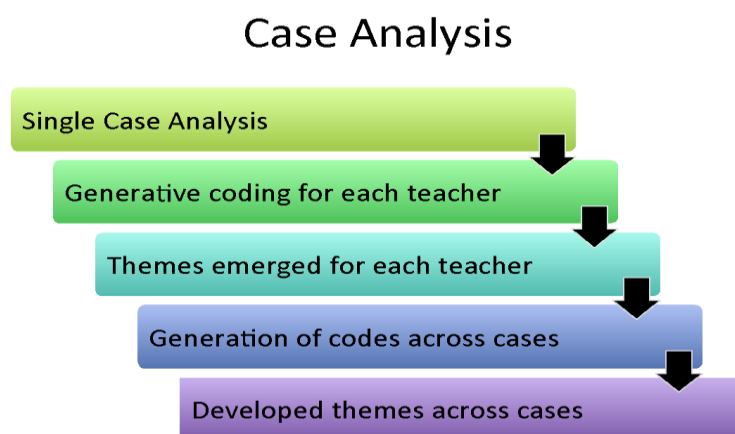
Figure 3. Case Analysis

Credibility

Qualitative research is often considered to be "subjective" in its very nature. However, the qualitative researcher sees subjectivity as a necessity to understanding, rather than as pure relativism (Stake, 1995). The nature of qualitative research requires tedious attention to

credibility. A variety of protocols were put in place to assure credibility within the study. I had an outside reviewer read my transcripts and my interpretations as a form of member checking and asked for feedback. The outside reviewer was a doctoral candidate in Early Childhood Education. She had extensive experience in professional development with early childhood teachers, the use of inquiry as a form of professional development, and has working knowledge of the Project Approach. Janesick (2011), states that it is imperative to have an outside peer to review the interpretations of the data. I also provided access to the teachers participating in the study to view all data collected and let them serve as a source for member checking. Once transcripts of the interviews were complete I asked the teachers to read the transcripts and shared my initial analysis, to assure my interpretation matches what they meant during the interviews. I also used the technique of crystallization. Crystallization time was allotted in order to step away from my data interpretations and to reflect on my thoughts of the data analysis process. I kept a researcher journal that was reflected on throughout the study, as well as part of the process of crystallization. Taking a step back while immersed in the data allows the researcher to identify and then articulate patterns in the data (Janesick, 2011). The use of member checking, and crystallization provided a lens for more authentic interpretation of the cases.

Ethical Responsibilities

As a qualitative researcher ethical responsibilities and considerations were taken very seriously. For this particular case study several protocols were in place to assure the safety of all participants and the children involved in the study. I have undergone the IRB ethics training and considerations for human subjects. The study received full IRB approval (Appendix C). All the names of sites and participants involved in the study were renamed for confidentiality purposes.

The names of all participants in the study were coded in data records to mask the identity of each teacher.

The nature of this study has minimal human subject risk involved. The children were not studied directly; however, documentation contained pictures of the children and their work. For this reason, all parents signed an informed consent form allowing for photographs, as well as the work of the children to be used only for the purposes of the study. Children's names were not used in any of the data records; pseudonyms were provided.

Teachers could be vulnerable through their endeavor with inquiry and the Project Approach. The use of the Project Approach might be uncomfortable for them or go against their beliefs regarding classroom teaching. The professional development sessions could have therefore made them feel the Project Approach is something they needed to align with in order to fit into the school culture. For this reason, informed consent was given to every child and teacher that could be involved in the case study. These procedures put in place to assure the limited risk to everyone agreeing to participate in the study.

In chapters 4, 5, and 6, I discuss the three individual teacher cases. The nature of each teacher's experience in the learning community during the professional development sessions are explored, as well as the role of documentation in their learning. I felt it was important to look closely at each teacher first to gain a deeper understanding of their experience in the professional learning community and the role of documentation in their learning before making assertions across cases. Therefore the single cases are followed by the cross-case analysis in that brings together the themes from each case in order to construct a rich understanding and description of the teachers' experiences in chapter 7.

In the following chapters, I describe three teachers' experiences as they participated in professional development sessions focused on engaging children in an in-depth project using the Project Approach as a framework. Stake (2010) informed my qualitative approach to the study. Stake (1995) defines case study as "The study of the particularity and complexity of a single case, coming to understand its activity within important circumstances." Through my interpretations of Stake, I found it important to look at each teacher as an individual case before expanding to my cross case analysis. Proceeding both analytically and interpretively, I focused on the particularities of each case and developed themes as a result of my full immersion in the transcripts, documents, and researcher journal in order to portray each distinct case before delving in to cross-case analysis (Stake, 2006). The in-depth descriptions of each distinctive teacher as a case served to deepen my understanding of the nature of teachers' experiences in professional learning communities and the ways documentation contributed to teacher learning. According to Stake (2006), "Qualitative understanding of cases requires experiencing the activity of the case as it occurs in its contexts and in its particular situation" (p. 2).

This multi case study was holistic, empirical, and interpretive in its approach. This research required both analysis and synthesis of the individual cases independently before exploring cross case themes (Stake, 2010). In chapters four, five, and six each teacher will be discussed as an individual case in order to analyze the parts of the experience. As detailed in chapter three, data collection included two semi-structured interviews (transcribed) using the river and channel approach with each participant (Rubin et al., 2012), nine professional development sessions that were audio-recorded with four selected for transcription, my researcher reflective journal, and classroom documentation samples. For each case I created a data record. I began my analysis by reading each document in the data record line by line,

multiple times for each teacher. Utilizing the track change feature I wrote down my thoughts after each line in the margin (see appendix G). I then created a list of the ideas I gathered from each line (see appendix H). After reading the data record again I generated micro themes, I then placed these into categories (see appendix I). I then re-read the documents and condensed the micro themes into categories to generate concrete themes for each case. In chapter seven, themes across cases will be discussed in order to synthesize. Stake (2010) contends that research requires that the parts must be first taken apart and then put back together in order for analysis and synthesis to occur. Therefore, it is important to look at each teacher's experiences in the professional development sessions individually before making assertions across the teachers.

Chapter Four

Members Only: Natasha

According to Natasha's colleagues at the preschool, she "literally came in off the streets." She walked in the preschool on a whim after a friend suggested she work with children. She had tried a few different career paths, but her heart was not in it. She was essentially hired on the spot as an assistant teacher in the two-year-old room. She immediately pursued her Child Development Associate and attended as many outside/ in house professional development sessions as possible. Although all the trainings were helpful, she acknowledges that Amber, the lead teacher in her classroom, was critical in her development as a teacher. Amber took the time to share her understanding of the cognitive skills of young children, the different domains of development, and teaching techniques. Amber provided day-to-day guidance, and Natasha identified her as a strong influence on her practice. When Amber took maternity leave and then decided to remain home with her children, temporary teachers were assigned to the classroom while the preschool searched to fill the position permanently. Natasha was not eligible to apply for the position because she did not hold a bachelor's degree and state licensure in Early Childhood Education. Natasha is eager to go back to school and finish her bachelor's degree in an Early Childhood Education teacher certification program, but financial issues currently serve as a barrier.

When the teachers were presented with the opportunity to participate in this study, Natasha was one of the first ones to express interest. She immediately asked if she was qualified to participate because she did not have her bachelor's degree. Natasha was very excited to be a

part of the professional development sessions because previously as a teaching assistant she was not always included. Although there were several occasions where the assistant teachers participated in professional development experiences at the school, assistant teachers were often expected to supervise children while lead teachers attend professional development sessions. Both teachers could not leave the classroom at the same time. This is often an issue in many early childhood school contexts.

Natasha chose to do a project on trucks with the two-year olds in her classroom. She had difficulty making this decision. This was her first "real" project, and she wanted it to go well. She debated a great deal of what would be the best project for the two's. She was unsure of how the Project Approach framework would play out in the two year old room. She finally decided on trucks because there were predominately boys in the classroom, and she noticed they often gravitated toward the trucks in the classroom. The questions for her investigation included: What are some different kinds of trucks, and What are the parts of a truck? In phase one, Natasha placed some different kinds of trucks in various centers throughout the room, she placed books in the literacy center on trucks, and she webbed with the children to gain an understanding of children's current knowledge on trucks. For phase two, the investigation, the children researched trucks using books, parts of trucks, different types of trucks and iPads. The children had a field expert visit the school where they were able to look at a "monster truck" to gain a better understanding of the parts of the trucks. The children did observational drawings of the truck itself and different parts of the truck during the field visit, as well as later on with different truck parts in the classroom. The children used wheels and other parts to paint and explore the texture of truck parts. The children also created their own truck out of boxes and recycled parts. This truck was later used in the dramatic play area for the children to explore the truck and play

with different themes surrounding the truck. For phase three, the culminating event, the children participated in a multi-class showcase where they were able to display and discuss their work with the other classrooms in the school.

I use the metaphor "Members Only" to describe Natasha. This metaphor represents her desire to belong to the group, and the constant underlying thought that she was not really a member of the club. The themes discussed below embody this idea of membership and affirmation.

Belonging

Natasha slowly walks up the stairs and quietly sits in the corner of the room where teachers are gathering for a professional development session. She looks downward and keeps to herself, only interacting with her friend/colleague Sarah briefly. She fidgets with the sleeves of her sweater, trying to cover the tattoo on her forearm. Once she notices the other teachers pull out their laptops and notebooks, she quickly asks to borrow some materials, immediately apologizing for not being prepared. "I am so sorry, I didn't know what we were supposed to bring," she states glancing down. She makes an offhand comment that she is excited to be with the group, but not sure she belongs. No one in the group reacts or responds to the comment.

As the meeting begins Natasha's eyes gaze directly at me as I speak about the upcoming weeks of our professional development sessions, and the Project Approach. Natasha is quiet for most of the first meeting, rarely even commenting. The times she does chime into the conversation it is to agree with another teacher, or to ask a question. At the conclusion of the meeting, she stays in her seat as the other teachers go back to their classroom. "I am new at this, and I don't know much about the Project Approach especially with two year olds. Are there any additional things I can read about it?" She asks. I am thrilled by her enthusiasm. She

smiles wide at my expression. I inform her that I will send her some additional material about the Project Approach specifically geared toward toddlers. She quickly gathers her purse and heads back down to her classroom.

When Amber, the lead teacher, left her position, Natasha described her role as "interim lead" of the two-year-old classroom until the director found a replacement. She knew the school, the classroom, and the children, and this situation provided her with the opportunity to essentially serve as a lead teacher. Natasha stated, "Oh yeah, it is a major shift to go to lead teacher! A lot more responsibilities and I was able to handle them, well I think at least, well enough to keep a successful classroom going." She smiled widely as she shared this. According to the preschool director, Natasha thrived during this time and the children and their parents felt a strong connection with her. It seems with Natasha when the expectations were raised of her by becoming the lead in the classroom, she took her role more seriously and rose to the occasion. She embraced it.

When a lead teacher was hired for the remainder of the year, I asked Natasha about the shift from going from being the lead back to the assistant. She explained, "It was hard to switch it off I guess. For me it was a little hard. I feel like we started the classroom as MY classroom, and now I have to step aside. Plus she is timid, so I don't know when to step in, yet I feel I have to because the children are going wild." She shared how she watched and waited for the new teacher to take charge and, she tried to step aside. She says, "I finally just took the lead. So when she didn't step up to it, I could see the behaviors of the kids weren't great, so then I would have to step back into that role and I tried not to cross any lines or boundaries or whatnot, but, on the other hand I tried to keep it together, you know, it was difficult. But I think we were building

a relationship so that we could even support each other rather than take a particular title, that was our main focus, to keep the children safe and engage them in learning."

Natasha's thoughts reflected a larger value placed upon instilling a sense of co-teaching and collaboration between teaching teams, rather than a hierarchical system, that was articulated as part of the vision of the campus preschool. Natasha noted the differences regarding her role, "I think we're encouraged more to ask questions with each other and have more of a dialogue than before, because before it kind of was just like when I shut my door, it's me and the teacher and that's it. You know, and there was a definite, like you … this is how I felt. I suppose as much as Amber had given me the support and whatnot, there was a definite feeling of 'I am the lead teacher. These are my duties. You are the assistant, these are your duties,' and so when we closed the door, it was just that, and I feel like now the door is open and the lines are a lot more blurred."

Natasha's ever-changing role in the classroom was a constant source of frustration and confusion for her. She wasn't sure where she fit at all. Throughout the study, Natasha referenced the fact that she is not as educated as her colleagues and doubts herself because of this. She doesn't know specifically what her role is as an educator within the professional community. She sees herself as inferior to the other teachers as a result of the ever-changing dynamics of her role. Natasha mentioned several times that she was "lucky to even be a part of the professional development sessions" because she is not a lead teacher with a Bachelor's degree.

Despite Natasha's enthusiasm about the opportunity to share ideas and plan with colleagues, she seemed unsure how to proceed with some things and then frustrated because nothing was getting accomplished. During one professional development session, I asked

Natasha how her project was going, and she let out a deep sigh. She shook her head and looked down at the paper in front of her. She complained, "I don't know. I guess I am really struggling here. The parents aren't helping at all. None of them brought in the materials I had asked for. I can't go and buy all the things I need, and they just don't seem to care." Sarah said, "Well I know sometimes it is hard with parents. I find it helpful to meet them at the door and tell them what we are doing. It works better than just sending a note. Sometimes the parents don't read the notes or the daily sheets carefully." Natasha seemed to agree with Sarah and says she will try that this afternoon and see if the parents respond. I then ask Natasha how her hunt for a field expert is going, and she lets out another long sigh. "To be honest, it is not going well. I don't know whom to call. I thought about Physical Plant, or the fire department." Kristin jumped in, "Oh the fire department won't work, you have to book them more than a month in advance." Natasha looked somewhat deflated and says, "Oh boy, I didn't know that. Well that is out! I guess I do have a friend that has a tow truck I could call," she mused almost to herself. I am kind of embarrassed to call him and just randomly ask him to come here and show the kids his truck, but I guess I could."

Despite the frustrations, the professional development sessions seemed to provide a safe forum for Natasha to share issues she was having. In our final interview Natasha noted, "There were some really hard times doing the project, especially with the two year olds. I would see the other classes' projects and I felt mine wasn't going as well. But when I told everyone, they seemed to have many complaints too." She stated, "I am so glad that we get to talk about our classrooms! I thought I was the only one going through these issues. It is so nice that I know I am not. I feel like we are all in this together, good and bad! I feel better about my teaching after talking with everyone in this group!"

The professional development sessions also appeared to stipulate accountability for the teachers. The teachers realized they would be talking about their classrooms from the previous week, and the other members of the professional development session were aware of the ideas proposed to occur in the classroom. This was especially true for Natasha. Natasha's primary form of documentation prior to the study consisted of online daily sheets sent to the parents. She was unfamiliar with gathering documentation for her own reflection and learning, as well as sharing with others what was taking place in the classroom. The need to bring children's work samples and artifacts created built in accountability for Natasha. She explains, "This was a little different for me. I had to decide what I needed to bring to our meetings each week. It made me think about what I wanted to highlight or focus on for discussion with the other teachers. I also made sure that I did what I said I was going to do in the meetings, because I knew someone would ask how something went."

The supportiveness of the group was evident from the beginning of the professional development sessions for the study. Since the teachers had been meeting with each other previously for other types of professional development there was an immediate sense of camaraderie. The teachers spent time each week cheering each other on in the classroom. Initially, Natasha was the receiver of the cheering. After the 3rd professional development session I wrote in my researcher journal (4/17/13):

> The teachers are all very supportive of each other. When one has an issue they
>
> immediately pump the other up with positive comments or suggestions. Natasha seems
>
> to need this right now. Perhaps she was receiving limited support since she has been
>
> serving as lead teacher. She shows insecurity in her conversations, even though she is

eager to participate. The supportive nature seems to build confidence each week, as well as providing support for Natasha to try new things in the classroom.

In our initial interview Natasha made a comment that struck me. She said, "I know a lot of the teachers and the assistants don't really like doing the professional development sessions, they think it is a waste of time. But I think that is crazy! I want to know as much as I can, I want to learn techniques to help me in the classroom. I don't know, maybe I appreciate it more because I was never included in them before with the other director. I know that I don't have to be included in this." She went on to explain how much she learned and enjoyed doing the book study about literacy with young children and this project. She explains, "I look at my children's drawings and lines on the paper differently now. I know that they are engaging in pre-writing, and that they need to do this. It is important to their development."

In my researcher journal I note (3/20/13):

> Natasha finds value in being able to participate professional development. It
> seems that when she is not invited to participate in professional development she
> feels a sense of inferiority and that she doesn't belong to the school culture. The
> lead teachers are required to attend all professional development sessions so may
> not have the same appreciation for the learning communities because they are
> always asked to participate. Natasha being an assistant teacher seems to give her
> a sense of someone from the outside wanting to be in the professional learning
> community group. When she is asked to participate she takes the information
> very seriously. It is apparent she takes her role of teacher seriously and wants to
> continue to learn and grow. She takes what she learns in the professional

development sessions and tries to incorporate different ideas within her

classroom.

At the end of the school year, there was another change in Natasha's classroom. She

knew another teacher was going to be transferred into her classroom and she described her

frustration that her role in the team was uncertain yet again. She was concerned she would no

longer be able to attend professional development sessions. She shared with me in our final

interview, "I feel like I have learned so much from this experience and I really want to try it

again. I doubt that I will have the ability to do that soon. I know that I will once again be

changing diapers and wiping tables, and I know I have more to offer then that."

I noted in my researcher journal (5/30/13):

Natasha is very upset that she is unable to fulfill the lead teacher role because she is

unable to get her degree because of financial issues. She makes it clear she feels inferior

and not fully a part of the "lead teacher club," even though one of her closest friends is a

teacher at the school. Natasha tries really hard. She wants to be an expert and takes her

job seriously. Her situation makes me question what is the definition of a high quality

teacher? Is it someone with a certain degree? Is it someone who is eager to continue

learning and wants to be the best educator they can be? Where is the necessary balance

between education, and experience? There is a significant unspoken hierarchy within the

school, although the school strives for a "co-teaching" approach. It makes me think

about when Natasha was telling me in her first interview that she wasn't included in some

of the professional learning opportunities in the past, I think this is why being a part of

the team was so important.

For Natasha, the professional learning community signified acceptance and belonging. It was important to her to be included in the group and seen as a professional. In the group she displayed a sense of inferiority, making the "power" of the group visible. She wanted to be seen as a member of the group, a part of the team. As the weeks went on in the professional learning community, Natasha seemed to see herself as an equal and part of the team.

Developing a Voice

A few weeks have passed; it is now week 3 of the professional development sessions. Today we are going to web our proposed project topics. The teachers will work individually and then provide feedback to each other to decide if the topic is appropriate and worthwhile for their classrooms. Natasha is again the first teacher to the meeting. This time she is prepared with her notebook and a pen. As the session begins, Sarah and Kristin chat about the children at the school and Natasha chimes in jokingly. Once the meeting is called to order, Natasha quietly sits alert and ready to soak in the information. She is writing copious notes as I speak. I ask each teacher if they have decided on a topic. Kristin immediately states that she is sticking with her idea from the first week. Sarah a bit more hesitant shares that she will be doing a softball field project. Everyone then looks to Natasha for a response. Natasha nervously fidgets then says, "Well I am not really sure what I should do. I have a lot of boys in the class and they love trucks. So I think I should do trucks. But then I saw in the article you sent me with the kids doing the project on the balls. I thought that looked cool too. I just really don't know what to do. What do you all think?" The teachers discuss this for a bit, pondering both topics. After some time I suggest she web about trucks and see what she thinks once that is complete. She likes the idea and we continue.

After we discuss the webbing process, I hand each teacher a piece of chart paper and ask them to web everything they know about the topic. Each teacher goes to a corner in the loft and sticks their paper to the wall and starts writing frantically with their markers. Natasha messes with the paper, not sure where to stick it, or what exactly to do. She looks over her shoulder to the left peering to see what Kristin is doing on her paper. She then cranes her neck to the right to see how Sarah is progressing. She turns back to her chart paper and stares blankly at it. Hesitantly, she turns to me and says, "I am not sure what I am supposed to do! Am I supposed to make a list? Do I just write things all over the paper? Sorry guys, I have never done this before." I tell her again about the webbing process and she looks back and forth at the other teacher's webs. She turns back to her paper and slowly starts writing down words about trucks.

After 10 minutes the group reconvenes. I ask the teachers who would like to share their web first. Surprisingly, Natasha eagerly volunteers to go first. She stands up by her chart paper and starts going through what she came up with. I then ask the teachers to brainstorm other things Natasha might have missed. All of us in the group begin firing off different ideas, and a few times the conversation goes in a tangent with activity ideas involving the children regarding trucks. Natasha is visibly excited with all the ideas she is getting and writing quickly on the web all of the different possible tenants of a truck project. She shrugs and laughs, "I can't believe I didn't think of all this when I was webbing on my own!"

During the professional development sessions, Natasha watched others, listened, hesitated ("I'm new at this guys"), and sought validation ("Am I doing this right?"). She noted, "I mean, everybody has a lot more experience than I do, so I just think that's great to kind of even listen to people, you know, talk about their experiences in the classroom because they might be going through or have gone through something that I'm experiencing now." Likewise

during interviews Natasha was very concerned that she might "answer a question wrong." There were several times after she responded to a question she would ask me "Is that what you wanted? Did I answer that right?" Many times she was making a statement but her intonation made her statement sound as if she was asking a question. After we had finished both sessions and the recorder was off she fretted that she hope she did that right for me, did she answer things correctly, did I have the information I needed.

Natasha hardly spoke for the first few professional development sessions, as the sessions went along her voice became stronger within the group and she was more open about sharing events occurring within her classroom. When she contributed, it was usually to clarify information or to ask a question. Several times she would ask a question and then answer herself. When sharing a concept web she completed with children, she commented, "Well this is how I had them do it, but I really had to ask them questions to get them to say anything. They don't talk much so I found it difficult to get them to web. Did I do that right by asking questions? Yes. I think I did, that is what we talked about doing."

Natasha began contributing suggestions to the other teachers about trying different things. She shared things in her classroom that had worked and other experiences that didn't work. This has transferred beyond the scope of the professional development sessions. Natasha shared in her final interview (8/26/14), "Now when I see Kristin or Sarah on break or out of the classroom we talk about teaching more. I ask her about how an activity turned out, or what happened when you tried this…? I couldn't do that before because I never knew what was happening in their classrooms." Through the professional development sessions and sharing classroom experiences Natasha appeared more confident and eluded to a sense of belonging and community.

While describing a field experience with the children to the other teachers, Natasha shared the photo below (see Figure 1) and showed confidence in her explorations with the children in her class. This particular photo was powerful for Natasha. She was amazed at the amount of focus of the child in the picture, and wanted to show the others in the group evidence of how involved the children were during the field expert visit. It appeared that Natasha wanted her peers to see the intent and focus the children displayed during the field experience.

Figure 4. Child Focus

"I had the kids bring out paper and pencil when we explored the truck. She was drawing the truck tire. She made a really nice circle that was a good representation of the truck tire. I was really surprised by how long she was engaged, so I took a picture of it to capture the moment. We also measured the children compared to the size of the tire. I am really surprised how well the field experience went. I am proud of it!" This "voice" was significantly different than Natasha during initial sessions. She would have questioned if she did the field experience properly, or asked for validation.

I asked her about her "voice" in our final interview (8/26/14) and she responded, "It was really great getting the chance to talk to everyone on a weekly basis. I felt better to know they had problems and questions too and that is ok. I didn't mind sharing my classroom as much or things that didn't go well once I knew that none of us were perfect, that we were all just trying to

do the best that we can. Once I realized that, I stopped questioning myself as much and spoke up. I realized, Hey! I have something to offer too!"

In her final interview (8/26/13) she shared that by talking about what was going on in her classroom with other teachers, it made her think more about her teaching. "I loved hearing all the ideas from all the teachers. It was so great to see what the other teachers did in their classroom. I would sit and think, oh wow I can do that with my kids. How could I make that work in my classroom and with the topic we are working on?" Natasha thought that by seeing what the 3 year olds were doing it made her role as a two-year-old teacher clearer. "By sharing with the 3 year old teachers, I know where my kids are going. I now understand what I need to do to prepare them, and to get them there!"

In our final interview Natasha states, "I really want to try another project. I learned a lot from this one. I know I picked a topic that was too broad. I should have picked a topic that was simple and here all the time. Trucks were not available to the children and there are too many different types of trucks. Or I should have just picked one type of truck. I struggled with finding an expert and keeping the kids in contact with trucks daily (Interview 8/26/13)." Although she was frustrated with her project topic choice, Natasha was eager to try another project. She said, "The Project Approach was not easy. It was definitely a challenge, but I liked it! I know my project wasn't the best, but I could see a change in my kids. I got them to engage more. I saw they were more capable than I thought with my help. It also made me think differently as a teacher." When discussing trying a new project in the final interview she says, "I really wish I could do the butterfly project with my kids. That ended up being so great. I think my kids would really like it. Plus with the butterfly garden in the back, the kids can be around it every day! Kristin had so many great activities for the children to learn and explore. That will

definitely be my next project." Natasha noted that she believed she couldn't do it without additional support, and she needed the professional development sessions to keep her motivated and learning about projects, especially gathering ideas from other teachers.

I noted in my journal (5/3/13):

> Natasha's participation and role in the group appears to have shifted in the last few weeks. Initially she was the receiver of the cheering from the other teachers, now I see her providing support to her peers. She is encouraging the other teachers and giving them her own suggestions with more confidence. Thinking deeply about teaching and asking questions. She is really involved in the sessions and helping the other teachers. In the past, Natasha has acted very unsure of herself. She was constantly worried if she was "doing it right" as if to say her view on teaching was technical rather. This shifted to a more inquiry stance toward teaching. She questions her teaching and practice almost every session. I can tell by her interactions with her peers that she is starting to feel part of the community and like she belongs. She is now beginning to really give her opinions and share what she thinks, and gives ideas. It seems that since she has heard about the other classrooms successes, failures, and behavior issues she feels more comfortable in being vulnerable with her sharing as well. Maybe Natasha is realizing that it is all right to try things, even if it means failure.

Focusing the Lens

Natasha sits down for her fourth professional development session. She has a few items with her to share with the group. When asked who would like to go first she sits quietly and then looks away, as if to say… please do not pick me! Another teacher volunteers to go first. She

listens quietly to what the other teacher is saying. Occasionally she gives a response to the other

teacher about how great her classes work is, that her students work is nothing like that. Her

time to share comes, and she slowly takes out the photographs and daily sheets to place on the

table. She tentatively describes what she has to share. "Well, this is the web that I did with the

class [see Figure 5]. You can see that they really didn't know what to do. I wasn't sure what to

do. I don't know how to get them to ask questions! I tried really hard. I don't know, maybe it is

because they are 2. Maybe I did something wrong." She asked the teachers, "How do I get

them to talk? I really don't know what they know or don't know, and what they want to learn."

Sarah jumps in immediately and says, "I talk to my kids while they are engaged in something at

the table." Kristin says, "I listen to what the children are saying to each other while they are

playing. I make notes of their conversations." They explained that they revisited the web a few

times that week with the students in order for the children to understand the purpose of the web.

Natasha seems somewhat relieved and renewed by the other teacher's feedback.
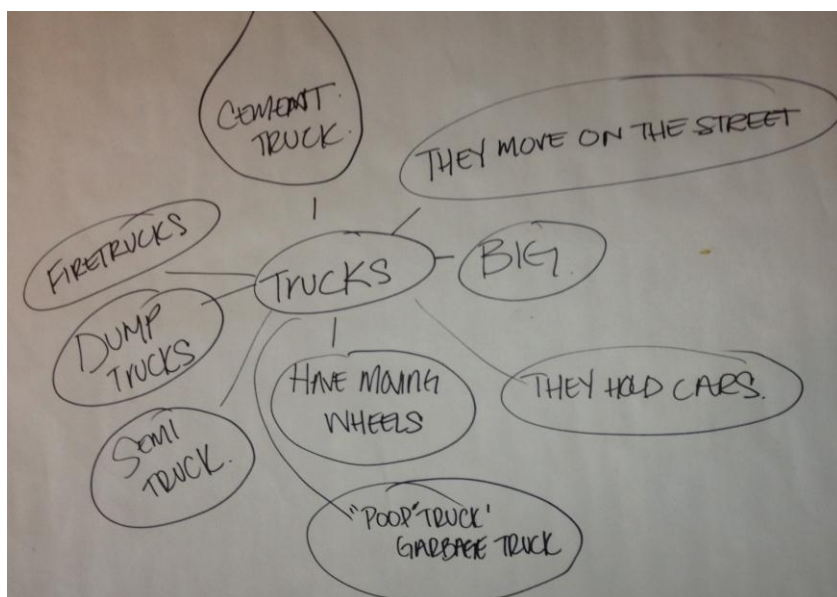
Figure 5. Natasha's Initial Class Web

Natasha proceeds to show samples of the children's first exposure to observational drawings. She provides a photograph of a child's drawing (see Figure 3). She explains that the child is attempting to draw the tire that she had on display for the kids. "Well it is just a circle, I know it isn't much of a tire. This is all I could really get. They seem to do it for one second and then just keep going with their drawing and it turns into something else. I am not sure what I am supposed to do to get them to stop with the observation part. Or if I need to stop them at all." One of the teachers immediately notes what appears to be some type of lettering and numbering along the inside of the circle presented on the piece of paper. "What is that?" she asks. Natasha perks up slightly and says, "Oh, he was trying to write that code or whatever it is along the inside of the tire by the trim." The other teacher responds, "Wow! That is pretty good for him to pick up on that, that is a lot of detail!" Natasha pauses for a second and thinks about what Kristin has said. "I guess I didn't think about it that way, I guess you are right. This is pretty good work for a two year old."
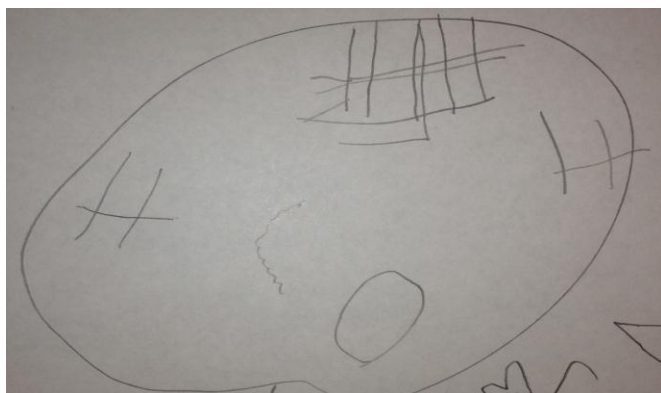
Figure 6. Child's Tire Representation

When Natasha shares documentation in sessions she somewhat downplays what the children are doing in her classroom; however, conversations around the documentation provided the opportunity to listen to others provide alternative interpretations of the work.

The teachers discussed a painting created by a child (Figure 7), and Natasha's impression of the learning experience shifts.

Figure 7. Painting With Tires

Natasha says, "Well here is what Evan did in art today, we did tire track paining. I know it looks pretty simple, but the kids really enjoyed it." Sarah jumps in, "I think this is really cool! This is a really big paper. I can tell from the dark part he went over it a few times." Natasha looks again and says, "Yeah you know what, he did spend a long time on this. He was really into the way the colors mixed and kept going over it to see how it changed. He played around with the pattern. Now that I think about it, he sat there way longer then he normally does!" Looking closely at the documentation with others resulted in a re-consideration of the nature and quality of the young children's work. Natasha began to develop more complex interpretations of the children's engagement in the learning activities.

While teachers were implementing projects in their classrooms the teachers brought documentation of classroom work to discuss, and the professional development sessions always included problems they wanted to brainstorm solutions about. Sometimes it was in the form of venting, more often it was a way of batting around different suggestions to solve a particular problem. At the beginning of the project, Natasha spoke about how difficult it was to find out what the children wanted to really know about trucks with their limited verbal skills. When she

attempted to web with the children, their input was limited. After talking with the other teachers about it, she returned to the classroom and tried some of the strategies they suggested. She reported that as a result she was more successful in eliciting information from the children about trucks and what they were curious about.

In another instance Natasha questioned getting "good" work from the children to collect for documentation, again exemplifying her concerns of "doing things right". In particular she was concerned about her two year olds' observational drawings. Natasha shared the photo in Figure 8 and it sparked the following conversation.

Figure 8. Child's First Observational Drawing

> Natasha: Well I know this is not much to look at! It started off very good. He was
>
> drawing circles to represent tires. Then he just kept going and it turned into a sun
>
> and then a dinosaur!
>
> Sarah: I have the same issues with my kids! They make a great picture, then I walk away
>
> for two seconds and when I come back they have scribbled over the whole thing!
>
> They start off on task and then all of a sudden it becomes something else! It is so
>
> frustrating.

Natasha: It really is. Then I have to bring a dinosaur up here now, instead of the tires

that was originally drawn.

Sarah: Well here is what I do now. I stay very close to them and as soon as they seem to

start in another direction I ask if I can have that picture and ask them if they

would like to draw something new on a new sheet of paper. That works for me!

That way I have something to show the parents in the daily sheets.

In the seventh and eighth professional development sessions, it becomes increasingly obvious that Kristin's project is turning out to be quite exceptional. She brings documentation of the project work that impresses her colleagues. Natasha says, "Let me go first today. I do not want to go after Kristin. My kids can't do any of that stuff and I don't really have anything special to show. I can't even get my kids to really ask a question about trucks, I have to model it for them." The fact that her children are younger seems to discourage her, because she is not getting the "product" the other classes are. The other teachers and I would point out things that her children did well or to show that her kids were capable of more than she initially thought. The other teachers tried to give examples for her to try to elicit more inquiry by the children.

While looking at the photograph, Figure 9 below Natasha shares her classroom experience as they created a truck for dramatic play.

Figure 9. Three Dimensional Fire Truck

"This really took a long time! It was hard to keep their attention and they wanted to put on parts that didn't belong. I kept asking them what should be where and trying to have them reference

books on it." Kristin says, "Well what did they want to add? Natasha responds, "They wanted to put a ton of wheels on." Sarah says, "Is that a siren they put on top of the truck? That is very good! Natasha answers, "Yes, That was their idea. They insisted painting it black because it was off." The teachers also discussed this drawing (Figure 10).

Figure 10. Tire Observational Drawing

Natasha: As you can see, there are a lot of circles! This is what I am getting.

Sarah: She really likes drawing the tires, you can tell she is focusing on that.

Kristin: There is a lot of detail. The circles are pretty small. That shows her fine motor skills!

Natasha: That's funny, when I looked at it I thought… great, circles!

Kristin: No I know her, she must be really interested. She usually draws one line and walks away.

Sarah: That really is a good first observational drawing.

Natasha: Hmmm I guess it is good, I never thought of it that way.

Natasha later noted in our final interview (8/26/13) that looking at the documentation and discussing it really made her look more closely at children's work and think more deeply about it. She said, "Sometimes when you look at something you don't think much of it, or what the children are actually learning. But when you talk about it with others you realize that there is

more to the picture and you think more closely about the way a child thought or what they learned." She shares, "Looking at the pictures that my class created I saw that they did learn something, but I realized how important constant access is for two year olds. I did learn that my two's are much more capable then I thought by talking with the other teachers." Conversations with Natasha eluded to the importance of professional development and the use of documentation in teacher learning. The richness of conversation changed as the projects were underway and the teachers brought documentation of project work to the sessions. The teachers spoke of their projects and their children's work with a different depth from the beginning sessions. Initially the teachers spoke primarily of activity ideas, however this shifted more toward how to better understand the learning experiences and to create richer learning experiences for the children. I note in my researcher journal (6/30/14):

> The documentation brought to the professional development seemed to provide a launching board for deep and rich conversations. The teachers began to reconsider the nature and quality of their children's work. They began to develop more complex interpretations of how children engaged in learning activities. I have sensed a shift in how the teachers speak of their classroom projects and children's work with greater depth. In the first half of the professional development sessions the teachers primarily spoke of activities they could do in their projects and sharing ideas, however this shifted to discussions surrounding a better understanding of learning experiences as the professional development sessions progressed.

Through looking at documentation it seemed as if Natasha started to see herself as a learner. She realized that looking at children's work was a learning experience. By looking closely at her documentation and the conversations evoked surrounding the

documentation began to change Natasha's perspective on teaching and children's

learning.

Synthesis

What was the nature of Natasha's experience in the professional learning community?

Throughout the study, Natasha grappled with both her personal and professional identity. This

was evident in the way she carried herself in the professional development sessions, interviews,

as well as her work in the classroom. This professional identity drove her need for validation,

belonging, participation in the group, and eventually finding her voice as a teacher. The

professional development experience seemed to provide a platform for her to share her stories,

struggles, and ideas. She quickly became a collaborative member of the group and this was

important to her. It was important to her to be a part of the group professionally, even though it

was apparent she considered herself the least qualified in the group.

Table 3

Natasha's Themes

Belonging	Professional Role
	Frustrations
	Questioning ability
	Support
	Appreciation
Developing a Voice	Seeking Validation
	Contribution
	Something to Offer
	Sense of Equality
Looking Closely	Interpretations of Work
	Problem Solving
	Deep Thinking
	Conversation Richness

It was clear that Natasha doubted herself as a teacher. She demonstrated a lack of certainty about her role in the professional learning community as an assistant teacher. Many times when Natasha was asking a question she would say, "Am I doing this right? Or "is that right"? This indicated to me that teaching was seen as technical practice within the school. This technical school culture permeated Natasha's actions within the professional learning community and within the classroom. As the professional development sessions progressed she began to seem more comfortable within her own skin as a teacher. The way teachers shared ideas, problem solved, and developed solutions created a sense of belonging within the learning community. The sessions provided her as well as the others a safe place to share ideas, cheer each other on, vent their issues, and to problem solve as a group. They took each other's feedback very seriously and often implemented the ideas in their classrooms. Discussions in the professional development sessions lent to a greater understanding of the children within the school, and shifted some perspectives on teaching and learning.

In what ways and under what conditions did documentation of classroom practice play a role in Natasha's learning? The documentation started rich conversations during the professional development sessions. Discussions surrounding documentation in the professional development sessions brought to light broader possibilities of what children were capable of rather then Natasha's perceptions of what the children's limitations. Looking at children's artifacts brought about a deeper understanding of where children were at developmentally, and made her question her own practice at times. Also, the process of deciding what to bring to the sessions forced her to look more closely and critically at the children's work.

When asked in her first interview about documentation, Natasha thought of documentation as a form of assessment and to inform parents of developmental level. As the

study progressed it was apparent that for Natasha the professional development sessions were an important condition for learning to occur. She noted that documentation in professional development sessions brought about discussions that led to her learning. Not to say that Natasha did not learn in the general professional learning community conversations, but she noted that there was a different "depth" when they were able to look at something concrete and discuss it. Seeing something live from the classroom was powerful and appeared to enhance the conversations. This was demonstrated when she looked at her children's work differently as a result of conversations surrounding the documentation she selected. She gained a better understanding of the importance and depth of her children's work through the discussions. When she brought a picture of what she just considered to be circles, the others noted how the child was trying to make the writing on the rim of the tire. This made her think differently about what her children and the older children in the school were capable of doing. The depth of conversation within the professional development sessions changed substantially as a result of documentation discussion.

Chapter Five

The Coach: Sarah

Sarah began her teaching career as a student at the university where the study takes place. She went through the teacher preparation program, which included coursework and four levels of field experience. Her first field experience was at the campus preschool. After completing her degree she was eager to gain employment at the preschool, she loved the environment and thought it would be the perfect fit for her since she was continuing her education. She began at the school as an hourly paid staff worker with the after school children in the afternoons. Although this was not her ideal position, she wanted to get her foot in the door. She waited patiently for a position to open up in one of the classrooms. After a short period of time, she was given the position of lead teacher in the 3-year-old classroom. Sarah has worked in this classroom for a total of three years, while she completed her Master's Degree. She decided once she graduated that she wanted to continue on her educational journey, and is currently working on her PhD in Early Childhood Education.

Sarah expressed interest in joining the study more cautiously than the other teachers. She wanted to participate, but she was quizzical about what the study would entail. Having a long-term relationship with the university, she was aware that involvement in the study might require extra work and time. She was knowledgeable enough to ask informed questions about the process of the study and what her role in the study would entail. Once she had a full understanding of her role in the study she was very interested in contributing to the study. She

wanted more exposure to continuing her professional development and another opportunity to explore the Project Approach.

After much deliberation, Sarah decided to select softball as the project topic she would investigate with children in her classroom. This project was chosen because of the construction of a new softball field right next to the preschool. Many of the children in the classroom had witnessed the construction and now the players on the field as softball season was underway. The questions under investigation included; what equipment is used to play softball and what are the parts around the softball stadium? In phase one, Sarah asked parents to bring in any softball equipment they were willing to share. She collected books about the sport for the children to look at. At the time the project began the team was in the softball playoffs, so the children were allowed to go and watch one of the games live. After webbing the children began their investigation in phase two. For phase two the children observed the different things around the softball stadium, and all the equipment the girls used to play the game. The children made representations of bases, balls, bats, helmets, and other items seen around the stadium. The children were intrigued with the tickets from their game. This led to the children creating a ticket booth and making their own tickets. The children had mock games as a part of their dramatic play. In phase three, the children collected all of their artifacts throughout their investigation and shared it at a school showcase.

I use the metaphor "The Coach" to describe Sarah. Sarah served as a mentor, resource, and supporter to everyone in the group. Her identity in the professional learning community was seen by others as an expert. The themes below encompass her role as coach within the group.

Sharing

Sarah focuses intently on her laptop while the conversation swirls around her. It appears as she is not attending to the discussion around her; however, she looks up and exclaims, "I got it! There is a show playing at the museum and you could take your classroom to the butterfly garden there as well." As Kristen continues to discuss her butterfly project, Sarah chimes in once again. "You should really consider using salt dough for making the butterflies. The children love doing that. You can use all those tools we have in the other classroom! It would turn out really cool!" Kristen writes down what Sarah has said.

Talk then turns to a group activity Kristen would like to explore with the children utilizing a wall projector. Sarah has had past experiences using the same projector and shares her experience. "You really have to focus on getting things set up right, and showing the kids how to do it. It can be difficult because the kids have to stand a certain way or they will completely block the projection on the wall. Be ready to step in and assist the children in working through it! I have those butterflies in glass cases, you could set those on the projector and I think you would be able to see clearly the butterfly for the children to trace. There is a huge roll of butcher paper in the back closet that you could tape to the wall that is what I used. Oh, and one more thing, make sure there is a fresh bulb in the projector (laughing) I got everything set up last year only to have the projector not work because it needed a new bulb. The kids were so disappointed!" Kristen and the other teacher take note of what is said by Sarah.

From the beginning of our professional development meetings, it was evident the other teachers considered Sarah a valuable resource. Sarah was open with the other teachers and shared her past experience and knowledge readily. In every single professional development

session Sarah gave examples of possible activities, or suggestions of possible materials that could be used by the other teachers. On several occasions she would say things such as, "Oh I have one of those in my room, I will bring it over to you." She was always willing to share materials or even special artifacts she had collected over the years.

A thread pulled from the third professional development session (4/17/13) highlights Sarah's comfort with sharing and the receptiveness of the teachers toward her. The teachers were brainstorming different types of butterflies and types of plants butterflies are attracted to. Sarah chimes in, "Well how about milkweed, and pentas? We have a ton of pentas planted out there! It is spelled, P-E-N-T-A-S." Kristin writes down what Sarah is saying and chimes in as well, brainstorming with Sarah. A few moments later Sarah mentions other types of butterflies she knows such as zebra tail and swallow tail. She even volunteers to find some pictures of different types of butterflies she has in her classroom.

Sarah had a wide range of experiences and expertise surrounding classroom activities as well as using different materials in the classroom. During the professional development sessions much conversation revolved around discussion of different materials that could be used for their upcoming classroom activities. Throughout the professional development sessions Sarah was always ready and willing to suggest different materials that could work for a particular classroom project. I note this in my research journal (5/21/13):

Today Natasha was struggling with how to have the children in her classroom create a 3d large truck. She wants the children to demonstrate their knowledge of truck parts by making a truck, this will be used in dramatic play and then ultimately a culminating event artifact. Kristin notes that there is a large box down in the kitchen that would be a great start for the children's creation. Sarah immediately suggested several ideas. She thought

about different recyclable materials that could possibly be used. Sarah goes and looks to see if there is still a box of recyclable materials in the outdoor storage shed, despite the fact this isn't her project. Once they realize that someone threw the materials away, Sarah immediately suggests that Natasha write a letter to the parents asking for different items so the kids can make the truck. Sarah goes a step further by suggesting the use of some plates that she has in her classroom that could be used for tires. She tells Natasha she will bring them to her as soon as we finish up with the session. Sarah has also offered several times to bring her husband's truck in for the 2s room and serve as a field expert if Natasha is unable to find someone to bring a tow truck, or monster truck in for the children. There is a strong sense of "team effort" among the teachers. They really go out of their way to help each other out and work together.

I found it interesting how receptive the teachers were to each other and willing to take suggestions so willingly. The professional learning community seems to provide a "safe place" for them to explore new ideas. Each person provides a different perspective on teaching and learning with young children. Sarah gave suggestions for materials and activities, but she took feedback as well. The other teachers' spoke of different ideas that Sarah ended up trying in her own classroom. She was thrilled to have teachers with different styles share their experiences, because it enlightened her on different ideas she had never thought of before.

For Sarah the professional development sessions provided a designated space for discussion about her colleagues' individual classrooms, which broadened her ideas toward her teaching. On multiple occasions when a peer mentioned an idea or an activity Sarah would immediately respond, "That is a great idea! I am going to try that in my room." All of the teachers were very encouraging of each other; this in turn seemed to lead to them feeling

comfortable sharing more. They did not appear to feel judged at all, it seemed as if Sarah was at the helm of this comfort within the group. The sense of community really fueled discussions amongst the teachers. Sarah sparked conversations that created opportunities for teacher learning. Sarah stated at one point, "It helps to know we are all in the same boat! We all have questions and concerns about teaching, that comforts me."

Sarah stated in both of her interviews (3/25/13; 8/30/13) that "idea sharing" was the most beneficial part of the professional development meetings. She states, "I love that we get to share with each other. It helps me to get new ideas, and I get to share my knowledge with the other teachers. It makes me feel like we are doing something more than just teaching behind closed doors." The teachers seem to take her ideas very seriously and implement her ideas in their classrooms, in regard to the sessions Sarah served as an expert in many domains. For Sarah the collaboration sparked by conversations in the professional learning community transferred into everyday discussions with the teachers outside of the professional learning community.

Beyond simple activities and material ideas, Sarah was a wealth of information regarding content knowledge as well as teaching techniques. She pulls from her past experiences and shares them with the teachers. When Natasha was struggling with ways to engage her 2 year olds with trucks, Sarah was quick to pop in the conversation with suggestions. This conversation from our 6th professional development session (5/14/13) highlights her sharing of teaching technique.

Natasha: The observational drawing is really hard for me because they are all just like
        marking on paper, saying there you go!

Kristin: Yeah, I know. I know what you mean. I don't know, maybe you should focus

> on like one small thing, like the tire. Maybe a truck is just too much for them. Or
>
> even a steering wheel?
>
> Sarah: Hmmm, why don't you get them interested and looking at the tire by doing
>
> rubbings of the wheel?
>
> Natasha: Oh yeah, that would be neat. How do I do that?
>
> Sarah: You get paper, and have them put in on the wheel we have outside. If you get
>
> those waxy crayons they can rub the crayons on their side and it will show the
>
> tread of the tire. Or you can try using paint and little trucks for them to make
>
> tread marks with the tires!
>
> Natasha: Ok, I am going to try that!

Figure 11 is an artifact collected from Natasha's project that Sarah recommended.

Figure 11. Painting with trucks

Once Natasha returned the following week with this artifact, Sarah was able to see how her suggestion played out within the classroom. Natasha was happy at the level of engagement of the children during the activity, and thanked Sarah for the suggestion. The teachers then focused on the child's work, which sparked further in-depth conversations.

Sarah pulled from past lessons to assist Kristin in developing ideas for her classroom. When Kristin was brainstorming ideas for her classroom to learn about butterflies, she shared how she had done a butterfly theme before and thought was a beneficial learning experience for the children in her classroom. "I had the kids squirt paint on one side and then fold it in half. When we opened the paper the kids noticed that both sides were the same. That surprisingly got us into a conversation on symmetry! We even took time to measure the sides to see if they were the same, so we hit on some math too. The kids were really interested in this and wanted to repeat the process," Sarah explains. After this in-depth conversation with the group, Kristen was encouraged to try a similar activity within her class while they were doing their butterfly project. The following week Kristen brought artifacts of the children working on their version of a symmetry project. Sharing among teachers seemed to be pivotal to Sarah and the other teachers. It providing Sarah an opportunity to speak professionally about her work with the group. These conversations led to discussions about teaching practice and created an opportunity for them to re-conceptualize their notions on teaching. The initial sharing with teachers created a sense of belonging among the teachers, which later transformed to deeper investigation of their work within the classroom.

Sarah loved to problems solve throughout the sessions anytime there was an issue in someone else's classroom. In our final interview (8/30/13) Sarah spoke of the benefit of problem solving with others, "It is so nice we can share our classroom, the good and bad. I feel like I can admit that I am not "perfect teacher". I like that I can share my ideas, I can share pitfalls to help other teachers to not repeat them. I don't feel isolated in my classroom, and that I have to "do it right" every time! I can make mistakes."

In one instance Natasha discussed her personal challenges in finding a field expert. Sarah immediately volunteered to assist. She first recommends possible places that she could call in order to get someone to come out. She looked down at her computer and began to type frantically. She was looking up possible places in the area where someone might be willing to come in as a truck expert. She suggested calling towing companies, or a local mechanic, she looked at the university site to see if there might be a division in the school that might be able to bring a truck to the premises. She then suggested that if all else fails she is more than willing to bring her husband's truck to the school for the children to explore. Sarah encouraged Natasha to keep trying and see what she can find, but worst-case scenario she can help her out.

Sarah emerged as a leader surrounding problem solving and collaboration, I think and write about this in my researcher journal and what it means for the learning community (reserarcher journal, 4/24/13).

Sarah seems to be delegated as the "leader" of the group, although it is evident she did not nominate herself. I wonder why this is. She hasn't been at the school the longest. She has taught fewer years than Kristin. However, it is clear Kristin looks to her for some advice and feedback as well. I wonder if in some part this is due to her education level. Although Sarah seldom discusses it, everyone knows she is beginning her PhD. She is humble about it and doesn't brag. I find this interesting because there is another teacher at the school who has a comparable education and yet fellow teachers do not look to her for advice. This makes me think that perhaps Sarah's demeanor and personality make her more approachable in the learning community. She isn't scared to share when she fails, when something was a disaster she openly admits it. I think this makes her more respected by the group. She is an asset to any professional development learning

community because of her openness and willingness to share, which really seems to be

fueling teacher learning in the professional development sessions. I find it interesting

that there appears to be an unspoken hierarchy forming within the professional learning

community.

In addition to being a leader, Sarah is a team player within the learning community. This

was evident in our final professional development session (6/4/13) as we were brainstorming

how to do a culminating event involving all of the classrooms. The logistics of this, as simple as

it seemed, was very complicated and required a great deal of conversation. Sarah took the lead

to try and coordinate the classrooms. As she jotted down notes, she asked for input from the

group. Sarah states,

> "Ok guys, what if we do a showcase. We can set things up in each of our
>
> classrooms. Put things the kids created on the tables, on the floor, where ever. We could
>
> let the kids decide how they want to design the room? We can rotate to each other's
>
> classroom. Like start with Kristin's room on the end, then head to Natasha's, and then
>
> finish in mine. We could even have the VPK classroom join us if we wanted to. What
>
> do you guys think? Will that work? Do you think we could all be in a classroom at once,
>
> or would that be too hectic?"

After much continued discussion the teachers unanimously came up with a culminating event

plan. Everyone collaborated and worked together. Each teacher in the group had input and

everyone's idea was used. At this point in the sessions I had stepped back significantly as more

of a facilitator rather than the leader of the group due to Sarah's ability to serve as a group leader

and the group worked as a team.

The dynamics of the group were intriguing as the weeks went on. Although Sarah wasn't necessarily the strongest teacher, she definitely had the strongest voice in the group. She serves as a strong coach within the sessions, providing countless examples of resources, content, and teacher techniques. When I asked her about this in our final interview (8/30/13) she seems surprised. She responds, "I don't think of myself as a leader. I hope I didn't dominate the conversations! I just think it is so helpful to share, that is what I love about our meetings. I can share my mistakes and successes. I can hear the other teachers' mishaps too. It is really helpful. I consider us a team." Despite her leadership role she was a strong team player. I contemplated this in my researcher journal (5/30/13).

> Sarah is definitely a leader, who did not nominate herself. She doesn't see herself in this role. I don't think the other teachers would consider her the lead necessarily either. They function as a team, all sharing. The professional learning community seems to bring them together as a team where they all belong, and all have something to contribute. Although Sarah gives the most suggestions, she is always open and willing to take advice. There is a definite give and take in the sessions. The teachers show a great deal of respect for each other, they note each others strengths and weaknesses. Sarah is always helpful to share in every group meeting, however she never takes over. She is always humble and portrays herself not as an expert, but rather just another teacher who makes mistakes and learns from there. She has no issues sharing her teaching mishaps with anyone at the school. The teachers discussions seem to demonstrate that it is ok to make mistakes, that teaching is not technical in nature, or one size fits all. Rather the teachers seem to see themselves as learners within the group.

Self-Evaluation

The group convenes for a third time, a week before all teachers are supposed to launch their projects in their classrooms. Sarah chimes in, "I am not so sure about my topic. I wanted to do fruits and veggies, but I kind of already started that. I like the idea of doing the softball project, because it is right next to the school. I know that is important for a project. But I don't really know anything about softball, and I don't know if my kids do either." The other teachers chime in with all kinds of ideas that are possible with the softball project. She hesitantly agrees to move forward with the softball project. "I guess I can learn right along with the kids. That is ok, right?" Sarah expresses she is unsure about the project topic as well as the process of the Project Approach itself. She is the only teacher in the group that has worked on another in-depth project in the past with guidance. She references a few times that she felt her first project was a flop and she doesn't want that to happen again. As the meeting continues, she inquires again the process and timing of each phase of the Project Approach. "How do I know when we move from phase one into phase two? Do I just decide that? Do I follow the kids lead, or are we all moving from one phase to the next together?" She asks. I assure her that we will touch bases each week to see where each project is, and when it is time to move on. I inform her that all classrooms will be paced slightly differently because of the emergent nature of projects. She sighs a bit slightly, seeming relieved. She takes note that all the teachers have the similar fears at the uncertainty and mentions it makes her feel better. She still appears to be slightly nervous and unsure as she plays with the ring on her finger.

Sarah considered her frustrations as her "weaknesses" when sharing them with the group. This seemed important in the group, sharing their struggles seemed to provide a sense of comfort within the sessions. Throughout the process of formulating a project idea and implementing the

project, all of the teachers experienced various pitfalls, setbacks, and successes. The professional development sessions provided a platform for the teachers to share with each other, learn, and grow through their discussions. The frustrations and venting seemed to lead to a great deal of problem solving and deeper thinking for both Sarah and the other teachers.

Sarah had many frustrations and problems throughout her softball project. She was somewhat nervous to do the project to begin with because of her shortcomings with project work in the past and her lack of knowledge of the content area of softball. Discussion from the group helped her to gain confidence in the project idea. However, the lack of knowledge about softball seemed to be a recurring theme throughout her project and created a sense of frustration for Sarah. She shared in a few sessions that the topic may have been "too out there" for them. She also mentioned that there was a shortcoming as far as access to what they needed. Sarah shares, "I anticipated having more access to the softball field during the project. I have called and emailed the coaches and the box office and I am getting no response. I really thought the people at the field and the coaching staff and maybe even the players would be more excited and forthcoming with the preschool."

As the weeks go on Sarah's frustration grows when she still can't get a response from the softball department. In our 6th professional development session (5/14/13) Sarah says, "Can I go

> first to share? I think mine is the most anti-climactic. So that way I don't have big shoes
> to follow. So all of our activities are starting tomorrow as far as observational drawings,
> experimenting with ramps. I wrote it down here. We are going to go on a picnic and we
> are going to watch the field, we are going to observe it, so everything is kind of in the
> works for starting, and I have been struggling. I am really frustrated with obtaining an
> expert to come out. I cannot get ahold of anybody!"

She shared her this frustration with the group regularly. Everyone was very supportive and encouraging regarding her frustration. In her final interview (8/30/13) she discusses things that did not go as anticipated in the project.

Researcher: So what would you change about the project if you could?

Sarah: I really wish I was able to get a field expert and more access to the

field for the kids.

Researcher: What did you learn from this experience?

Sarah: Well I learned that I probably need to check into things before I began.

Had I known that I wouldn't get any response or support from them, I would

have probably changed my topic entirely?

Researcher: Were the professional development sessions helpful with this

issue for you?

Sarah: It was really helpful to just vent my frustration with everyone! It was nice to

hear also that other teachers were having issues and things were not perfect for

them either. I also got some really great alternative ideas from Natasha and

Kristen. Without their suggestions I think I wouldn't have had as good of a

project. They thought of different things I probably wouldn't have.

Sarah was intuitive and open about sharing her failures to the group. Sarah had several struggles throughout her project. She was open during the professional development sessions seeking suggestions or advice. One primary struggle Sarah discussed was the inability to locate a field expert for the children to interview. This presented a problem, because it is a key component of any project. She shares her conundrum with the group.

"So I can't get ahold of anybody to come out and I am kind of unsure of where to go. I have contacted the coach and assistant coach of both the softball team and baseball team and I haven't heard back from any of them. I have no idea what to do now. None of them will respond! I guess I need to have a Plan B for somebody who can come and be an expert. Do we know anyone that knows about the sport?"

During the 8th professional development session (5/30/13), she was discussing the fact that she still hadn't gotten to many activities even though we were nearing time to move to phase 3. She felt like she wasn't where she needed to be and shared this with the group. She was floundering a bit and the group discussion helped her realize this and want to change what was happening in her classroom. We pulled up some documentation to discuss and Sarah pulled up a few daily sheets on her laptop. There was little in her daily sheets to reflect a project in the classroom. My researcher journal (6/31/13) notes this instance.

> Sarah used her daily sheets today as her documentation to share. This surprised me, because I have seen the daily sheets throughout the week, and I really didn't see anything about softball at all. As she discussed with the group what was done in her classroom, she made mention that she didn't have a chance to do much on softball that week. They did a few things, but they were not depicted in the daily sheets. Sarah is concerned about her project not having the momentum she hoped for. Although her project did not go as planned it was a benefit to the group to show that she was open and accountable for her classroom, despite the turnout.

Sarah stated she believed the discussions with the group could helped to provide a type of evaluation. From what she talked about she had a sense of how she felt she was doing in the classroom, good or bad. She would share her failures in the classroom and provide suggestions

to other teachers in order to help avoid the same pitfalls. Her approach of giving advice and sharing mistakes that she has learned from, seems to make the teachers more open to listening to her. She never gives the impression that she is a perfect teacher which leads to the trust needed to share concerns and engage in true community learning groups to problem solve. In the 7th professional development session (5/21/13) she shares one of her experiences with Natasha.

Sarah: You should use the Promethean with the kids!

Natasha: We did watch some videos on my computer.

Sarah: You could show them like monster truck rallies on the large screen, they would love it. But make sure you have everything set up before you take the kids out there. The last time I made a big deal of using the Promethean and brought the kids out there to watch something. It wasn't plugged in and nothing was set up. It was a complete mess! The kids had to wait for me to get everything going and it took like 15 minutes. It did not go well!

Sarah's openness regarding teaching and content instigated the other teachers to share their strengths and weaknesses as well, where they seemed to evaluate themselves. The learning community allowed for the teachers to share their different perspectives and re-conceptualize their ideas on teaching. The teachers took the information given to them by others in the group to heart. Natasha followed the advice of Sarah multiple times through the course of our 9 weeks together. I think the teachers discovering their suggestions were used in other classrooms, fueled their confidence in themselves as educators. In return, they continued to share more and more as the weeks went on. I note this observation in my researcher journal (5/21/13).

Sarah from the beginning was willing to share multiple failures within her classroom. The other teachers would laugh and nod their heads. However, as the week pass I notice

the other teachers are chiming in regarding their own mistakes and mishaps and then providing suggestions for future teaching. The use of documentation has taken the professional development discussions from general activities toward more in-depth discussion on teacher practice and children. This in turn has led to the teachers trying new things suggested by their peers and sharing these new experiences within the professional learning community.

From the beginning, the teachers were very open to the idea of collaboration with each other. This could be due to the fact that they had been meeting together in professional development sessions weekly for some time before this research began. Sarah served as a master collaborator within the group as a problem solver and a team player. Sarah loved to problems solve throughout the sessions anytime there was an issue in someone else's classroom. In our final interview (8/30/13) Sarah spoke of the benefit of problem solving with others, "It is so nice we can share our classroom, the good and bad. I feel like I can admit that I am not "perfect teacher". I like that I can share my ideas, I can share pitfalls to help other teachers to not repeat them. I don't feel isolated in my classroom.

Despite Sarah's apparent confidence in our professional development sessions, she was in need of feedback and support just like everyone else in the group. Sarah was unsure about many aspects of both project work and her topic, and kept asking for affirmation as a teacher. She was looking for feedback if she was doing things right in her classroom. She wavered on how to proceed many times, and the group provided both a sounding board and viable feedback for her. Following our third professional development meeting, I commented on this in my researcher journal (4/17/13).

Sarah seemed at first to want to do fruits and vegetables, however she was already pretty far along with that topic in the classroom. As we spoke as a group it seemed that there was concern that the children would not hold interest in this for the next 4-6 weeks, because they had already been talking about it for 2 weeks. As we brainstormed the best idea seemed to be softball, the fields are right next door. After much discussion and the other teachers sharing possible ideas, she hesitantly agreed. She expressed immediate concern that both she and the children knew nothing about softball and she would have to learn at the same time. She seems to have many questions about timing of the project despite having done a project before. Her uncertainty seemed to be shared by the entire group, they were all unsure. They appeared to be relieved that they were all a little worried about their projects and how they would play out in the classroom, it seemed to give the group a "common ground". She seems to be looking for one right way to do things, and thinks of teaching as a technical practice.

The rapport between the group was healthy and open. Sarah often gave ideas, but she took the ones given to her by her peers very seriously. As we began to discuss different ideas of how to bring softball to life in the classroom, Sarah was stumped. Kristin brought about the idea of maybe doing something in dramatic play. This discussion snowballed and Sarah became very excited about creating a mock softball game with the class. The teachers came up with the idea to make a concession stand, a ticket booth, and have some kids play a mock game with the materials they created. Sarah exclaims, "It would be so cool if they could make tickets! I kept the ones from the game we went to and they are always asking to see them." The teachers agree this is a good idea and she continues, "I could even have them make uniforms somehow! They would love that! This is going to be great!" The passionate conversation continues for quite

some time. Sarah leaves the session with renewed confidence about her softball project. Sarah

mentions in her final interview that having the other teachers give feedback took her dramatic far

beyond what she would have come up with herself. In my researcher journal (5/25/13) I note the

following.

> Sarah seems to be very excited about her project as well as the other teachers in the
>
> group. Although Sarah is enthusiastic about her project, I haven't seen as much taking
>
> place in the classroom as I expected. She shows great support to her peers. She gave
>
> Kristin several ideas for her butterfly project today. After the brainstorming session, she
>
> made the comment that she wants to do the butterfly project next. She was very
>
> supportive and excited by the artifacts that Kristin brought to the session and noted
>
> several times that she cannot wait to try that in her classroom as well. This makes me
>
> reflect on the idea of lack of transference between professional development and the
>
> classroom. How can an educator create experiences to bridge the gap between teaching
>
> and practice? How do you create favorable conditions in a professional learning
>
> community? It has been mentioned on different occasions that there is a level of
>
> accountability with a facilitator in the professional learning community. These seems to
>
> indicate to me that it might be necessary to have some sort of facilitation in place for
>
> follow up, as well as to keep conversations from turning into complaining sessions.

The professional development sessions provided a sense of accountability. Sarah was

really struggling to get ahold of someone from the softball program. We discussed this in our

session and we decided to do something as a group about it! In our 5th professional development

session (5/8/13) we ended a few minutes early. We were talking about the idea of taking kids for

a walk around the softball field, just to explore, and see what they find interesting. Sarah stated

that she had never been over there. One of the other teachers made the comment that we should

go. Then I immediately responded, let's go walk over there for a few minutes. Sarah was like,

"Really? Oh, ok!" We packed up our stuff and headed out. Within five minutes we had already

found a ticket person working the booth and spoke to them about the possibly having the kids

come by for a visit. The lady at the front informed us that there was a tournament the next day,

and that all children admissions were free of charge. I turned to Sarah and said, "Why don't you

take them tomorrow? I will even come and help you. Sarah hesitated slightly and said, "Can we

do that? Do we need permission forms? It is very last minute, I don't know." I suggested we

walk back over to the school and ask the director for permission. We then walked back and

asked. The director was enthusiastic and printed out permission forms on the spot. I then

walked over to the fields again and got the tickets for the children. The discussion in the

professional development session sparked this occurrence, and ended up being a highlight of

Sarah's project. This again makes me think about the need for facilitation within a professional

learning community.

Sarah shared with the group her previous project attempt, and you could sense relief

amongst the teachers. They seemed to think Sarah had all the answers to project work because

she had done it before and had taken a course. She stated, "I really didn't know what I was

doing? I couldn't get their interest. Maybe it was the topic, it just did not go well." Sarah

sharing her fears seemed to create a sense of belonging in the group, where no one had all of the

answers. It demonstrated to the learning community that there wasn't one right way to do

something and that mistakes were learning opportunities. The group seemed at ease to learn that

Sarah had similar feelings, which seemed to further bond the group. In the end it was Sarah that

struggled the most in choosing her topic and was very unsure of the topic after she chose it.

Sarah immediately started questioning the timing and her topic knowledge as soon as she decided on softball. This could have been due to the issues she had in her first project, or a true lack of understanding about the Project Approach. She stated in her initial interview that project work was very difficult for her last time. She was not used to the emergent style and open-ended format, she was used to having one way of doing things. She was unsure if this was because she was a new teacher, or this was just a difficult style for her. One of her main concerns was the timing of each phase, as well as her role as teacher as the children engaged in the softball project over time, which she shared with the group. In our third professional development meeting she shares, " How am I supposed to do a web of what they know? I mean that is going to be an empty web! They don't know anything about softball. I don't know anything about softball either. So what does that look like? How much do I prompt them to think about it or hint? I guess I just don't know exactly how this will look."

Sarah's questions sparked a rich conversation with the group and gave them some commonalities and concerns to muse over. She shared similar concerns about what would happen when they had a field expert come in. Again she ponders her role and the process of project work.

> "I just wonder how that looks, like, so when we have our expert come in, I mean, they're going to probably be, like, nervous or excited and forget their questions. I mean, I'll have papers with them written down, but would I have to be like, okay, you know, here's the question. Go ahead and ask or could I say, you know, we were wondering – do I ask for them?"

The other teachers appeared very happy that Sarah had brought this up. They were also unsure about how exactly the meeting with the field expert would work. Sarah bringing

questions to the forefront provided a great space of discussion for all the teachers to brainstorm

and think of ways to make the most of the field experience for the children. Sharing with the

group her issues and questions allowed for rich interaction and collaboration for the teachers.

Here is an excerpt from our 7th professional development meeting (5/21/13) about finding a field

expert for the children.

Sarah: So I can't get ahold of anybody and I'm kind of unsure where to go.

Researcher: Okay. And the baseball coach, you haven't heard?

Sarah: Never even responded back, so I basically sent the same email…

Researcher: Wasn't there an assistant?

Sarah: I've both – no, that was for softball and they're still…

Sarah: Assistant coach, not on baseball.

Sarah: Not on baseball. None of them will respond to me.

Researcher: Hmm.

Sarah: So I don't know if we have a plan B for somebody who can be an expert?

Kristin: Do we know anybody that plays baseball or softball?

Sarah: Yeah, that's what I'm thinking. Do we know somebody who's interested in the

sport?

Natasha: I can't think of anyone off the top of my head.

Sarah: I'm just – I feel at this point as far as that goes, I have my plans, all that's

going to be fine – our activities are going to be good, but as far as obtaining

someone to come out, I'm kind of like worse case scenario at this point, what

should I do?

Kristin: You might want to ask one of Elijah's moms because …

Sarah: Oh, really?

Kristin: She teaches, I think, three-year-old soccer, so maybe she teaches other

    sports, too.

Sarah: Okay.

Researcher: What about – I'm trying to think, an athletic director over there?

Natasha: Oh, that guy that came today?

Sarah: What guy?

Natasha: Dr. Waterson?

For her project Sarah admits one of her major failures was dropping the ball on the field expert, which is a critical component of any project. During the field experience students have the opportunity to ask an expert questions on their topic, an important piece of engaging the students in rich learning experiences. She admitted that she procrastinated and didn't expect finding an expert would be a problem. She ended up having an instructor from the P.E. department come over and briefly speak to the children. However, the children were unprepared and had lost interest in the project by the time the field expert visited. Despite this letdown Sarah reflected on her failures and looked at it as a learning experience with the group. She noted in her final interview that the field experiences were one thing she would most like to change about her project. She says, "I really wish I could have done more with the field experiences. I should have been able to go deeper with the field being right next door. I couldn't get a good field expert for them to interview. I am not sure if it was the timing because the team had playoffs or what. No one ever responded to me. It was a problem. I should have been more aggressive with my follow through."

Sarah demonstrated strong confidence in the professional development sessions and served as a pivotal knowledge provider, however she grappled with uncertainty in the classroom with her own project. Part of her uncertainty surrounded her own inquiry, when to step in and assist and when to step back and let children discover/ problem solve alone. Alongside this struggle, Sarah seemed to tussle with bringing the ideas from the professional development sessions to life in the classroom. There were many ideas that were developed in our meetings that never took place in the classroom. In our 7th professional development meeting (5/21/13) she states, "No we haven't gotten to do it. There was a fire drill last week, and then it was raining. It has just been crazy. We haven't even made all the stuff we need yet. There isn't much enthusiasm, we have had a lot of other things we had to do." This was an interesting statement, because all of the teachers in the group had the same fire drill, and outside factors to deal with. I felt that she was unsure of how to proceed with the project and how phase two should actually look, and she dealt with that through avoiding following through with it. Many of the photos in the daily sheets depicted activities that had nothing to do with the softball project. Therefore the lack of data became data in and of itself. I asked her about this in our final interview and she responded, "We talked so much in our meetings about things we were going to do, and I always felt bad when they didn't occur. I definitely sensed the need to bring something to the table. I wasn't always successful and I had to share it, but it made me look at what I need to work on as a teacher and very aware of when I didn't follow through on something." I made note of this in my researcher journal (5/21/13).

Sarah is often speaking about things she is going to do in the meetings.

However, as I look at the daily sheets I notice some of the ideas are really not playing out in the classroom. I am wondering if sometimes things are said because I am present. Are

they telling me what they think I want to hear? Sarah has mentioned the word "accountable" a few times. I am wondering if this idea of accountability is less about the other teachers, and more about my presence in the learning community itself. This makes me think about what needs to be in place for teachers to take what is discussed and implement in the classroom, otherwise there really is no difference than a one time workshop.

Through discussion and sharing documentation Sarah demonstrated a great deal of pride sharing the little successes with the teachers and getting affirmation from them. During Sarah's phase 2 she was thrilled to present the work the children did in the classroom to the rest of the group. Due to her uncertainty, the group seemed to provide some affirmation for Sarah. "Look at what the kids made!" Sarah says laughing during session 8. "I know it really doesn't look like much, but they were really excited about it." Sarah spread the pictures out on the table. She also showed some photographs on her computer. "I had the idea to have the kids make bats and balls. I wanted the kids to use dough to make it, but the kids wanted to use paper. I didn't know what to think about it, but I decided to give it a shot! They decided to ball up paper to make the baseballs and then used tape to keep it together. I know to some they probably look like balled up paper going into the garbage, but the kids were proud of them because it was completely their idea. I was really surprised on the amount of determination while creating these" Sarah explained. She goes on to explain how she is planning on having the kids paint the baseballs and bats later this week. One of the other teachers suggested that perhaps these can be used as props in dramatic play center, Sarah immediately agreed and made note to do that either later in the week or early the following week.

Figure 12. Children Creating Bats and Balls

Sarah was thrilled to share her children's work once they created bats and balls out of newspaper. Her pride was evident throughout her sharing and the response evoked from the other teachers. Sarah seemed to need affirmation from her peers of the importance of her teaching in the classroom. It wasn't so much about the product but rather the assurance that good teaching experiences were taking place with the children in the classroom. It seemed she was most proud of their work because she let them take the lead on it, stopping herself from pushing her idea. Discussions in the professional learning community began to be centered around practice and learning through experiences rather than "doing it right."

The teachers bringing documentation to the professional development meetings seemed to elicit affirmation from all the teachers in the group, they were proud to share what was going on in their classrooms and were reinforced by the responses of the other teachers. Sarah noted in our final interview (8/30/13), "I like that we brought things up to the meetings. I never really knew what was going on in the other classrooms. Now I can see what they are doing! It was exciting to me. I don't feel as isolated in my classroom anymore. Plus now that we know what we are all doing might see something and know someone else might find it useful!"

Questioning Practice

Sarah sits down in the 8th professional development session with a bag in one hand and a folder in the other. She has brought her documentation to the session. In past sessions, she has not brought much to share with the group. She sits patiently and waits for her peer to finish what she is saying, but her focus appears to be on looking at what she brought. She engages in the discussion with the other teachers, however she seems slightly distracted. As soon as she has the opportunity, she jumps into her story of the week. After weeks of having little to share, she is anxious to show what she has brought. She takes out a few crumpled up paper balls and then a rolled out long paper piece. She also carefully opens her folder and lays out the photos she has brought. She immediately laughs and says, "I know it doesn't look like much! But this was so cool! I can't believe how good the kids did."

Out of everyone in the professional development sessions Sarah was most likely to pose questions to her own practice. Again, this could be due to educational experience because part of the higher education courses had a strong focus on personal/ teacher inquiry. Sarah asked, "So we are going to be creating artifacts based on what they know, and I wonder what is *my* role? At what point do I step in and help them if they are having trouble? When am I helping too much?" She spent a great deal of time pondering this and really focused on trying to let the children take the lead, rather than solving the children's problems herself, as well as letting children decide the medium they will use to represent their work.

As the professional development session progress, the teachers began to chime in regarding their personal inquiry question and their findings. Sarah started off the conversation. She shares with the group her inquiry question of when to step back and let children do their own projects, even when they aren't done to her standards. "I struggle with control! I admit it! It is

difficult for me to stand there and let them do something when it is not how I envisioned it. I am working on it. It is so hard and very frustrating. It is hard for me to find the balance of when I should step in and assist because the frustration level is rising, and when to just let them struggle and figure it out." Sarah willingly admits what she considers is a flaw and says she is actively seeking ways to change this aspect of her teaching. Sarah tried very hard to engage in inquiry throughout her project. However, she struggled with the systematic collection of data throughout her inquiry process. Despite this, we did have some good conversations surrounding her struggles, and what she learned during her first attempt at inquiry in her own practice.

While Sarah was trying to step back and let the children do their own work she discusses some tough situations she encountered with the group. Through her comments and discussion, it is clear she is inquiring about this process and problem solving in her own teaching. She struggled as to when to step in with a particular child. "It was really hard. It was so hard because they were getting really frustrated, like Garrison had a full-on temper tantrum, screaming and crying because he couldn't figure it out. I just wanted to give him the answer so bad! So instead of just taking over we experimented with the squishing, which didn't work at all. Then Nina actually figured out that rolling it worked. Then they were all like, *Ahhhhhh,* the light bulb went off and they were excited."

Throughout the professional development session Sarah noted how she was really impressed with what the children were able to accomplish and their pride in their work when they were able to do it themselves. The teachers discussed how this "self-problem solving and work" promoted a much different result then a pre-planned activity such as an art project where the end result was already determined. This was a big insight that Sarah shared with the group. The discussion made the other teachers think about and discuss their own issues with giving over

"control" in the classroom which I felt was very worthwhile. Discussing their own personal inquires seemed to move the teachers away from discussion based solely on classroom activities and into deeper discussion. I note this in my researcher journal (5/30/13).

> Today Sarah spoke about her issues with control and her desire to study herself for her inquiry piece. She wants to try and take a step back and not "fix" everything for the children in her classroom. This idea was based upon our Project Approach discussions. As we went through the phases of the Project Approach I noted that it was important to let children problem solve and figure things out for themselves. As Sarah thought about this she realized that she was typically deciding how children would represent their work and would overly assist in the process of their work. This sparked a rich discussion. Sarah was curious as to when to step in and when to step back. All the teachers concurred that they struggled with this in various degrees and were very interested in seeing how Sarah's inquiry played out during her softball project.

As Sarah tried to step back from doing the children's problem solving for them she went through a range of emotions, however she decided that by stepping back the children felt a strong sense of pride about their work. I noted that she saw her children's capabilities through their work. Sarah noticed that when the children were able to problem solve without teacher interference the children worked collaboratively. This was an important observation by Sarah. She shares with the group how the children were really helping each other.

Sarah shares, "The kids were so into this. They decided to use newspaper, which I thought was interesting. It wasn't too hard for them to make the baseballs, but the bats were a different story. They couldn't figure out how to roll it." Natasha chimes in, "It looks like she figured it out. How did they end up doing it?" Sarah continues, "Well it took multiple children,

and at first it was so frustrating for them. I really wanted to step in but didn't. One of the children had to roll it up while another had to tape it together. They were really trying to be accurate." Kristen adds, "I can tell! Look how she is holding it next to the bat to make sure they are about the same size and shape!" Sarah continues, "It is funny because it just seems like they are playing with paper, but it really hit a lot of standards! Social emotional for the group work, fine motor to roll the paper."

Figure 13. Comparing Bats

Sarah shared her bat and ball experience in detail in the 8th professional development session (5/30/13). She explores with her peers her experience with the children and letting go of the control. For her this was a huge step and she was thrilled with what she discovered.

"Believe it or not, I left it to them to set it up. We started constructing our own bats and balls and they chose the materials. They wanted to use newspaper, which was something I had not thought of, so I thought that was pretty clever. I thought of aluminum foil, but they were not into that. They were really engaged in the activity, everyone did one. I just put out the objects on the table. We put tape, scissors, and the newspaper and just let them have at it. I mentioned to them the idea of Paper Mache to make them appear more like balls. But the kids just like them the way they are. A lot of the children do not like the texture of the wet paper. We started experimenting with how to make a bat. They were really struggling with it. Some of them were squishing it and in a row and it just

wasn't working because it was expanding like this! So then they started rolling it on

itself and this was Nina's (she shows documentation photo) and she focused on the

difference between the bat and then the handle, like the size, so she was really problem

solved. She did this and then I helped her. I actually brought the picture of it because I

was like, my question… when it is too much? When do I step in? This is very difficult

for me."

From Sarah's excerpt it is apparent she is focused and thinking about what she is trying to

learn from her classroom experience. She notes her personal struggles and her successes. She

brought the documentation specifically to demonstrate what was taking place in the classroom;

she wanted feedback and discussion from her peers. She indicates that she let this particular

child work on her own, and yet on other occasions she had to step in. She discussed with the

group how she worked with a child that was new to the classroom and was an English language

learner. Sarah shares that the girl wanted to work by herself but motioned for help because the

paper kept expanding. She shares, "I finally had to step in, but it was minimal. She just wanted

me to hold it while she wrapped tape around the paper. I still felt she completed the work herself

and she was so proud."

The use of documentation in the professional development sessions provided an

opportunity for Sarah to look more closely at the children's work in the classroom. Sarah noted

on several occasions that just having to think about what she was going to bring to the

professional development sessions forced her to think about what the children were doing and

what she wanted to share about her documentation.

When asked about what she learned about herself through the process of participating in

the group meetings she responded, "Yeah, it was good! It was a learning experience and it

helped me a lot because I always want to step in and do it for the kids, but it taught me that it doesn't have to look perfect, it doesn't need to be pretty; it is meaningful to them because it was… specifically, like, those balls and the bats that the kid's made, they didn't look pretty to me, but they were so meaningful and it important to them. That made an impact on my thinking."

Through our conversations, documentation, and her own personal inquiry Sarah realized how much she was initially interfering with the children's work and their thought processes. It has been a continued goal for her to work daily on finding opportunities for children to explore on their own, and for her to avoid her initial instinct to step in and "save" the children from failure. Her conversations in the group sparked much discussion with all the teachers about how much they did for the children, and when it was appropriate to let them struggle and when was the right time to step in and assist. One take away comment she made struck me, "I heard a teacher say, my job is to teach you, so if you don't know, I teach you. However, I think I was more like, if you don't know, I will tell you. But this wasn't the right approach; I wasn't giving them the steps to solve the problems on their own. That is what teaching really should be." I found it interesting how one simple activity in the classroom and the artifacts brought to the session sparked such rich discussions.

On some level it seemed Sarah somewhat under estimated the work children in her class were capable of. She always seemed surprised by what the children created in the classroom. This could be due to the fact that her previous project didn't go well, or she had never tried to really push the children from the regular routine. However, she showed great enthusiasm with what the children created, and the ideas that the teachers came up with in the professional development sessions. She was always so excited to talk about and try something in her

classroom. In our 5th professional development session (5/8/13) we discussed going to a softball

game with the children as a possible field visit. She was so excited by the idea of this. We

talked in-depth as a group of all the different things the children could do, look for, and learn at

the softball field. In our 6th professional development session (5/14/13) she discusses the field

trip with the group.

> "We only lasted 2 innings because it was so hot, but the kids loved it! We came back and
>
> just sat on the carpet to cool down and regroup for like 15 minutes. It didn't seem like
>
> the kids were really into it while we were there. But when we came back and started to
>
> web, they really shared a lot. I was surprised! They wondered why the mascot wasn't
>
> there. They were very concerned about that! They were curious about the music. They
>
> wondered about the tickets. They seemed to pay close attention to all the shapes there
>
> were on the field, although I did ask them to look for that while we were at the game.
>
> The kids noticed there were so many squares on the field and even drew them! Look at
>
> this one. Do you see how he drew all the bases? I was pretty surprised with what they
>
> remembered and took away from the trip!" Sarah shares.

Figure 14. Helmet Observational Drawing

After their return from the softball game the children explored and conducted

observational drawings of the softball equipment. The following conversation transpired as a

result of looking closely at children's work. Sarah begins the conversation, "I had the children

look at helmets and baseballs last week to observe and draw. This was new to them because we

haven't really done that much some reason this year. They looked very closely at the equipment and I put magnifying glasses out so they could look more closely. I was really surprised by how much time and effort they put into it!" Kristen adds, "Well it is kind of hard to see from the photo but when you look closely you can see that she has the shape of the helmet correct and she is working on drawing the detail of the grill part in the front." Natasha states, "I find it surprising how much time they spend on drawing things sometimes. Sarah responds, "I know! They were so engaged in this! Normally I can't get the kids to spend any time drawing and here they are working away. When they are interested it makes a difference!"

Later in our 7th professional development session (5/21/13) Sarah shares a few different artifacts that the children created after our last meeting.

Figure 15. Field Visit Representations

> Sarah: So this is what I have got for observational drawings (laughing). Obviously,
> they are new at this.
>
> Researcher: Why do you say that?
>
> Sarah: Well it barely looks like anything, circles and lines.
>
> Natasha: I mean I know you have the labels on them, and they would be hard to know
> what it is if you didn't, but I think they definitely drew what they saw! I think

pitchers mound is really cool, he even drew the little base that is out there. That's

a good observation.

Kristin: You can definitely tell the girl is holding her idea of a bat! They are definitely

looking closely!

Sarah: Hmmmm, I guess so! They were really paying more attention than I thought.

Surprise in children's work was common with all of the teachers for the most part,

however Sarah was often the first to rave about children's work in other classes.

Natasha: I know you can't really see it, but this is a truck. It is more like a square

(laughing). I don't know, it kind of looks like scribbles.

Sarah: You can clearly see the rectangle shape of the truck, is that

a steering wheel? And look there, it almost looked like he tried to create a road!

He did so good.

Natasha: Yeah, maybe you are right! I didn't really notice that he did that. He did make

a road, he did say that.

After this simple exchange and encouragement by Sarah, Natasha's attitude toward her student's

observational drawings seemed different. She became positive, upbeat, and proud. She started

to see her children's work as more advanced.

Sarah noted that collecting documentation was important in her learning as well as for

sharing in professional development sessions. In our final interview (8/30/13) Sarah comments,

"When I was looking at documentation to bring and share with the group I would look again at

what the children created. It would make me think, how much did I step in? Did I interfere? By

collecting the children's work and then looking at it again with the group I was able to really

think about how involved I was in the children's work." Documentation not only assisted in understanding children's capabilities, but it also helped in Sarah's personal inquiry as well.

Sarah admitted in her initial interview that she took photos and collected artifacts strictly for the purpose of sharing with parents what the children had done during the day. The school requires each teacher to create a "daily sheet" that is a compilation of pictures with statements underneath demonstrating what the children did throughout the day and what they learned. Sarah notes that documentation is also used to collect work samples for the children. Part of the assessment used at the school is collecting work samples on particular specified content area. However, beyond the scope of assessment and communication, she did not consider other possible uses of documentation. Interns that had been a part of her classroom had created documentation panels for assignment purposes, but she did not carry this on once the interns were out of the room. She did note that the process of deciding what to put on the board did force her to take a closer look at children's work and what they demonstrated.

During our final interview we discussed the role of documentation and its importance. The following excerpt is from our final interview (3/25/13).

Researcher: When did you use documentation?

Sarah: I would say we used it consistently throughout. When we were studying items like doing observational drawings and taking photographs and we had those concrete examples, but we were using documentation throughout the whole thing to share with parents and to let the kids see their own work. We also used them a lot for our discussions upstairs.

Researcher: Do you feel this was something you were already doing or did it change while you were doing your softball project?

Sarah: Yeah, I mean obviously I knew about documentation and ways to use it, but the project provided an outlet for me to be able to explore those, where I usually don't feel like I have time for that.

Researcher: Have you been collecting documents since the project has ended? Have you displayed children's work or looked at their artifacts alone?

Sarah: I did it with the project. I could do much more. It just blends itself so much easier to the project because it is ongoing work and it is a continuous investigation, whereas with a theme by the time I have time to study the children's work we are moving on to the next topic.

Researcher: Did you use documentation for your own inquiry question or was it just used primarily for the children?

Sarah: It was primarily for the children, but I think using the documentation up here (professional development sessions) when we were talking about our inquiry questions and thinking about how we can answer those questions. I thought it was a really rich time and way to share ideas and learn from each other, and it was really meaningful to me.

From her statements I gathered that to her it was important to have a forum to share her documents. She thought deeply about the documents shared in the group and was very communicative about it. However, without the weekly meetings to discuss what was taking place in the classroom in our session she reverted back to using documentation only for the purpose of communicating with parents and occasionally displaying in the classroom. I note this in my research journal after our first interview (3/25/13).

Sarah has learned about the use and importance of documentation in her course work and has had to assist interns in her classroom with creating documentation panels on her own. However, once the interns are out of the room she does not create panels on her own. I could tell from our conversation she is aware of their importance and possible uses, but it seems like a hassle for her… just another extra job to do. Through our interview she talks about documentation primarily in terms of "parent communication" or requirements from the school of collecting work samples. She does not seem to see the value of collecting and studying artifacts for her own personal learning. She also didn't mention the use of showing photos or children's work in order for children to engage in learning experiences. I find this very interesting. I am curious how she will collect documents/ artifacts throughout her project and how she will use those documents. I have a feeling that things will go back to the way they were before after my study is complete.

For Sarah, the use of documentation in conjunction with the professional learning communities provided an opportunity for questioning practice. This took on different shapes throughout the professional development sessions. There were attempts at teacher inquiry that were definitely in the beginning stages, but a good stepping stone to continue with inquiry in the future learning communities. Though the community, Sarah thought differently about her work as a teacher and the work of her students. She seemed to gain a different understanding of the complexity to children's work, engagement in the classroom, and her own ideas about teaching and learning.

Synthesis

What was the nature of Sarah's experience in the professional learning community? Sarah considered the professional development sessions as a platform for classroom and teacher discussion. She used the arena to share her ideas, frustrations, and problem solve. She emerged as a leader of the group. She learned a great deal by listening to the other teacher's suggestions as well as taught other teacher's through the conversations. Sarah felt a strong connection to the sense of community the professional development sessions created, which she said brought about learning beyond the professional development setting. She noted the professional development allowed for more collaboration between the teachers, which led to more discussion about their classrooms with each other outside of the sessions. These experiences led to additional learning experiences for her and the other teachers. Though the learning community Sarah felt she was part of a team. A place where the teachers were free to discuss things in the classroom, alleviating some of the isolation of teaching. The discussions in the professional learning communities changed some of the perspectives on children's work and what children are capable of, demonstrating the idea of teachers as continuous learners. Sarah was focused primarily on the technical practice of teaching. She wanted to figure out the "right way" to do things. It was frustrating to her that there wasn't an easy single answer. Despite her attempts at inquiry, Sarah did not see herself as a researcher. She was focused on children's learning throughout the study. In what ways and under what conditions did documentation play a role in Sarah's learning? For Sarah the professional development sessions and documentation allowed her to think more deeply about her classroom. By sharing the documentation in the professional development sessions Sarah began to question her practice in the classroom differently. She was looking more closely at the work the children brought, and focusing on their capabilities in the classroom. She

thought about what was going on in her classroom and how she could or should change it,

conceptualizing her ideas of her teaching. She saw the professional learning community as a

place for accountability. For Sarah it seemed necessary to have a facilitator in the group to give

her reason to collect and think about her documentation.

Table 4

Sarah's Themes

Sharing	Resourceful
	Mentor
	Collaborator
Self- Evaluation	Frustrations
	Feedback
	Queries
	Affirmation
Questioning Practice	Personal Inquiry
	Enacted Inquiry
	Reflection on Inquiry
	Gaining Understanding of Children's Work

The collection and discussion surrounding documentation created a new lens for

Sarah to view herself and her classroom. She learned a great deal about her children's

capabilities by experimenting with suggestions given in the professional development sessions.

The documentation brought to the sessions created a window into the personal experiences she

shared with the children in her classroom. The snap shots of her classroom through her

documentation alluded to the learning experiences of the children in the classroom, as well as her

own inquiry as a teacher.

Sarah noted in her initial interview that her previous documentation use was superficial,

in that it was primarily for the parents to see what the children had done in the classroom for the

day. However, the conversations sparked through discussions in the sessions changed the

conditions of her documentation collection. She learned a great deal by collecting the

documentation for the professional development sessions, because it forced her to "look again" at what her children were doing. She began displaying documentation for the children to revisit their own work, and saw this as very important to learning for the children in her classroom. She also felt a sense of accountability to herself and her children through the request to collect documentation, and share classroom work within the professional development setting. The rich discussions elicited through the documentation led to deeper thinking and learning about her practice and teaching in the classroom.

Chapter Six

The Enthusiast: Kristin

When first approached with the idea of taking part in the study, Kristin was excited and inquisitive about the process. She was ready to take part in something she felt would enrich her teaching and carry over into the classroom. She was excited about the idea of meeting with the other teachers and discussing project work. Kristin professed she was already doing projects in her classroom, and wanted to learn more about it. She asked very specific questions about what would be required of her during the study, making it clear that her classroom was her first and foremost priority.

Kristin began her career in early childhood similarly to the other teachers working at the campus preschool. She went through the early childhood education program at the university. Upon graduation with her bachelor's degree she discovered an assistant teaching job at the campus preschool and immediately applied. She started off as an assistant in the same room as Natasha. She felt fortunate to have been mentored by an experienced lead teacher her first year in the field. She loved the campus preschool and wanted to get her foot in the door, so she took whatever they had available. She stated that she was happy looking back that she started out as an assistant teacher because it gave her a chance to understand the philosophy of the school and her role as a teacher, before she took on a lead teacher position. She was able to get her footing in the classroom and really learn what it is like to be a teacher day to day. After the completion of her first year as an assistant in the 2-year-old room, an opening came about in the three-year-old classroom for a lead teacher. She inquired about the opportunity to work as a lead, and was

granted her request. She felt she was ready for this new challenge. Kristin has been working in the 3-year-old for the last four years.

Kristin decided immediately during our initial professional development session that she wanted to do a butterfly project. She chose this topic because the school was planting a butterfly garden and her students were a part of the planting process. The students were very interested in this idea of a butterfly garden and seeing if butterflies would come. The students were responsible for the care and upkeep of the garden, so Kristin felt this would be the perfect project based on children's current interests. During phase 1 the children observed the butterfly garden, Kristin brought in books about butterflies, and placed a butterfly kit with caterpillars in the room for observation. For phase 2 the children investigated butterfly habitats, the life cycle of the butterfly, types of butterflies, and the parts of the butterflies. The children represented their learning through dramatic play by acting out the cycles of the butterfly, observational drawings of the stages and parts of the butterfly. The children created many different representations of butterflies using a variety of mediums that included paint, wire, clay, and observational drawings. The children created habitats for their butterflies by collecting materials from their butterfly garden outside. The children went to the museum to speak to a butterfly expert to answer some questions they had. For phase 3 the students created videos of acting out the life cycle and sharing them with parents. The students also participated in the school showcase with the other classrooms displaying and explaining their work and knowledge.

I use the metaphor "The Enthusiast" to describe Kristin. Throughout the professional development sessions Kristin shared her desire for engaging and meaningful learning experiences with young children. She inspired the other teachers to try new and exciting approaches in the classroom.

Teachers as Learners

Kristin sits quietly smiling while she waits for Sarah to finish discussing her project

events for the week. Kristin has her hands on some pieces of paper that appear to be drawings

and some photos. She keeps looking down at them slightly and grins when she peeks at them.

Once Sarah wraps up her portion of the conversation, I give Kristin the cue to go ahead and tell

us what has been happening in her classroom. She excitedly starts with her projector activity.

"Well as you know, this week we were going to do our group work on the overhead projector!"

She exclaims enthusiastically. We all look her way curiously because the previous week we had

spoken in great detail about this idea for the children in her classroom. Kristin shares, "It was

really interesting! Some things went really well and some did not! It was definitely a learning

process." I asked her to go more in-depth about this and tell us what happened. She explains,

"Well at first I just was not sure how to have the kids do this. I decided they would work in

groups of three, and they were really excited about it. But we started running into problems

right away. They all wanted to draw the same parts, and they kept getting into each other's way.

I realized we were going to have to assign parts of the butterfly to work on and explain to them

how the projector works so they can understand where to stand while they worked." The group

chattered a little bit while Kristin got her documents she brought to the meeting organized. "See

I took this pic, I had to have one child work on one wing, and then one work in the middle, while

the other child worked on the other wing. The child in the middle had to duck down a bit while

they traced." Kristin is very explicit about the events as she explains what happened. She

shares a vivid experience of the children fighting with each other while trying to figure out how

to work together. She explains how she coached them how to work together on the project.

Kristin pulls out her photos and explains in detail every step of what the children did, how many

days it took to complete, and what she felt the children learned from the experience. Kristin then goes into detail about the learning she experiences as a result of this project. She explains, "I really have never thought of doing something like this in my classroom before, I am glad we came up with this idea last week. We always talk about how important it is to work on helping children enhance their social skills, but we usually do that through everyday talking and when situations arise. However, this was so very different! The children HAD to work together! They had to move out of the way for each other! They had to discuss what paints they were using and how they wanted their mural to look at the end. It took a little coaching, but it was amazing to see how they figured out working together! Look guys at what they came up with! They turned out so beautiful! The children worked on them every single day this week."

Kristin's primary focus was always on the children's learning. Through this interest in her class she was able to foster collaboration with her fellow teachers, and the children. She shared many important ideas and really showed the other teachers how she embeds multiple content areas within a single activity. Her input was pivotal in providing the other teachers different ideas they could use in their classroom by following children's interest and finding ways to create learning opportunities out of those curiosities. She gave advice to other teachers but she was also eager to hear the ideas of the other teachers as well.

During every professional development session Kristin shared several ideas for activities in other teachers classrooms surrounding their topic. It was as if she was constantly brainstorming activities and was always thinking of new ways to engage children. Kristin always shared unique ideas that demonstrated her focus on studying children and how to engage them in learning experiences. When discussing Natasha's truck project, Natasha was stumped as to what kind of truck for her children to observe. Kristin immediately responds that the garbage

truck comes by every Tuesday, and that Natasha could call the sanitation department to see if she could find out the schedule so the kids can look at it, and possibly arrange to speak to one of the workers. She did the same thing with Sarah suggesting different parents she might be able to seek out that could serve as a field expert for softball, with a unique focus on engaging and challenging children with new experiences. She had in-depth past experiences with the sanitation department because she had reached out to them various times in the past for her own classroom studying different topics. This exemplifies that the teachers each shared a distinct role in the professional learning community. She was constantly working to help solve problems from the beginning. Right from the start she shared her approach to discovering project ideas with her colleagues in our initial professional development session as illustrated in this discussion.

> Sarah: I don't know what to do. We are talking about fruits and vegetables right now, but we have kind of already started that.
>
> Kristin: What have the kids been doing outside or playing during free play in the classroom?
>
> Sarah: Ummm, I don't really know. They have been making ice cream (laughing).
>
> Kristin: Well what about looking at things that are right around the school. Something the kids can see every day.
>
> Natasha: Yes that makes a lot of sense. I mean I guess I am worried about doing trucks because when are the kids going to be around trucks?
>
> Kristin: Oh my! There are trucks everywhere. Behind the school those semis park, I

think to sleep. There is also the worker trucks for all the construction. Or even

the garbage truck. You just have to look around, I bet you will see them

everywhere now that you are paying attention!

Natasha: I guess you are right.

When Natasha was struggling with setting up dramatic play opportunities for the children

about trucks, Kristin brainstorms with her. In the 7th professional development meeting

(5/21/13) Kristin shares a possible idea with Natasha.

Kristin: Even those blue blocks that we have on the porch would work, it

might be really fun for them to manipulate and they could build their roads with

those, and it's huge. You could tie in math into dramatic play.

Natasha: Is it hard to put back in the container 'cause that scares me.

Kristin: Well, I think Vicki has posted a sheet to show you, you know, that tells you

how to place them back in the … but I think they would love that, Natasha.

Natasha: Okay. Hmm.

Kristin: Because they're big and you can just grab them and you line them up and

make a road and those trucks that you have in your classroom, they're big, so

they'd fit perfectly on those stone things.

Natasha: Okay. Maybe we'll do that Friday. Okay. I'm just a little afraid of those

things because it's like putting a puzzle together and I'm not so good at puzzles.

Researcher: Can you do it?

Natasha: No! (laughing) I just know it will take me like a month to get those blocks

back in that giant case, it is like a huge puzzle!

Kristin: If you have trouble, Marla will help you because she's put

them away several times, so I know if I am not able to help she can.

Natasha: Ok, Ok… I will give it a try.

Kristin fostered collaboration by distilling information to her peers in a congenial way, she was deeply respected by her peers. She was passionate about her work and her ideas and that was evident to all. The feedback she provided encouraged the other teachers in the group and gave them numerous ideas to try in their own classroom.

Kristin respected all of the peers in the group and often tried their suggestions in the classroom. She felt working together was pivotal in her classroom teaching. Multiple times during the professional development sessions as well as during our interviews she shared how much she feels her teaching has improved as a result of meeting with her peers in our final interview (8/23/13).

Researcher: What role did the professional learning community play in your project?

Kristin: Just sharing our ideas just really got me thinking. It

made me think of so many other activities I could do with the children sparked

from our discussions. I would have never thought of using the unfix cubes to

measure milkweed. That ended up being a significant experience for my students.

Researcher: Yes I can see how talking about it could bring about new ideas.

Kristin: As teachers we are all in our own classroom and we rarely have a chance to

talk to each other. Just by meeting every week I found out that we are planting a

garden at the school, oh and we have extra milkweed I can use in my classroom.

Just hearing Sarah and Natasha's ideas really made me think.

Kristin pointed out how meaningful it was to have discussions with the other teachers and to also see artifacts from other classrooms. During our final professional development session (6/4/13) she spoke about bringing pictures, children's work, and other artifacts to our discussions.

> "I am so glad we get to bring things the kids have been working on to the loft, even if it is just the daily sheets. I love seeing what you all are doing. It is really neat to see the ideas we talked about come to life! Since you made us do this, I have to think about what I am bringing up here… it makes me look more closely about what is going on in the classroom and what is important and even why! I am really learning new things about the children in my classroom, and how to go further with them."

Kristin listened to what the other teachers had to say. She was always looking for new and different things to try in her classroom. She tried everything that was discussed in the professional development sessions in her own classroom, and would then come back and share this with her peers.

Kristin worked with everyone in the group to collaborate, but her main focus was on getting her children to collaborate. She thought it was important to collaborate with her students, and to work with them to enhance their group working skills. While brainstorming in the professional development session what she would like to focus on in her classroom, she decided she wanted to zoom in on social emotional development and creating an activity to foster these skills. I threw out an idea of possibly having the children to work together on an art project. After much conversation amongst the group we formulated the idea of having the students create a mural of a butterfly by using an overhead projector. Here were her musings following the idea,

> "This is going to be really neat. There will be a lot of things that the children can work on during this activity. Obviously the fine motor skills of drawing, as well as

observational skills will be part of the mural creation. This will take several days to do, so the children will have a new experience of working on things over a period of time. I think it is going to be a challenge for them to work together! I will have to think about this, I think having them work in groups of three will be good. This will challenge them to work cooperatively in groups. I like this idea. I think this is going to be very interesting. I can't wait to try this with my kids!"

The following week when we reconvened Kristin was eager to share her experience with the group. She immediately focuses on the experience and the children's learning. She shows her documentation that includes a pictorial journey of the children's butterfly murals.

Figure 16. Butterfly Wall Murals

Researcher: So how did it go?

Kristin: Oh my goodness! It was really interesting! It was really hard at first, but what a great experience for the children. It was very difficult for them, and me as well to decide when to step in and when to let them work it out. I realized immediately that the children needed some sort of guidance! They immediately started fighting because they kept getting in each other's way. See when you project the image of the butterfly on the wall, if you stand in a certain place you block the image. So a child would stand right in front of it and the other kids would get

upset. I had to assign them a part and explain to them where they needed to stand to make sure they did not block the light. Once I explained this they did pretty well. It was neat to watch them. They talked about what they needed to do, and what needed to be done. Later when we went to paint their butterflies they had to decide as a group how they wanted them to look. I let them get creative and add additional things to make them unique. Look down there! You can see them drying. They came out amazing, the children were so proud of them. The parents really noticed them too, they are excited about the project too and all the things the children are learning. I made sure to mention in my daily sheet about how the children were working on their social emotional skills through this group work.

Sarah: That was hard for my kids too when we used the projector, but they did learn a lot by trying it. I can see from the picture that you have one child on each side that must have been after you interfered.

Kristin: Yes I had to really be specific about assigning sides and you can see that I am standing behind them to monitor at first. After awhile though I was able to step back a little bit and they were able to work more independently.

Natasha: How many days did it take you to do all this?

Kristin: It took us the entire week. They worked in groups of three and we only had one projector. They spent a day on tracing, and then another day to paint it. I was only able to do about two groups a day though. Toward the end of the week, other children were coming over and watching the other groups work, which was really neat. They would give each other tips, and usually the new group would listen!

Sarah: Did you choose what materials the children would use to complete their

butterflies?

Kristin: No! I actually let them decide what they wanted to use. They immediately chose

paint, I think because we used paint earlier for our symmetrical paintings. They

also chose to use pom-poms. The kids said they needed pom-poms because some

of the butterflies they have seen had what looked like spots, and the pom-poms

would make perfect spots on the butterflies. I thought that was really good

thinking on their part.

Natasha: They look amazing. I saw them hanging in the hall. All of my class

stops and looks at them when we walk by!

Researcher: Will you use the projector again for a group project?

Kristin: Yes! I think the kids learned so much and they were so involved in it, you could

tell they thought it was something special. But just so you know, the projector

light bulb went out just as we finished our last mural! Thank goodness not

before; I don't think we have any more bulbs.

In addition to finding ways to help her students collaborate, sometimes Kristin sees

herself as one of the learner within her own classroom. When speaking to Kristin in our first

interview one of the first things she spoke about was her love of projects. She informed me that

she felt it kept the kids engaged and always learning, but she noted that she always learns

something new as well. She shared that she loved exploring new topics and that she always

learned so much from every project topic. In our 8th professional development session (6/30/13)

she shares new information about butterflies to the group following their visit with the field

expert. "Ok, so you remember when the butterflies emerged from the cocoon and the kids and I

thought the butterfly was bleeding? That became of our questions we studied. We took that question to the butterfly expert. It is called meconium! It is the left over coloring from the butterfly wings! The butterflies I ordered were painted ladies, so there was a lot of coloring. The butterfly we found on the milkweed plant was a Monarch and they do not produce as much meconium that is why we didn't really see it when that butterfly emerged."

Kristin thought of the children in her classroom as capable learners, and respected their thoughts and ideas. This is evident in her approach she takes in her classroom and also the conversations she shares about her students. She considers herself a learner too, learning right along with her classroom. Her ideas brought new insight to the professional learning community. She demonstrated to the other teachers there are different ways of doing things in the classroom. She feels there is always something more to learn about teaching, children, and learning which is evident in her conversations and the documentation she shares within the professional learning communities. Her ideas toward children and children's work were evident with the documentation provided. She always brought a new perspective on children's work that made the teachers think about children a bit differently.

Creativity

As the teachers share the children's experiences in the classroom for phase two, it is evident by looking at her that Kristin is excited to share something. Although she is ready to talk she makes sure to attend to and contribute to the other members in the group, always ready to share an idea based on what the children are showing interest in. She initially notes something she saw a child doing from another class that she feels might be important to the truck project. When her colleague finishes she sets out her pictures and opens up her laptop. She starts

speaking quickly about how the children have really gotten into the life cycle of the butterfly because of their live caterpillars. She has created cards and let them create the part of the butterfly and caterpillar as well. She explains how after so much discussion about the life cycle of the butterfly she noticed that the children were trying to reenact this process in dramatic play. "I really wanted to be creative with this! This project has focused a lot of visual art, but little on dramatic play." She had the children create props for the different phases of the life cycle. For the caterpillar phase the children slithered on the floor and ate leaves that the children made, for the chrysalis she brought in a white sheet for the children to form an egg, and then the children can emerge from the egg with butterfly wings. The children were so excited about it she says that she decided to video the children so that they can watch their videos and that she can send them to parents. As Kristin continues to talk about her butterfly drama the pride is evident in her face. She has skillfully and creatively found a way to teach the lifecycle in a way that is meaningful for children.

Environment is a word that came up often when Kristin spoke in her interviews and in the professional development sessions. For Kristin, everything is about environment. She finds child interests and topics of study by noting what is in their immediate environment and what the children are drawn to. As noted in my researcher journal (3/18/13), Kristin uses the environment to guide her daily teaching.

After our initial interview I find it intriguing how Kristin naturally keys into the environment to find topics for children to explore. She looks at things going on in the school, takes advantage of everyday happenings, and explores her immediate surroundings. In the interview she spoke about how she pretty much already knew what she was going to have the children explore for this project because of the excitement in

her classroom about the butterfly garden planting. When she spoke about past projects she spoke of them naturally occurring because of an event in their immediate environment. She discussed the importance of her children being able to see, feel, and explore something every day. During the interview she also eluded to staging the environment and how she thinks about each area of the classroom for different learning opportunities.

During our initial interview Kristin speaks specifically about how the environment shapes her projects. She explained how she listens to the children while they are engaged and exploring their environment. Kristin gives multiple examples of happenings in the environment that sparked involved conversations between children. Kristin and her assistant teacher take anecdotal notes of what the children are conversing about, this is how most of her project ideas are shaped. Although, Kristin admits she doesn't follow the exact Project Approach framework, her classroom does engage in long-term in-depth learning experiences.

Kristin is always thinking of ideas of what to put in the classroom to engage children. She explains that she thinks of every center as an area of exploration for the children. She spends a great deal of time and planning to arrange the environment differently depending on what is taking place in the classroom, she is not stuck on keeping the room exactly the same.

In the 6th professional development session (5/14/13), she shares different activities that the children have engaged in outdoors.

Researcher: So tell us a bit about what you have done this week Kristin.

Kristin: We made some paper butterflies and we put pennies on both sides so the

children could balance them. This got us talking about symmetry.

Researcher: Oh wow, what did the kids do with the butterflies?

Kristin: We took them outside. The kids got to try and balance them on different body

parts. It was neat because we got into balance, which led to some other gross

motor activities.

It is evident that Kristin thinks of the environment as imperative to the daily learning

experiences of children. Through her words it becomes apparent that she believes the way

projects are brought about, the way they are carried out, and evidence of learning is evident in

the classroom environment. She also exhibits that the aesthetics of the classroom is of the

utmost importance, and a room should be ever changing for children to effectively explore.

Many of the conversations in the professional development sessions in which she contributed

surrounded around her classroom environment or helping brainstorm environment ideas for her

peers. She used her documentation as evidence to share with the group for in-depth

conversation. During our 8th professional development session (6/30/13) Kristin discusses

displaying children's work at eye level with the other teachers.

Kristin: My whole room is just full of so many things about butterflies now that we are

getting close to our phase 3! It looks so beautiful and colorful! The children love

showing and talking about things they created.

Sarah: I see that you have things on the table and on the wall.

Natasha: I think if I did that the kids would just come by and mess it up!

Kristin: At first I just had the larger butterfly depictions on the wall, but the children

started to ask where their symmetry butterflies were, so I decided to put those on

display as well on the table.

Natasha: Why didn't you put them on the wall?

Kristin: The children expressed so much interest in them, I thought that they would like

to have them just sitting out. I usually don't do this, but I decided to try it. The

kids will come and get them and take them to other centers, like dramatic play and

then bring them back.

Sarah: So they are kind of using them like props?

Kristin: Yes exactly! They are so careful with them too! Before I laid them out I told the

children that I was putting them on the table instead of on the wall. We talked

about how everyone worked very hard on these and we have to be very careful

with them if we handle them. They took this very seriously! It would take some

practice with your young group I am sure Natasha, but I think they could do it

with some direction from you.

Sarah: Hmmm, I am going to try this in my class and see what happens!

Below in Figure 17 is a display in her classroom that the teachers were discussing.

Figure 17. Classroom Documentation

Kristin shared in the professional development sessions how she displayed the children's work in

the classroom and why she displayed it the way she did. Kristin shares, "I like to

put up samples of what the children are working on. I try and put them on the child's eye

level when possible so they can go and look at it too. The children are proud of their

work and always show their parents when they come in to pick them up." After this

discussion other teachers tried hanging work a little lower in the room to see if it made an

impact with the children.

Kristin had an uncanny resourcefulness about her. She would see materials laying around

and find a way to use them. She made use of everything she had in her surrounding environment

and found a way to tie it in to what the children were learning. In the 6th professional

development meeting (5/14/13) Kristin shares an activity that ended up happening unexpectedly.

"Well I had all these socks in the classroom for puppets, but then we had the

mass death of all the caterpillars outside. It was all the children were talking about. I

think they drowned because of all the rain, we aren't really sure. But then I thought, hey

we can use those socks to make sock caterpillars and stuff them with newspaper and paint

them. That was much more in tune with what we were doing instead of making sock

puppets. So we just pulled out some green paint and a bunch of newspaper and put that

out for our art center that day. The kids loved it. They had so much fun making them!

Here is the daily sheet with them making them. Look at them! You should come see the

real ones."

Figure 18. Sock Caterpillars

Kristin is intentionally creative about the environment she creates. She starts with creating

aesthetic centers for the children to engage in learning experiences. She incorporates both in the

indoors and outdoors as learning environments to be explored. The classroom evolves as the

children engage in a project, embedding the children deeply into the topic of their study.

Kristin thinks about different teaching approaches, activities, and materials for children to explore and learn in the classroom. When speaking to her in both interviews one of her points of reflection primarily focused on what she could use differently or what else she could try if she does a similar topic again. She is always trying to keep things fresh and new keeping things creative in the classroom to improve her teaching. The excerpt below from our second interview (8/23/13) demonstrates this.

> "I am so glad we got to do the field trip that was really my favorite part. The kids really enjoyed seeing the butterfly garden, speaking to the butterfly expert, and then seeing the IMAX movie on butterflies. I am going to keep track of what things are happening at the museum and their different exhibits because it is so convenient to go there and a great resource. One thing I did for the trip was take pictures the whole time. Then a printed out some of them, and I brought them to our circle time. We then used the pictures to discuss the trip and then we used the pictures for sequencing. The children were completely into this. I even ended up putting the pictures in a center and the children were over there sequencing and talking about their experiences. I took notes of their words. From now on when we do something like this, I will make sure to take photos and let the children experience the photos and use them for sequencing."

Kristin sometimes sees something new and finds way to teach using the new material. She likes to have her kids explore different things in her classroom. In our 5th professional development session (5/8/13) a spool of wire sparks her creative nature in trying to find a way to incorporate it into the classroom.

> Kristin: Look what I found in the loft! I wonder what I can do with this. I think this would be neat to use, kind of like those Reggio slides you showed us. It seems

pretty bendable, I bet the kids could definitely bend this! I bet I could have the

kids try to shape a butterfly out of this wire. That would be something different

for them to use besides the typical clay and paint.

Sarah: Hmmm does anyone have panty hose? Remember when you showed us the

Reggio slide where the kids made the wind catchers? Maybe you could have the

kids use the pantyhose over the wire to make wings!

Kristin: I love it! I am going to try it and see what happens. Definitely something fun

and different for the class to explore.

Kristin is always thinking of ways to enhance teaching with each topic creatively. In the

6th professional development session (5/14/13) Kristin makes some suggestions to Natasha for

dramatic play/ art when her children appear to be "stuck" in their play.

Natasha: All the children are doing is rolling play trucks around. I don't know how to

get them to move beyond that. I was thinking about having them make a truck.

Researcher: That would be fun for them.

Natasha: Can I just use boxes and make a truck or would that be too broad?

Researcher: Absolutely, I think that is a great idea.

Kristin: There is a huge refrigerator box downstairs in the lounge.

Natasha: It can be a semi-truck.

Kristin: Actually we have had a ton of deliveries today. You need to run down there

and go get all those boxes of different sizes and shapes.

Natasha: Oh yeah, I need to do that.

Kristin: You can use that huge box as the body of the truck, and then that medium box

for the cab of the truck.

Researcher: You could find other recyclables to make other parts.

Kristin: You could have the kids focus on how to make the main parts, like the wheels, steering wheel, head lights. You could use aluminum foil, paper plates and bowls, bottles. There is all kinds of neat things you could use that we have right here.

Researcher: If you make the truck, you could expand that into blocks and they can create a truck stop, or gas station, ect.

Another aspect of her creative thinking is her ability to think and change paths in the spur of the moment. If her children take a different path, she is willing to switch gears and change routes if necessary. I note in my researcher journal (5/14/13) her creativity and ability to think on the go even if it is "unplanned".

After today's meeting I can't help but to think how Kristin is different in her teaching style then the other members of the group. This makes me think of the learning community and its members. Everyone has something different they bring to the table. They are all different in some way, and they all can learn from each others strengths and weaknesses as well. Kristin always just goes with the flow and has no issues with exploring something the children discover, even if it wasn't in the plan. Today she shared that while measuring milkweed plants the children found a caterpillar on a leaf. She automatically called the children together and let the children decide where they should keep it. The used the old parts of her caterpillar kit and let the kids keep track of it. She definitely took advantage of an opportunity that presented itself in the environment. She also used this as a teachable moment. Originally the students suggested putting the caterpillar outside in the garden. However, they had a discussion

about how all the caterpillars outside died for some reason. So they all felt it was safer to keep the caterpillar inside. The children also noted that the caterpillar looked different than the other caterpillars they had, this led to the children hypothesizing that this might be a different type of butterfly. So Kristin and the classroom are now comparing and contrasting this new caterpillar to the others they had, and looking for ways to use this opportunity to extend the children's learning.

In another instance, she shares her thinking process to assist a struggling colleague to think about engaging children in creative dramatic play.

Sarah: I am struggling with dramatic play, I don't know how to get the children into it.

Researcher: What do you have going on in there now?

Sarah: Well I have the helmet, uniform, and a base… but that is about it.

Kristin: Why don't you try doing something outside for dramatic play? Maybe they can do a mock game. You could have the kids make props for the game, and set up things that they saw when they went to the game! You could have a concession stand, maybe you could have a few kids play instruments, maybe make tickets, and have someone collect them?

Sarah: That sounds really cool! I think the kids would like that!

Kristin: You could keep everything in one place and then just bring it out with you when you go outside that way the kids could do it several times.

Researcher: That is really a good idea. The children could also go to the fence and look at the softball field to get ideas.

Kristin's creativity expands to her teaching style. She is able to follow the children's lead, and go where they want to explore. She is flexible yet intentional in her teaching. She shares her teaching ideas with the others in the professional development sessions and the teachers are eager to hear her ideas. This has led to teachers trying new things in their classroom. The collaborative efforts between the teachers are evident by the way they are supporting each other, and willing to try new ideas. They have a different focus on children and children's work.

Intentionality

As we are conversing in our initial interview, I ask Kristin about inquiry and what it means to her. She immediately relates inquiry to young children. She replies to me, "I think of pulling questions that the students have about a certain subject and proving with them in an interactive way of learning or having them solve their problems, have them come up with their answers through hands on learning and providing an environment where they can answer their questions, you know through play and certain activities." I clarify her response about using a "hands on" approach and she continues on, "As a teacher I have to provide an environment where their questions can be answered through their play and games and activities can help them learn more about what they are interested in and just going off their interests and what they are curious about. I have to find a way to weave in math, art, literacy through what they are interested in." I then ask her how she inquires about her own teaching, and she says she doesn't really do inquiry on herself. However, later she contradicts herself with this statement, "I am constantly reflecting and thinking about what works and doesn't work. I keep notes about things in the classroom. Right now it is all about transition times, it can be a hard time for me and the kids in my class, so if I see that they are lining up by what color we are wearing today, I record if it works or not, if it is not working I try something else the next day and record that as well. If I

have a great art activity that I want to do with the kids and incorporate literacy in it with the kids

I write notes, did this work? Was this over their heads? Is learning happening here? That helps

me dictate what I do with them in the future. But I also take note if it is something they are not

ready for now, but might be a few months down the road." At this point I realize, she doesn't

think of herself as an inquirer but it is the foundation of her teaching.

Kristin used the Project Approach as a means of integrating curriculum. She seamlessly

embedded math, science, social studies, and literacy into her butterfly project. Her ability to do

so and share with the group served as a great learning opportunity to everyone in the group.

During the 7th professional development session (5/21/13) she shares the documentation of

intertwining math, science and literacy.

Figure 19.   Measuring Milkweed with Blocks

"So I shared with you last time that I wanted the kids to go outside and measure the

milkweed plants since we have been paying such close attention to them because of all

the butterflies they attract. Well we got lucky because Patsy told me that she had some

extra milkweed plants in her office! This was perfect, because I just brought the plants

into the classroom for the children to measure. I had the kids measure the plants with

duplo-blocks so they could relate the measurement to their own experience. I thought

that would have more meaning for them. They loved it! I just set it up in the math

center. I created a sheet for them to record and tally the blocks. The children were really

into this and it really showed their one on one correspondence skills. I also put magnifying glasses in the center for the children so they could look closely, integrating science really. Then we found a caterpillar! So we put it into one of our containers left over from our larva kit. Now we are all waiting to see if it will form another type of butterfly!"

For every activity that was placed in the classroom for the children to explore, Kristin had a specific learning goal in mind, and she shared the way she approached this with the teachers in the professional learning community. She was always looking for ways to embed multiple content areas into a single classroom activity. Kristin uses both her personal documentation as well as the children's work to share experiences with her class, the professional development group, and parents. She combines sources to discuss and document learning in the classroom. For the children's field experience she created a power point of photos to share with the classroom as well as to email to parents. Within the power point she has children's comments and questions spoken throughout the field experience. Kristin later shares with me how she used this to enrich the learning experience for the children. Kristin says, "I sent the

power point to all the parents and they really loved it. The next day I showed the children and read what I heard them saying during the trip. The kids were excited to see what they had said repeated, and were proud! We used the power point to revisit the web and note the new things we learned. I had never done this before, it was pretty powerful!"

For Kristin, the documentation served as a guide to dictate where she should go next and a cue as to how to embed future learning experiences. During the 6th professional development session (5/14/13) she shares how her classroom is changing with the group as a result of their

emerging interests in caterpillars and butterflies and her curriculum integration. In figure 16 the

teachers discuss curriculum integration surrounding a work sample of an observational drawing

of a butterfly.

Figure 20. Butterfly Observational Drawing

>Kristin: Here is one of the observational drawings the children did of the butterflies.

>Natasha: Wow there is so much detail! That is pretty incredible! You labeled it for
>them?

>Kristin: I know they worked so hard on these! They really took their time to do their
>best work. Well as the kids were drawing, I noticed that they were saying the
>parts of the butterfly that we have been talking about. So I thought this would be
>a great opportunity to write what they were drawing so they can see that these
>letters have meaning and start with letter/ word recognition.

>Sarah: I try and do this sometimes in my class. I have seen them go back to the work
>when it is hung up an " read" the words that I wrote from their drawings. I
>think it is a great start for the 3's and noticing print.

Sarah did something similar earlier with her children when they were observing caterpillars in

the classroom.

"Well we now have our caterpillars in the science center. I have moved things around
and put magnifying glasses in there so the kids can get a closer look. I also put some
pencils and paper in there in case they wanted to draw what they saw. I tried to integrate
science and writing with the children on their caterpillars. It was funny because in this
picture Stacey noticed that the L's in the caterpillar looked similar to the lines in her
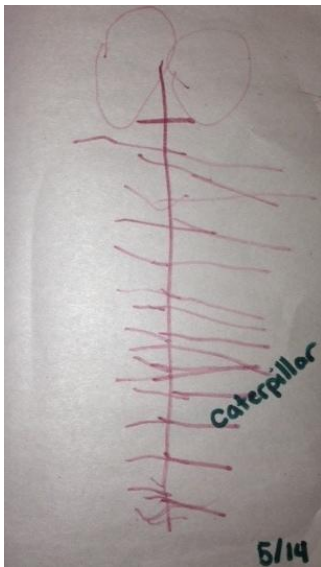drawing!"

Figure 21. Observational Drawing of a Caterpillar

Through our conversations and the work samples Kristin shares with the group, it is
evident that her classroom is in constant metamorphosis as her butterfly project evolves. As the
children progress through their phase two investigation the room becomes a reflection of their
ongoing learning. The room is covered with observational drawings, painting representations of
butterflies, 3d representations of the parts of a butterfly as well. The science, math, literacy,
writing, and dramatic play centers have taken on a new life with different plants and types of
butterflies a part of the center. In my researcher journal (6/25/13) I note,

Every day from the daily sheets and the artifacts that Kristin decides to share

you can sense how the entire classroom has transformed as a result of the butterfly study.

Everything the children are doing revolves around learning more about their specific

questions of butterflies. Kristin appears to use every inch of space to incorporate learning

experiences for the children. She has shared many of these ideas or how to make them

applicable in her colleagues' projects. She has mentioned several times that the more the

children do with butterflies she sees from their work they can go farther and she pushes

them to do so. The children's work sparks new ideas and she is constantly aware of

where the children are and where they are capable of going.

Another example of Kristin's ability to embed content. Every center, circle time, and

outside play had rich learning opportunities. In our 7th professional development session

(5/21/13) Kristin shares another example of how she folds in other content areas to enrich the

inquiry experience for the children.

"Well the children are so into the butterfly life cycle now that we found

another caterpillar! We have acted it out, and now I created a set of cards that have

numbers on the top, and the word at the bottom. I found at the Dollar Store plastic

butterfly life cycle pieces. The kids have to sequence the cards and match the word to the

butterfly phase. I know they are going to do it because of order, not the words, but it is

just more expose to print. Plus we have added a word wall documenting all the new

words we have learned!"

In my researcher journal (7/20/13), as I was analyzing Kristin's data I note the multiple times she

foster's inquiry in her classroom.

After listening repeatedly to the audio recordings, looking at her

documentation, and reading the transcripts I am amazed at how Kristin is always thinking

of new ways to embed content and create opportunities for the children to inquire and

discover answers alone. She has taken full advantage of the butterfly garden. Having the

children tend to the garden, looking for answers after the caterpillars died, and observing

butterflies outside as well as in her kit. She brought out magnifying glasses, pencils, and

clipboards every day for the children to conduct observational drawings if they chose to

do so. She took a simple craft of making butterflies with pennies stuck to them, and

created an opportunity for the children to discuss balance and symmetry. She makes a

true effort to work on all developmental areas while doing so within the context of

something that the children are completely absorbed in. Her work and efforts are evident

in the massive amounts of documentation she shared in the sessions, in the daily sheets to

parents, as well as on the wall.

Kristin always looks for a way to enrich her children's learning experience, embedding content

whenever possible. She is intuitive in exploring every possible teachable moment, to enhance

the children's exploration. This seemed to come naturally to Kristin, while the other teachers

really had to sit and think about how to embed different content areas into a center, or a learning

experience.

Everything Kristin does is a result of how she thinks it will affect the children in her

classroom. She is always looking for children interests and seeks ways to create learning

opportunities through these themes. She watches and listens to children's conversations, takes

anecdotal notes to decide where her classroom should explore next. In our initial interview she

shared her love of doing projects and the different successful projects she has done with the

students in her classroom. Kristin said she feels it makes learning fun for the children in her classroom and that she finds teaching more rewarding when engaged with projects with the students. When I inquired if she does the same projects every year with her students. She responds (Interview 1, 3/18/13),

"No! It really depends on the class I have that year. They always get into something different, and what is going on at the school. Last year we had a ridiculous amount of frogs on our playground for some reason, and the kids became obsessed with them! The minute they got on the playground everyday they would run out and start searching for frogs. So obviously I decided that we would study frogs. It was such a great project. We ended up studying them for about 8 weeks. We did all kinds of things around frogs, and I was able to weave in literacy, and other key areas because they were so into it."

While talking with Kristin, it is very apparent that she loves to discuss her classroom and all the different amazing things her class does. Her primary focus is always on the students. She always looks for ways to engage children by following their lead. During our first interview (3/18/13) she shares another project that the children initiated this school year.

"It always works better when I let the children pick what they want to study. I listen to what the children have to say and take notes. Before, I once tried to start a community worker theme, and I could tell the kids just weren't into it. Then Valentine's Day was approaching and I brought in some pretty heart shaped cookies. The kids loved them! They started trying to make the same cookies with the pink play-doh I had made for the class. Next thing I know we are doing a full-blown bakery project! Over the weeks the children studied different types of cookies and tried to recreate them. One day we lined up chairs and pretended to deliver the baked cookies to different houses. So then we got

into how a bakery runs. We looked at the different things a bakery could make, how they

take orders, how they make them, what they use to make them, and then how the items

are delivered. The kids loved it! You just never know with kids. Right after we finished

our bakery theme we saw a fire truck at the building next door, then the kids wanted to

learn all about the fire truck! However, when I first tried to do community workers,

which included fire fighters, I got no response! It took the kids seeing the truck to spark

their interest and I just went with it!”

Kristin demonstrates responsive teaching with her peers in the professional development

meetings as well as in her classroom. While the other teachers somewhat struggled to come up

with topics for their project, Kristin was quick to give possible suggestions. She asked one of the

teachers during our third professional development meeting, “Well I know you are having

trouble thinking of something, what are your kids doing? What are they playing outside? Or

inside for housekeeping? Anything that caught your attention? I like to write down what the

kids are saying while they play, it helps me.” The way in which she advises her colleagues

exhibits how she goes about her own teaching process.

Kristin shared many examples of her ability to change courses when the children spark an

interest in something. In our initial interview (3/18/13) she explained to me the way topics come

about in her classroom and how she is flexible to follow the children’s lead.

“At some point last year there were frogs everywhere on the playground, so our frog

project emerged. For the frog project the kids were going crazy looking for frogs. At the

time I think we were involved in a transportation project but the children kept talking

about the frogs! I finally allowed the children to bring them inside and we put them in an

aquarium. I let the children do observational drawings of the frogs. However, we let

them go at the end of the day so that they wouldn't die. We then explored where the frogs lived, we kept track of where we found them and where they were hiding. We discovered that the frogs enjoyed wet dark places. So we them used that information to design our indoor habitat in the aquarium. We found out about tadpoles too. It's a shame there is no pond close enough for us to see if we could find any. We also used the outside to play frog games! We made lily pads and had the kids jump from one to the next, kind of like leap frog. It was a great gross motor activity for the kids. I took anecdotal records of their conversations and that allowed me to know where to go with the project."

In the professional development sessions, Kristin mentioned a few times that she liked to capture children's words while they were engaged in their environment. She would write down what the children would say to get an idea of what they knew already and what they needed to learn. Here is a sample of children's words that she showed the class and her interpretation on this artifact.
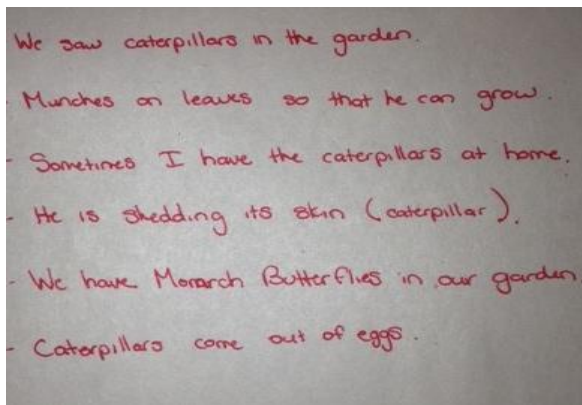

Figure 22. Documentation of Children's Words

Kristin shares, "So the other day I took a piece of paper outside with me while the kids

were down in the butterfly garden exploring. I didn't ask questions, I just listened to

what they were talking about. I realized they already knew some important things about

butterflies! They knew the names of some types, what caterpillars eat, some of the life

cycle, and basics on habitat. This gave me an idea of what we didn't need to spend time

on, and where I could really expand and teach them new things!"

Having the teachers look at what she wrote and discussing it was powerful within the learning

community. The importance of listening and writing children's words was shared. I noticed that

this became a more common practice as the weeks went on with the other teachers.

Kristin always follows the lead of her own students. This means she rarely can tell you

weeks in advance what she will be studying in her classroom. She doesn't set a time for her

projects, she just follows along with the children until she feels that the children are saturated on

a topic and another interest has formed. She is responsive to what they need to learn and what

they are interested in. Her approach to teaching is somewhat different than the other teachers in

the group. The teachers look to her as an expert, and take her ideas very seriously. Through the

documentation she shares it is evident that she thinks critically about the children as learners, and

her ideas and artifacts make an impact with the teachers.

Synthesis

What was the nature of Kristin's experience in the professional learning community?

Kristin's fcus was always on her children and the classroom. The professional learning

community served as a forum for Kristin to share the work going on in her classroom, and to

listen to her peers. She regarded feedback from everyone as a valuable resource, and would

readily collaborate with the teachers.. Kristin was a key collaborator with all the teachers as well

as her own classroom. There was a cyclical effect where Kristin would share information and receive input, she would then go back to her classroom and experiment, then come back once again and share her classroom experiences. The professional development sessions seemed to serve as a catalyst to spark further creativity within her classroom. The discussions with everyone made her think of more ideas to try with her children. Her ideas seemed to spark the other teachers to think about teaching differently, and look closely at what the children were doing in her classroom. They saw the vast capabilities of children through her stories and documents.

The professional development sessions gave Kristin the opportunity to discuss the children in her classroom. These discussions provided a place to look even more closely at individual children. Her primary focus was on children's learning. She used the artifacts as a way to look at what her children knew, and where she could take them next. She saw how the children were developing and growing while deeply engaged in the butterfly project.

Table 5

Kristin's Themes

Teachers as Learners	Collaboration from Teachers
	Collaboration with Children
Creativity	Environment
	Teaching
Intentionality	Embedded Content
	Responsive Teaching

During the professional development sessions Kristin shared the way she embedded content areas into her projects. She wasn't even aware of how much she embedded until she was talking about it. This made the other teachers take note of how she worked and how she was able to connect math, literacy, science, social studies, and the arts almost seamlessly. Her

practice of teaching made the other teachers think about what they were doing in the classroom as well, and focus in on their own pedagogy.

In what ways and under what conditions did documentation of classroom practice play a role in Kristin's learning? Kristin found that having to decide what to bring to the professional development sessions provided an opportunity to look closely at what her children were doing. She had to think about what she was bringing and why. For Kristin she took the opportunity to look at what the children were learning and how she can expand this knowledge base. In turn, she looked at the documentation of other teachers as an opportunity for further ideas for her own classroom.

Kristin was honest regarding the documentation. Although she found the experience beneficial, she thought it was somewhat time consuming to go through the students work and decide what she was going to bring. She was doing it because she was asked to, she admitted that she probably would not do this on her own if I was not holding her accountable to bring something. She did explain that she did go through a similar process when she created her daily sheets for parents, so she found doing it again for the group was a bit redundant. However, by looking at the artifacts more than once she did mention reflecting deeply on the children's work.

Chapter Seven

Cross Case Analysis

This study sought to describe and explain teachers learning within school contexts by exploring the nature of teachers' experiences in learning communities. This study explored the ways in which teachers participate in professional development sessions using the Project Approach as a framework for facilitating and engaging in inquiry. The questions that guided my research were: What is the nature of teachers' experiences in inquiry-based professional learning communities? In what ways and under what conditions does documentation of classroom practice play a role in teacher learning?

I conducted a qualitative multi-case study to discover the nature of teacher's experiences in professional learning communities and the role of documentation in teacher learning. As described in chapter three, I used multi-case analysis as described by Stake (2006) to allow for rich descriptive data and in-depth interpretive analysis of each individual case and a cross-case analysis that provides substantive, interpretive assertions as described in chapter three.

In chapters four through six, I took an in-depth look at each case in order to describe themes from each individual teacher's experiences in the learning community. I also took a close look at the role of documentation in teacher learning within the professional learning community. Each teacher had unique themes based on own their experiences within the professional development sessions. Therefore I looked at each teacher individually before the cross case analysis.

I began my analysis by looking at each teacher as an individual case. I compiled a data record for each teacher that included; transcription of interviews, transcriptions of four professional development sessions, artifacts brought to the sessions, and teacher daily sheets. Through my data record, codes for each teacher that led to emerging themes for each teacher. I felt it was important to look at each teacher as an individual case in order to identify each teacher's personal experience within the professional development sessions and to gain a deeper understanding of the role of documentation in teacher learning.

After completing my single case analysis, I generated codes across cases. I then compiled all of the data records and generated themes across cases in order to answer the research questions posed in my study. Through my cross-cases analysis four primary themes emerged: group dynamics, fostering inquiry, documenting children, and facilitation (see table 26). The themes *group dynamics* and *fostering inquiry* relates to my first research question: What is the nature of teachers' learning experiences in professional learning communities? The themes *documenting children's learning* and *favorable conditions* seek to answer my second research question: In what ways and under what conditions does documentation play a role in teacher learning?

In this chapter, I present the cross-case analysis I begin by presenting an overview of each teacher as an individual case with respect to the research questions. Through my cross case analysis I discuss the assertions across cases as a result of my data analysis. I then respond to the research questions, and implications of this research for the field of teacher education.

Table 6

Cross Case Analysis

Group Dynamics	Belonging
	Power
	Collaboration
Fostering Inquiry	Doing it Right
	Teachers as Learners
	Re-conceptualizing Practice
Documenting Children	Looking Closely
	Children as Learners
	Focusing on Children
Favorable Conditions	Facilitation
	Accountability
	Purposeful Documentation

Summary of Individual Cases

For Natasha the professional learning community provided a sense of belonging as she struggled to find her identity as a teacher. She began the professional development sessions questioning herself about everything. The group helped to validate her professional identity by being part of the group, which eventually helped her find her own voice. The professional learning community provided a platform for her to share her ideas and problems with the group and seek out answers together. It was important for Natasha to see that everyone had questions about teaching, and that they shared the same struggles in the classroom as she did. For Natasha, the documentation in the professional learning communities brought to light a deeper understanding of children. She began to look and the children's work differently, and re-conceptualized the capabilities of the children in her classroom. The rich discussions evoked from discussions based on documentation helped her to look more closely at her children's work.

Members Only: Natasha

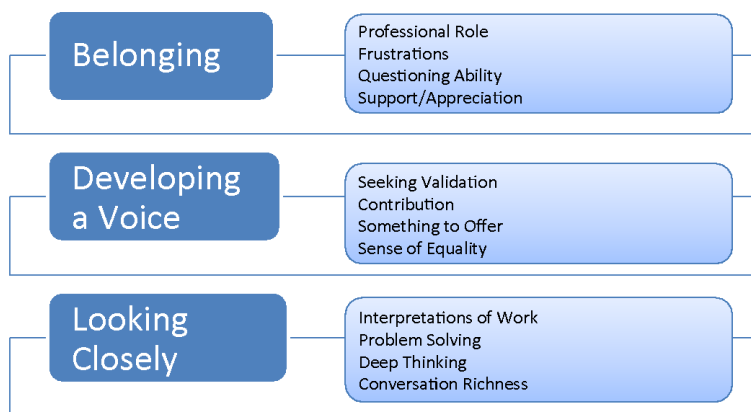| Belonging	Professional Role Frustrations Questioning Ability Support/Appreciation
Developing a Voice	Seeking Validation Contribution Something to Offer Sense of Equality
Looking Closely	Interpretations of Work Problem Solving Deep Thinking Conversation Richness

Figure 23. Members Only: Natasha

For Sarah the professional learning community provided a platform for discussions around teaching and the classroom. It was a safe place to share ideas, frustrations, and to problem solve. She was able to give suggestions to others and found listening to other teacher's beneficial to her own practice. The professional learning community provided a sense of community that was important to Sarah. She felt it was important to know what was going on in other classrooms and felt the conversations went beyond the professional development sessions. The documentation brought to the professional development sessions made Sarah think more about her own classroom and the children she taught. She reflected that deciding what to bring to each session forced her to look more closely at what the children in her classroom created, and the further discussion within the professional learning community took this to another level. The need to bring documentation made Sarah feel accountable to demonstrate what was taking place in her classroom. As Sarah began to think differently about documentation she began to display the documentation in the classroom more to allow the children to revisit their work.

The Coach: Sarah

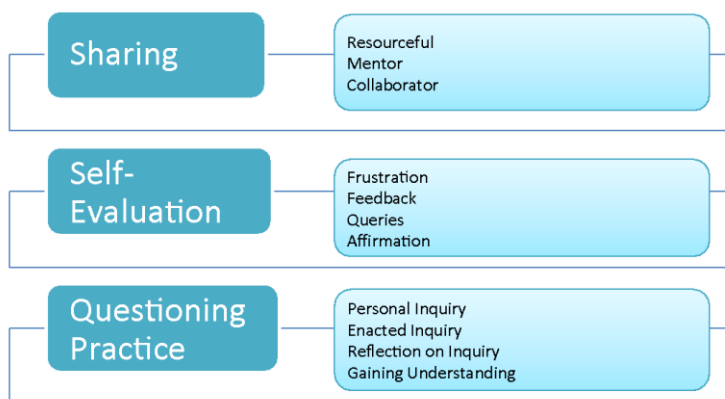| Sharing | Resourceful
Mentor
Collaborator |
| Self-Evaluation | Frustration
Feedback
Queries
Affirmation |
| Questioning Practice | Personal Inquiry
Enacted Inquiry
Reflection on Inquiry
Gaining Understanding |

Figure 24. The Coach: Sarah

Kristin utilized the professional learning community as a place to share the work going on in her classroom, and receive feedback from her peers. She thought of all her peers as a valuable resource. Collaboration was key with Kristin, she felt that listening to her peers and discussing her own classroom sparked further creativity in her teaching. These discussions created a sense of affirmation for Kristin when she was considered as a valuable resource, and this fueled her to continue her work. Kristin provided a strong pedagogical voice within the group and shared her creativity and her practice of embedding content areas within her classroom. Kristin felt that documentation was important, and she used documentation a great deal in the classroom for children to see and for her daily sheets sent home to parents. Although she enjoyed the conversations about documentation she felt that it was a bit time consuming. She admitted that she probably would not continue to look at the documentation the same way if it wasn't required for the professional development sessions, even though she knew it forced her to reflect more deeply on children's work.
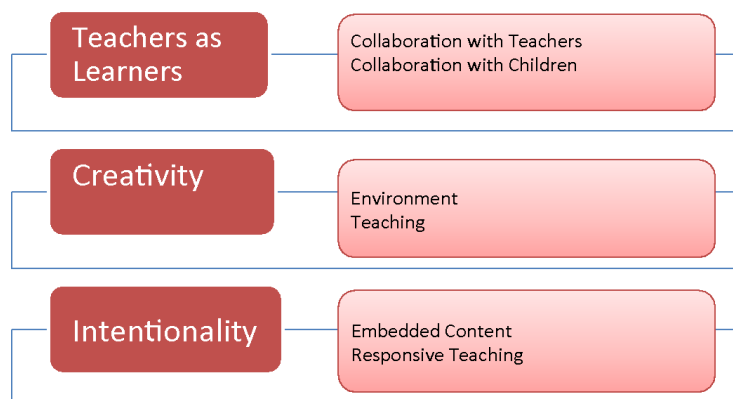
The Enthusiast: Kristin

Figure 25. The Enthusiast: Kristin

Table 7

Individual Teacher Themes

Natasha	Sarah	Kristin
Belonging	Sharing	Teachers as Leaners
● Professional Role	● Resourceful	● Coll. with Teachers
● Frustrations	● Mentor	● Coll. with Children
● Support	● Collaborator	
● Appreciation		
Developing a Voice	Self- Evaluation	Creativity
● Seeking Validation	● Frustrations	● Environment
● Contribution	● Feedback	● Teaching
● Something to Offer	● Queries	
● Sense of Equality	● Affirmation	
Looking Closely	Questioning Practice	Intentionality
● Interpretations of Work	● Personal Inquiry	● Embedded Content
● Problem Solving	● Enacted Inquiry	● Responsive
● Deep Thinking	● Reflection on	Teaching
● Conversation Richness	Inquiry	
	● Gaining	
	Understanding	

Teachers Experiences in Learning Communities

Group Dynamics.   The learning community provided a place for teacher validation, belonging, and creating a sense of community within the school. The sub themes that emerged were belonging, power, and collaboration. The teachers within the professional learning community felt a strong sense of belonging within the group that created an identity of teachers as professionals. Within the group there was an unspoken hierarchy where every individual had their own niche. Despite the power differentiation within the group, the teachers saw themselves as a team and worked together to benefit the children in their classrooms. The teachers stated that discussing their classrooms within the professional learning community brought them out of isolation. The teachers began to discuss teaching and classroom experiences outside of the professional development sessions.

Belonging. Belonging to the professional learning community validated each teacher's identity. For each of the teachers "belonging" to the group was seen as important. The meaning or purpose of belonging was different for all of the teachers, but there was a sense of importance of being a part of the professional development group. Hendersen et al. (2012) noted that professional learning communities surrounding inquiry validates and affirms teacher identity. For Natasha, this meant that she was seen as an equal and as a professional. Natasha mentioned several times in her initial and final interview that being part of the group was important to her because it made her feel like a professional within the field. This sense of belonging also fueled her to see herself in a more professional light and encouraged her to explore her students and classroom differently. For Sarah, belonging to the group provided her with the opportunity to serve as a mentor to her peers. She always made sure she was ready to give advice and ideas to her fellow teachers and took pride in being able to share her knowledge with the group. For

Kristin, being part of the group allowed her ample space to share her classroom experiences with her peers. She was excited about what was going on in her classroom and was delighted that she could share these classroom experiences with the group. This reiterates the findings of Ha and Yuen (2009) where teachers felt valued as a result of meeting, discussing, and solving problems together.

Meeting as a professional learning community led to the teachers as seeing themselves as important and as professionals. The teachers felt a sense of what they were doing was important and had a very meaningful purpose. Sarah said it best in her final interview when she stated, "Meeting together with the group makes me see myself differently. I sometimes feel like the title 'teacher,' especially in early childhood is seen as a daycare worker. But with our discussions I see myself as important. I am affecting the lives of many children and my role is very important. That is reassuring." The teachers meeting together and looking at the work of other classrooms and discussions surrounding their classrooms, elicited a sense of importance to the group. There was a sense of professionalism based upon an ongoing learning process where there was reflection and discussion of work (Lazari, 2012). It was evident from their statements that feeling like their job was important gave them a stronger sense of importance for themselves and their role as a professional. I note in my researcher journal following my interviews (8/30/13):

> The teachers seem to need the assurances that come from the professional
> learning community. They all made mention to the fact that they see themselves as more
> important in their role in the classroom when they get to meet and discuss what they are
> doing with others. This made me reflect back to past issues with not including the
> assistant teachers on past professional development sessions. It is important for everyone

to feel they are a part of the group and that they are important. This sense of importance as a professional seems to drive their classroom practice.

Being a part of the learning community and reflecting on their work made them view themselves and their work differently, they saw themselves as professional group (Vaughn, Parsons, Kologi, & Saul, 2014). This propelled them to bond in the professional learning community. Wenger (1998) also discusses identity as a central component in learning communities and how experiences are negotiated to determine how you fit into a group. The teachers in this study confirm findings from previous research that professional learning communities provide teachers with a sense of belonging that is key to validating teachers as professionals.

Power. In the professional learning community there was an unspoken hierarchical order of power, sense of trust, and an established role for the teachers. From the beginning of our meetings it was obvious there was an unspoken roles established among the teachers, and myself as the facilitator. The teachers saw me as an enforcer of accountability. This brings to light the idea that most teachers see their role as teacher, strictly within the classroom. Professional development and the professional learning community were seen as "extras," not an integral part of the job. Clausen, Aquino, and Wideman (2009) note it takes time to develop a professional learning community, where teachers see themselves in charge of their own learning. Not all aspects are in place in the initial stages of creating professional learning communities. All of the teachers stated in their final interviews that they knew they had to bring documentation to each session. They shared that they spent time each week looking at their artifacts and deciding what they would bring because I expected it. They also were aware that I was looking at their Daily Sheets and other classroom communications.

Despite this feeling of accountability the teachers described a strong sense of trust between everyone in the group that is imperative for a professional learning community (Dana et al., 2008). The teachers felt they had a say in their own learning and the approach wasn't completely top down, which is recommended by Helterbran et al. (2004). Aside from myself, a hierarchical system emerged that was unspoken but still very much in place. Natasha saw herself as inferior to the rest of the group and questioned everything she did, especially at the beginning, however this changed over time as she developed an authentic voice through interests and important issues for her (Helterbran et al., 2004). I note this in my researcher journal (6/20/13).

> When looking through Natasha's transcripts for the first time, I was amazed at how almost everything she says is a question in the first three professional development sessions. Even when she makes a statement, her intonation is as such that it seems like a question. In everything she does, she needs assurances from the rest of the group.

> From the beginning, Sarah was looked upon by the group as an "expert" in the field. I believe this was because of her level of education. On multiple occasions when someone had a question about teaching practices the question was directed toward Sarah. This was noted multiple times in my researcher journal, here is one expert as an example (5/4/13):

> Sarah is considered the expert of the group. She is seen as a viable resource. Sometimes she offers information, and at other times they ask her directly. She seems to know where everything is and how things work. Everyone looks to her for some assurance they are doing things right. I find this interesting because she has not been in the school as long as the other teachers, so I am attributing this phenomenon to her being a part of the PhD program.

Kristin is also seen as an expert, but for some reason not as highly ranked as Sarah. Kristin is seen as the pedagogical expert. She is dominant in embedding content, engaging children in projects, creativity, and thinking of ideas to engage children in learning experiences. Throughout the professional development sessions she was constantly brainstorming different ideas for the teachers to try in their own classrooms. All of the members of the group, including myself contributed to the conversations. There was a balanced group dynamic that engaged in reciprocal communication (Dana & Yendol-Hoppey, 2008). This was evident multiple times in chapter four in Kristin's discussions with other teachers. I wrote about this in my researcher journal (5/30/13):

> Kristin is the idea creator! She is always thinking of activities and materials for the teachers to use and try. The teachers are constantly seeking her guidance for their projects and how to take things more in-depth with their students. The teachers take her ideas very seriously and occasionally try them. However, they seem more timid to try new things. This might add to the respect they have for Kristin because she is always going out of the box in her teaching.

It was evident there was a type of hierarchy within the group, however the teachers seemed very comfortable with each other. Natasha somewhat questioned her statements initially, but everyone felt comfortable sharing their classroom success and failures with each other. This was very important with the group as time went on and discussions became more in-depth. Each teacher played a significant role in the group each providing different contributions, which became evident once trust was established. This denotes the importance of long-term professional communities in order to establish an environment of trust and support. This requires a significant time investment to create trust and establish roles within the group. The

role of power is very important. The hierarchy of roles could either facilitate or inhibit the development of stance as an inquirer.

  Collaboration. Collaboration was seen as the strongest benefit for teachers participating in the professional learning community according to the teachers. The teachers within the group quickly saw themselves as a team. The teachers collaborated and throughout the weeks engaged in rich conversations to construct new knowledge (Adger et al., 2004). Initially this consisted of answering questions about projects and trying to figure out what they wanted to do in the classroom with their students. There was a powerful moment early in our professional development sessions when I asked the teachers to create a web on their chosen topic. I had them turn away from each other and brainstorm. We then looked at each web and brainstormed together. The teachers were amazed at the difference in the webs from when they were working alone and when they worked together. This demonstrated Rogoff's (1995) belief that social interaction advances thinking for an individual within a collaborative setting. Figure 21 is Kristin's web when she worked alone and Figure 22 after the collaborative brainstorming session.
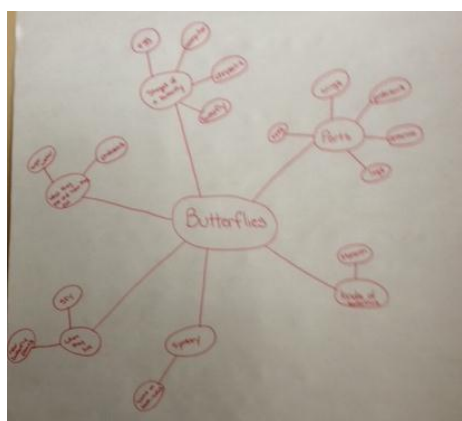

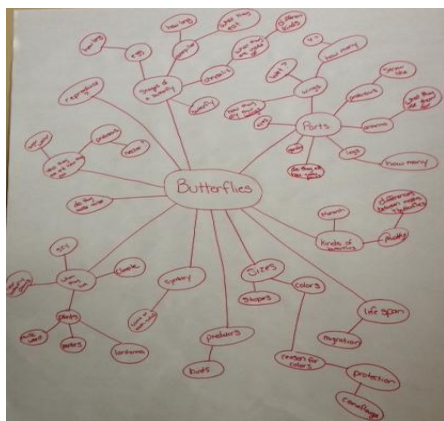Figure 26. Initial Butterfly Brainstorm Web

Figure 27. Collaborative Butterfly Web

As the projects got underway the teachers quickly looked to each other as idea generators. They sought out each other for activity ideas, suggestions on materials to use, folding in content, finding field experts for project topics, behavior issues, and engagement issues. The teachers seemed to gain a new insight into teaching through collaboration of classrooms surrounding teaching experiences (Abramson, 2008). Each member of the group had a different area of expertise that questions were generally directed, as is emphasized repeatedly in chapter four by the teachers using each other as resources for multiple purposes. I note this in my researcher journal early on (4/17/13).

> The teachers are working together as a team giving all types of suggestions for
> the classrooms. They are sharing activities and materials for the most part. The teachers
> are realizing a greater resource in numbers. They are not embarrassed to ask for
> guidance. I can see they want each other to be successful. The teachers are invested in
> the children in this small school, and do not seem to view each other as competition.

As time went on the teachers began to collaborate outside of the classroom as creating a sense of de-privatization with the teachers (Blank, 2008). Teachers felt more comfortable reaching out to each other during the week, because they all knew what was going on in each

others classroom according to all of the teachers. There was a sense of shared responsibility created within the professional learning community that extended beyond the professional development sessions (Moran, 2007). The teachers felt they were no longer all alone in their classrooms. They knew what was going on in other classrooms and the teachers had a sense of what was going on in their classroom. The teachers within the group saw this as important. There was the beginnings of a gradual shift where teachers started to take ownership of their work that could eventually lead to phasing out my role as facilitator (Sheridan et al., 2009). All of the teachers mentioned this in their final interviews the sense of collaboration that had formed outside of the context of the professional development sessions. Kristin stated, "It is so neat to know what everyone is doing. We can talk about it on our lunch breaks. We talk about our teaching, children, and classrooms more. I can get ideas from other rooms or I know who to go to if I want to try something they did in the past. Before I wouldn't even know they did that!" After completing my interviews I wrote about this in my researcher journal (9/2/13):

> The teachers have all mentioned they talk to each other more about what is
>
> going on in their classrooms. They all spoke about before when they had no professional
>
> development in place beside normal trainings, they had no idea what all the teachers were
>
> doing in their classrooms. However, through meeting together they now know what each
>
> classroom is focusing on, what they are struggling with, what went well, what they are
>
> thinking of doing next, and even which children have behavior issues. Through these
>
> discussions, each teacher provides a different resource. Natasha was speaking at one
>
> meeting about an issue she was having with one of her students that had just started
>
> school. Kristin had the sibling in her class currently, and Sarah had the sibling in the past
>
> school year. Both Kristin and Sarah were able to provide Natasha with important insight

about what could be going on and some ideas for helping the child. This information was valuable to both the child and Natasha.

The teachers worked together to construct knowledge and expand their current understanding. This exemplifies Parsons and Stephenson (2006) finding that collaboration aids in adult learning. Teachers benefit from collaboration through conversations. This also aligns with Wenger's (1998) idea that we are social beings and that knowing is a matter of participating and developing meaning. The social learning theory as described by Wenger (1998) integrates the combination of community, identity, meaning, and practice as essential components of learning. This was demonstrated with Natasha, Sarah, and Kristin despite their different level of expertise. The teachers found increased collaboration with each other as the most important benefit of the professional learning community. It created a place to talk about teaching that carried over into the everyday environment. This finding builds upon the literature of the importance of collaboration for teachers to reduce the sense of isolation and foster teacher autonomy.

Fostering Inquiry

It takes time to develop an inquiry stance for teachers to feel comfortable about sharing mistakes, and using them as learning opportunities. The sub themes that emerged were "doing it right," teachers as learners, and re-conceptualizing practice. The teachers initially struggled to free themselves from the culture of teaching as technical practice. They were concerned about "doing it right," especially in the beginning. As the weeks progressed the teachers began to see themselves as learners and formed an understanding that as a teacher you should always be learning from your work. The sessions began as an outlet to share ideas and activities with the group, however when documentation was brought to the sessions teachers began to investigate

what they were seeing in each others classroom. While looking more closely at the work

children created, teachers began to re-conceptualize their ideas on children's capabilities and

teaching practice.

      Doing it right. The teachers saw themselves as technical practitioners. One striking

similarity was the teachers' stance toward practice at the beginning of the study. There was a

sense throughout the preschool culture of teaching as a technical practice. Teachers sought

affirmation of a right or wrong response. Teachers worried about what they did as "appropriate"

teaching to match the school cultural practice. This aligns with Schon (1987) who indicated that

teachers have an inclination to a technical perspective, they look for a right or wrong answer.

This rationalized Natasha's questioning at the beginning of our professional development

sessions. She was constantly seeking approval for a "correct" response or question. Sarah was

more aligned with an inquiry stance where she wasn't as hesitant to share her failures with the

group. As the meetings progressed and everyone continued to share their concerns and

problems, the teachers began to get more comfortable with the idea of problem solving and not

always looking for the correct answer. Contemporary teaching environments often make it

difficult to see beyond the technical skill based approach to teaching because that is still a

dominant discourse (Reid & O'Donoghue, 2004). It takes time to create a learning community

and involves multiple layers to get away from technical perspectives. The teachers did start to

see the group as a safe place to explore different approaches to teaching and developing learning

experiences for themselves as well as the children in their classrooms. I noted in my researcher

journal at the beginning of the study (3/26/13):

      After my initial interviews I found it striking that all of the teachers at the end of the

interviews asked if they did ok, if they gave the right responses. They seemed a bit insecure with

their knowledge, but I am not sure why. They seemed to think there could only be one right or wrong response to my open ended questions, which of course is impossible. I had to assure them there were no right or wrong answers. This made me think of my relationship with the participants. I think I would not have gotten such candid responses had I not been a part of the environment for a prolonged period of time. Although I was an "outsider" of sorts, we had enough of a relationship for them to feel safe to be honest with me. I think there are many things that they would not have disclosed if I had just come in off the streets and interviewed them. Especially given the "right and wrong" culture that appears to be embedded into the school context.

The teachers were at the beginning stages and were still looking at their work through a technical lens. Seeing teaching as technical practice interrupts the ability to develop an inquiry stance. If one is trying to "do it right" and find a formula for teaching, there is a barrier developed to see teaching as open ended and ever changing as is necessary for developing stance. It takes a great deal of time to change practice, culture, and habits of a school. Poetter, Badiali and Hammond (2009) compare the time it takes to develop this sort of change to the growth of trees, painfully slow. Hargreaves (2001) found as well that teachers often don't understand the interdependence and stance needed to develop inquiry based professional learning communities, and this takes time to foster. This further speaks to the importance of considering professional learning communities as long term endeavors in order to create a space for teachers to understand inquiry, engage and inquiry, and reflect on inquiry to translate to teacher learning.

Teachers as learners. The teachers believed inquiry was related to children's learning, not their own. When I asked each teacher to define inquiry they gave interesting responses, all looking at children rather than themselves. Natasha defined inquiry as, "Curiosity, like trying to

figure things out, problem solving, lots of questions, child-led, letting them kind of teach you but you are guiding them." Sarah defined it as, "Problem solving. Inquiry is questions based on what the children are interested in. I don't want to say a lifestyle, but it is a learning style that we are trying to instill within the children to be creative, problem solving, curious individuals interested in their own environment." I went further with Sarah and asked her, "How would you define inquiry-based teaching?" Sarah responded, "It is a classroom style. Inquiry-based teaching would be encouraging children to ask questions, and I validate those questions, and we study those questions, and I also bring questions to the table, and we are problem solving together. We are being really hands-on and I am bringing resources in and I think of Project Approach when I think of that." Kristin described inquiry in a similar way as well. Kristin says, " I think of pulling questions that the students may have about a certain subject and providing them with an interactive way of learning or having them solve their problems, have them come up with the answers through hands on learning, and providing an environment where they can answer their questions, you know playing and by doing certain activities." When I asked her to define inquiry-based teaching she essentially said the same thing, relating back to children. The teachers clearly did not see themselves as inquirers or learners in general. Dana et al. (2002) also found that initially teachers were unfamiliar with inquiry and little inquiry initially took place because of teacher discomfort. I spoke of this in my researcher journal (3/27/13):

> The teachers do not seem to have clear understanding of the term inquiry. I find
> this unusual because we have spoken about inquiry in previous professional
> developments sessions in the past. The teachers think of inquiry as something you do
> with children, rather as a means for teacher learning. This explains why the teachers
> struggled with the idea of collecting data about their own personal inquiry but excelled at

collecting artifacts from their students projects. The teachers were uncomfortable looking at themselves and thinking of themselves as learners. Although, all the teachers spoke of teacher learning as an important attribute of a strong teacher, it was difficult for them to transfer this completely to themselves.

Developing an environment of inquiry for teachers is a challenging and time consuming (Kemmis, Wilkinson, Edwards-Groves, Hardy, Grootenboer, & Bristol, 2014). A professional learning community must seek to create a culture of care, where the teachers can work together to critically reflect and engage in dialogue. The teachers in the study were unclear about the definition of inquiry, and they struggled to fully engage in teacher inquiry, although they did demonstrate initial attempts. They created a question, and they haphazardly collected data. It was the beginning stages to move toward teacher inquiry. Jacobs and Hoppey (2010) note, the inquiry process individually can only go so far when there are limitations on knowledge and skills to question yourself. However, when inquiry is a part of professional learning community they can access others to deepen the level of inquiry. The teachers did not initially see themselves as learners or inquirers, however this slowly evolved as the professional learning community continued. The concept of inquiry can be initially confusing to teachers. Teachers think of inquiry as a way of reaching children, however few think of themselves in relation to inquiry. It takes time and explicit teaching to understand how teacher inquiry can be conducted and why it is important for teacher learning.

Re-conceptualizing practice. The professional learning community provided an opportunity for teachers to hear about other teaching strategies and try new ideas. Throughout the professional development sessions the teachers were able to listen to, and respond to each other's ideas. Although not all conversations led to transference in the classroom, the teachers

began to consider other opinions and ideas for their classroom. Wood and Bennett (2000) noted that changes with teachers happened in three distinct phases. First, the teacher would reflect on how knowledge arises in the context of the classroom. Next, they brought problems and restraints. Finally, they re-align their practice as a result of this reflection. The discussions in the professional learning community made the teachers re-evaluate sometimes how they thought about things. The teachers all made note in their initial interviews that they all had different teaching styles, but they all respected each other. However, most of them never got the opportunity to discuss the planning and outcomes of the classrooms. In final interviews the teachers all commented on the benefits of hearing from the other teachers in the group. Kristin stated, "It is really great that we get to share our work each week and discuss our classrooms. I have gotten so many different ideas, things that I would have never considered trying. It is somewhat out of my box, but then I try it and the kids love it, and more importantly they learn! It keeps teaching interesting for me and it keeps things fresh for the kids as well because we aren't always doing the same old thing." I noted the teachers' re-conceptualization in my researcher journal (9/2/13).

> Teachers seemed open to trying the ideas of others and incorporating them into their classrooms. The teachers all shared their strengths and gave ideas for other teachers to try. In some cases this was for a behavior issue, or embedding content into an activity, or even using a regular material for something different. The discussions seemed to give teachers the sense that they could explore and grow within their own classroom. The teachers all commented in their final interview that this was the most beneficial aspect of our sessions, and they hoped they would be able to continue these types of discussions in the future.

Through collaboration the teachers began to reflect on their own work and the work of the other teachers in the professional learning community. The teachers started to look at things differently within their classrooms. Bennett (2001) states that collaboration and reflection are essential elements in order for teachers to change their ideas about theory and practice. The professional learning community allowed for teachers to talk in-depth about their classrooms and their personal teaching strategies. These conversations provided the teachers an opportunity to consider a different way of doing things. The ongoing job embedded professional learning community allowed for teachers to take new ideas into their classrooms and experiment, and later discuss results with their peers. This translated to re-conceptualizing their teaching. The teachers considered this a strong benefit of the professional learning community. Professional learning communities should include job embedded experiences for teachers to transfer to classroom practice.

Summary

What is the nature of teachers' experiences in professional learning communities? The teachers felt a strong sense of professional identity associated with the professional learning community. The learning community provided a place for teacher validation, belonging, and creating a sense of community within the school. The teachers found themselves discussing classroom experiences outside of the professional development sessions based on conversations started within the professional development sessions. The teachers found the professional learning community to share ideas, resources, frustrations, and formulating solutions. These conversations sparked new creative ideas for the other classrooms and the children within them. The teachers sense of self as a professional developed within the learning community. The teachers listened to each other and learned from each other, they experimented in their

classrooms based on conversations taking place within the professional learning community. The discussions within the professional learning community provided a space for teachers to look more closely at children's work. The teachers in the professional learning community saw the time allotted for embedded teacher learning as important to their own development as well as the children they teach.

The Role of Documentation in Teacher Learning

      Documenting children's learning. Bringing documentation to professional development sessions created an opportunity for teachers to look once again at children's work, which created learning experiences for the teachers. By spending time together discussing and looking at children's work from their classrooms, they began to think about children's work differently. They studied the children
within their classrooms. They spoke about development and children's capabilities in each classroom, and how to push the children in their classrooms. There was a shift in how they thought about the work their children were producing in the classroom, and the children's learning experiences.

      Looking closely. Bringing documentation into the professional learning community created an opportunity for teachers to look closely and interpret children's work. At the beginning of the professional development sessions the teachers were primarily concerned with swapping different ideas for different activities and materials that can be used for each other's classroom. This was very important to them, and they all noted that idea sharing was one of the things they found most beneficial about the professional development sessions. However, as the meetings went on and the teachers began bringing children's work to the meetings the conversations shifted away from activities. Teachers began to discuss the documents that each

of them brought. They began to interpret the children's work, talk about the importance of

children's work, and have rich in-depth discussions about children's classroom experiences and

learning. This exemplifies Zaslow et al., (2010) findings of the effects of teacher learning when

teachers are allowed to bring their own problems, discuss issues, and then go back to the

classroom to experiment. This first excerpt of the transcript from our 4th professional

development session (4/24/13) is a strong example of typical conversations that took place

initially:

> Kristin: This is Matthew's drawing at the math table today. We started talking
>
> about the different parts of a butterfly, and I had little labels of the different parts,
>
> plus the word and with the clay they had to mold the different body parts.
>
> Sarah: What clay did you use?
>
> Kristin: Just Play-doh.
>
> Sarah: Play-doh. Okay. Curious.
>
> Researcher: You are getting clay?
>
> Sarah: Yeah! Oh, that's good.
>
> Kristin: So they were really interested. One of the labels was a proboscis. I think
>
> that's how you pronounce it.
>
> Sarah: Proboscis. (laughter)
>
> Kristin: And they were really interested in that part of a butterfly, so we started
>
> talking about that and talking about how it's, like, straw-like and they uncurl their
>
> proboscis to drink their dinner.

Kristin: Yeah, to drink the nectar from the flowers, so Matthew actually drew a little like, the individual body parts of the butterfly which I thought was neat and then he drew arrows pointing. He said, "The arrows are pointing to the egg and the egg is on the flower." (laughter) So they all kind of drew. I had books out that they were looking through. I had the caterpillar chrysalises out that they could draw from and this was Trey's caterpillar.

Natasha: That's good. Look at it!

Kristin: That's Chad's butterfly.

Researcher: I love the eyeballs.

Kristin: Yeah.

Natasha: Mm-hmm, this is really cool.

Kristin: I love kids' art.

Sarah: And the butterfly! They did really well for as young as they are. They're really good drawings.

As the professional learning community shared documentation and their classroom projects, the teachers became active learners. They began to observe, listen, and inquiring on their teaching. Cochran-Smith (2003) discusses the same connection between teaching and learning when teachers discuss real issues and inquire collaboratively, to develop inquiry as stance. Natasha, Sarah, and Kristin really engaged when they were looking closely at their own classroom issues which furthers the findings that teachers need contextual, job embedded, and ongoing learning experiences (Dana & Yendol-Silva, 2003; Neuman et al., 2010). The teachers in the study had very positive experiences sharing their work and ideas with others, and using some of these ideas in the classroom. The addition of documentation into the professional

learning community brought a different depth to the conversations among teachers. Teachers went from discussing activities/ problems to interpreting artifacts and their meaning in relation to children. This finding elicits the need for documentation to be considered an integral part of professional learning communities in order to provide meaningful learning experiences for teachers.

    Children as learners. Documentation makes children's learning visible and creates an opportunity for evocative discussions about children. When teachers began looking at the documentation, the teachers were always downplaying what they brought. They would say things like, "I know it isn't much" or "This is all I got from our initial drawings." However, the other teachers always showed great interest and encouragement when they saw what a peer had shared. On most occasions, the teachers would find something the teacher providing the artifacts did not see at all. For instance, when Natasha brought in her photos of circles she was dismayed. Yet when her peers looked at the photo they were impressed with the observational drawing. They noticed the finer details such as the markings that looked like the serial number on the side of a tire. Helm et al. (1998) insists that through documentation teachers are able to make learning visible and have viable discussions based on these artifacts. The time spent looking at the drawings, photos, paintings, and daily sheets gave additional time to focus and look more closely at the meaning and quality of the work the children engaged in. Sarah noted in our final interview (8/30/13), "I like that we brought things our class did into the professional

      development sessions, although it is sort of a hassle. It did make me look at what the children did that week, made me think of what I was going to share, and why I wanted to share that. So I guess it really made me reflect on my classroom for the week. Then when we were able to share it we really got a different perspective on what our children

were doing. Others see things that you don't notice when you are in the moment. It

made the work somehow more important by sharing it with others."

Through documentation and discussion teachers looked at the work children produced

differently. Teachers were given the opportunity to see the significance of children's work and

gain different insights (Abramson, 2012). The conversations surrounding the projects and

documentation provided a shared repertoire and coherence within the community as outlined by

Wenger (1998). The teachers were beginning to see the power of documentation, and what

could be seen by looking at children's work.

When teachers brought documentation to the meetings many discussions arose regarding

children's work and what they should be capable of developmentally. The teachers were

impressed and surprised by the work and learning demonstrated by the children once they really

focusing on the documentation, which fueled the desire to learn more about themselves as

educators and the children in the classroom (Ha & Yeun, 2009). When I initially made

suggestions of different activities for their projects they seemed to think that their kids would be

unable to do those things, such as work with clay. The teachers worried the kids did not have the

fine motor skills to work with hard clay or to hold the small pencils for observational drawings.

Natasha was very skeptical of her 2-year-old classroom being able to do a project in the first

place. However, by looking at the children's work the teachers realized that the kids were more

capable than they first thought when they looked really closely at what the children were doing.

Natasha came to realize that her work did not look the same as the other classrooms, but that

didn't mean it was less meaningful. She was surprised by the capabilities of her 2's. Natasha

stated in her final interview, "I was nervous about bringing things up at our sessions at first. I

knew the other teachers would have great work to share and my kids are still really just

developing basic skills. But when I came up feeling disappointed, they would point out

something that I didn't really think about. Then I was like wow! That is really impressive!"

The teachers were struck by the vast development of the children in their classrooms.

Natasha shared in her final interview, "It was eye opening for me to see what the 3 year olds

were doing. I got a sense of where my children will be next year. As a teacher I want to give

them experiences so they can continue to develop and grow as they move into the other

classrooms." Sarah made a similar comment, "It is amazing to see the 2 year old class work and

then the work from my class. It is incredible how quickly they develop and what they are

capable of." The documentation provided a visual for teachers to look at and note changes in the

development of children and their capabilities.

It quickly became evident the teachers had gaps in knowledge related to child

development and child capabilities. Buldu (2010) notes that pedagogical documentation clearly

illustrates children' s perspectives, aiding in teacher knowledge and understanding. The teachers

were able to take the information shared in the professional learning community and extend it to

their own classrooms and other children within the school. The documentation shared in the

professional learning community not only led to in-depth conversations, it created a venue for

discussions on individual children, children's capabilities, and children's growth. According to

the teachers, this helped them gain a deeper understanding of the children in their classroom.

This finding demonstrates the importance of documentation in professional learning

communities to foster discussion and learning directly related to children.

Focusing on children. Reflecting on documentation in the professional learning

community led to utilizing documentation for authentic assessment and gauging engagement.

Collecting artifacts along the way and studying the Daily Sheets the teachers sent to parents,

provided a platform for teachers to look closely at children's work that carried over into the

classroom. As time passed and the teachers continued to look at each others artifacts the

teachers seemed to gain a more complex nuanced understanding of the children in their

classrooms. By taking the time to select artifacts to bring and discussing them with each other,

the teachers gained a better understanding of each individual child. Documentation is a data

source from children, and explicitly shows children's learning making it visible (Castle, 2012).

Kristin stated in our final interview (8/23/13), "It was very time consuming, to be honest. Trying

to figure out what to share. It would have been easier just to bring everything. However, by

> selecting a sample of work I really felt I had to look at every child's work again. I started
>
> to notice who was doing more with art, or dramatic play, and certain children's fine
>
> motor skills. It gave me a deeper sense of where the children are, and what I need to
>
> focus on for each individual child. I know we do the checklist, and I know essentially
>
> where each child is, but I think it increased that understanding. I really got a deeper
>
> sense of what children were interested in as well by looking at what they spent the most
>
> time doing. Even though you see that in the classroom, it is different when you can see it
>
> on record."

In my researcher journal (9/15/13) I denote this phenomenon:

> I just finished reading all of the final interviews again and I am thinking about
>
> the bigger picture. The teachers seem to be a bit put off by the amount of time it takes to
>
> look through the documentation of their children throughout the week, but all have
>
> mentioned the benefits. They all seem to have a deeper sense of each child in the
>
> classroom by having to spend more time looking at their work. Although they do collect
>
> artifacts for their work sampling system and for parent teacher conferences, it seems they

just do this the week before it is "due". Now that they have to look at it every week, they seem to be gaining a deeper understanding of each child and seeing these documents as a means for authentic assessment. They have realized they can easily use these artifacts for their work sampling and their developmental checklist.

Teachers develop an awareness of children and teaching through the use of documentation and the professional learning community. It gives them a way to look at children's perspectives and thought processes (Buldu, 2010). The teacher's felt they benefited from this, however they all noted the challenges of this process. McLaughlin and Zarrow (2001) similarly found that teachers initially complained about collecting artifacts of their students, however they were later excited about the tangible proof they had to demonstrate a child's growth and learning.

With teachers looking at different artifacts each week for our sessions, the teachers noticed quickly the level of engagement in an activity. In Kristin's room, the engagement level in almost all of the activities were high. The children spent a great deal of time, often days working on ways of representing their learning. In Sarah's room, she struggled to keep the children into the softball project. This was also reflected in the work she brought to the professional development sessions. Helm and Katz (2011) speak of the importance of engagement within a project. The documentation brought to light the level of engagement within each classroom. It was obvious in Sarah's daily sheets where there often wasn't much evidence of a softball project occurring at all. We discussed this in her final interview. I asked Sarah about the engagement of students in her classroom and lack of artifacts. Sarah responded, "Yeah I wish I could kind of re-do. I wish I would have picked something else. I think it was a bit

abstract and I really didn't know anything about it, nor did I have high interest in the

topic. I could tell from my classes work that this was not as high interest as say the

butterfly project, but that is ok. I really learned something from this. I know what I will

do next time to make it different. Our discussions and my documentation gave me many

insights into the engagement level of my students and what I need to do next time to

improve upon it."

Although Sarah was somewhat discouraged with the outcome of her project, I was pleased to see

that she realized her struggles herself. She noticed things that I noticed. In my researcher

journal after our 6th professional development session (5/14/13) I make note of Sarah's

classroom engagement level:

I am really surprised by Sarah. She has so much to share in the sessions and

really knows her stuff. However, I am not seeing much going on in the classroom. There

is a limited amount of documentation in comparison to the other classrooms. Also her

daily sheets are full of many things that do not pertain to the softball project at all. I

guess the lack of data becomes data in and of itself.

There was varying levels of engagement in each of the teachers classrooms. This became

a discussion point on observing some of the daily sheets and other artifacts. The teachers began

to discuss children's interests and the importance of child directed project topics to enhance

learning experiences for children. Conversations emerged about Kristin's choice to study

butterflies surrounding the excitement of the new garden in comparison to the other teachers that

chose something somewhat of convenience. Helm and Katz (2011) explicitly state the

importance of this within the Project Approach. Through discussion surrounding the

documentation teachers began to see these documents as a form of authentic assessment and a

way to estimate child engagement. This exemplifies the notion that documentation brought to a professional learning community can be utilized in different ways that can streamline teachers work in the classroom.

Favorable Conditions

It is important to have a facilitator or coach to hold teachers accountable, at least in the beginning stages of forming a professional learning community. It took coaching for teachers to look at children's work beyond an artifact for mandated work sampling or a daily sheet for parents. The sub themes in this section include facilitation, accountability, beyond daily sheets, and bringing projects alive. The teachers valued the work that took place within the professional learning communities. They all concurred that meeting as a group and collecting documentation was beneficial to teacher learning. Despite this, the teachers admitted they probably would not take the time to do this if I was not facilitating the sessions with them. They needed the accountability and guidance. Teachers spoke of the need for additional supports to understand and engage children in projects since they had limited experience.

Facilitation. Selecting documents to share in the professional learning community was seen as an "extra task" for the teachers that would not take place without the meetings with a facilitator. All of the teachers in the study mentioned the learning benefits surrounding documentation and bringing artifacts to the professional development sessions. At the same time, they also mentioned the time commitment associated with this. They said it took a great deal of time to go back through what the children had done, to think about what to bring, and reflect on why it was important. They all admitted in their final interviews they probably would not use documentation in the same way if I was not asking for it at our professional development sessions. The teachers were very busy with other things and all mentioned the practice of

looking at children's work closely would sadly disappear if there were no meetings to share the artifacts and discuss it. Kristin shared, "I love that we got to bring things from our classroom and I think it is so important! But I am so busy! Even though it helped me I can't imagine doing this if I wasn't meeting within our professional learning community. Although it is extra work, I hope we can continue." Sarah also made note of this in her final interview, "I will be honest, I probably won't continue doing it. I mean it is great, don't get me wrong… and I really learned from it, it is just so time consuming! It would be hard for me to justify it when I have a million other things I am responsible for. I wish some of those less important things would go away so I could devote more time to documentation and teacher research."

Teachers are taxed with many responsibilities within the classroom. They are responsible for lesson planning, assessing, and providing learning experiences for children. In many schools teachers also wear additional hats that make documentation and professional learning communities difficult to establish and maintain. This indicates there must be a shared vision within the school and with administrators on the importance of inquiry oriented professional learning communities (Dana & Yendol-Hoppey, 2008). If the value of inquiry is not shared, then even with great coaching or facilitation, it will be difficult to maintain a professional learning community. Collecting documentation was seen as just another thing to do for the teachers. This idea shared by the teachers speaks to the culture of the school. In order for documentation to be seen as important and valuable, it must be considered a part of the everyday teaching culture with an emphasis on inquiry.

Accountability. Sharing documentation in the professional learning community created a sense of accountability for their projects. Documentation provided an unstated sense of accountability for the professional learning community and to demonstrate children's learning

(Dana & Yendol-Hoppey, 2008; Helm et al., 1998). The teachers were aware they needed to be

working on a project in their classroom, and they had to collect and bring documentation of

children's learning experiences to the professional development sessions. Sarah mentioned this

helped her stay accountable for her project, despite her struggles. She stated in her final

interview, "The project was tough for me, and I really wanted to give up. However, I knew I had

to stick it out and keep trying. I knew I had to have something to share with you and the group.

When a teacher gave me a suggestion I felt guilty if I didn't at least try it if I said I would. I

needed the sense of accountability, so it definitely was not a bad thing for me." I made note in

my researcher journal of our final professional development session (6/4/13) regarding

accountability:

> Natasha made a comment today about thinking of the documentation as an
>
> "assignment that was due". I was struck by this comment. I honestly did not think of it
>
> that way. Although the teachers really seemed to love the conversations surrounding the
>
> documents, they also felt it was a hassle to bring them weekly. When I asked the
>
> teachers if they would want to continue with bringing documents they all agreed that they
>
> wanted to and that it was very important. However, it probably would not happen unless
>
> someone was specifically asking for it. Sarah mentioned that unfortunately they would
>
> probably use documents like they had in the past, for the parent daily sheets. The
>
> teachers obviously had too much on their plate in their eyes, and really wanted some
>
> other tasks to go away to make more time for things like documentation for professional
>
> development and documentation panels.
>
> Teachers seemed to view documentation as an additional task to be done and submitted.

They made it clear that this would not be something they would do on their own. This indicates

a strong need for a facilitator at least in the beginning stages of inquiry based professional learning communities. Perhaps as time passed the teachers would begin to value the documentation to a greater degree as the teachers developed a stronger inquiry stance. In order for full participation to occur there must be participation within the professional learning community and the reification by way of documentation (Wenger, 1998). The idea of engaging in projects in the classroom, collecting documentation, and then inquiring about children's work were all fairly new concepts for the teachers. Time was needed to develop these ideas and for teachers to see the importance of documentation as well as teacher inquiry. Since the Project Approach and collecting classroom documentation to share within the professional learning community was new to the teachers, it was seen as an assignment. The documentation was their proof of the Project Approach taking place in the classroom. Once again this demonstrates the current culture of the school. The teachers needed support and direction initially for documentation to be collected and reflected on. This speaks to the time and efforts needed to create authentic learning communities for teachers.

Purposeful documentation. Collecting documents for the professional learning community created importance in the children's work. At the beginning of the study, the teachers were using children's work for one primary purpose. The teachers collected photos and children's drawings and compiled them into an electronic file to send to parents on a daily basis, informing parents about their day. In our initial interviews all of the teachers shared this as their primary use of documentation. They also made note that twice a year they would collect work samples on a few math and literacy indicators. They would display all the children's pictures of whatever they made. Through our discussions about documentation, there was a slight shift in their view on the importance of documentation. First and foremost, the teachers began to focus

on some group work. This group work was ongoing and required the students to revisit. They

had to find space to let things dry and to be brought out the next day.

As the teachers began to create documentation panels for their classroom projects the

teachers began to put things on eye level for their children. This idea was based on a discussion

in one of our professional development meetings surrounding the idea of children seeing

themselves as learners (Helm et al., 1998). Once the teachers tried this out, they were surprised

by the children's response. Sarah said, "I have noticed that some of the children often go by the

table and look at what they created, and they like to show their friends." Kristin made a similar

comment regarding her displays, "The children love to go and look at what they did. I see them

pointing to it and talking about it. They seem very proud to see their work up in the classroom

where they can see it. It is important to have it at eye level." Natasha tried something a little

different following their visit from their field expert and was surprised by the kids reactions, "I

took all of our photos from the field expert visit with the monster truck and some of their

drawings and I downloaded it into a slide show on the iPad. I put it in the literacy center

and the children are crazy about it! They love to see themselves and their friends in the

truck and looking at different parts of the truck. They talk about it! They have even

brought their parents in to take a look."

Through discussions in the professional learning community the teachers began to think

of documentation differently. Previously children's work samples were used for the benefit of

parents, and for assessment purposes. The use of documentation for discussion provided a lens

for teachers to view documentation differently for the benefit of child and teacher learning. This

aligns with the idea of documentation as a window to demonstrate classroom learning (Helm et

al, 1998; Helm & Katz, 2011).

The use of documentation fit well with the framework of the Project Approach. The teachers found it was natural to have ample documentation when the children were involved with in-depth studies. They found that it was a great way to demonstrate children's learning and to see exactly what the children know. The idea of multiple mediums to represent learning allowed for the teachers to collect and analyze from a variety of artifacts. The documentation as it was compiled created a story of the project that clearly demonstrated children's learning. The use of documentation helped the teachers decide weekly where they needed to expand their study to create different learning experiences for children. The teachers were able to look at the knowledge of the children on a weekly basis (primarily in phase 2) and look for gaps in learning, and brainstorming ideas of how to take things further. I note this in my researcher journal after our 8th professional development session (6/30/13):

> The last two weeks the teachers have been sharing what the children have
>
> done in the classroom and discussed the documents brought to our session. The teachers
>
> have been using these artifacts as a springboard of deciding what to do next in the
>
> classroom. Not just activity ideas, but rather intentional planning of activities to expand
>
> children's understanding of key concepts related to the project.

The teachers began to develop a deeper understanding of the Project Approach and the meaning of documentation for child and teacher learning. However, it is clear the teachers need a support systems in place to help them with their future projects, intentional documentation, as well as understanding teacher inquiry within professional learning communities. Sarah noted in her final interview (8/30/13), "I really want to do another project. I think I understand it more.

> But I would definitely need support. I wish we could do this again just like this. I am not
>
> sure I am ready for another project on my own. I feel like I learned a lot, but there is so

much more to understand with projects and documentation. I really struggled with trying to do my own inquiry. I just wasn't systematic with my data collection. I think if I had another opportunity I think would have a better grasp on it."

The teachers were still trying to get working understanding of the Project Approach, as well as documentation for the purposes of learning. The teachers did seem to gain a deeper understanding of the Project Approach, but there were struggles along the way and supports were needed. For Sarah, the Project Approach was somewhat different then her typical way of teaching, which is why her first project probably wasn't a success. The teachers knew what I valued as a facilitator and this more than likely shaped their responses to me. Both Sarah and Kristin graduated from the university where the study takes place, and they had course work surrounding these practices related to the Project Approach. Despite their knowledge, there were different degrees on the ability to implement without supports in place. For professional learning communities to be successful there much be mutual engagement, joint enterprise, and a shared repertoire in place (Wenger, 1998). The teachers need ongoing exposure to both projects and inquiry, because it is a slow process that requires continual development within the professional learning community.

Collecting artifacts for the professional learning community created a sense of importance for children's work. The teachers began displaying the work of children differently. The use of the Project Approach as a framework allowed the teachers to have ample work samples to choose from. The documentation created in the classroom through the Project Approach demonstrated children's learning for teachers to share. This finding signifies the benefits of considering a framework similar to the Project Approach to give teachers favorable

conditions for success in collecting artifacts and seeing the ways in which documentation can be used for teacher learning.

Summary

In what ways does documentation of classroom practice play a role in teacher learning? The teachers all valued the importance of the rich conversations sparked by the documentation within the professional learning community. The documentation provided a snapshot into each classroom, and gave each teacher a deeper understanding of each classroom and the students within it. Bringing the documentation forced the teachers to look more closely at the work produced by their students. The teachers had to initially sort through artifacts to decide what the share in the professional learning community, and then the teacher would discuss what they saw. This extrapolated reflection from all the teachers. Many of the teachers saw things in other classrooms and thought of ways to incorporate something similar within their own classroom, to align with a different topic. The teachers discussion ignited discussions on children's capabilities, and where children were developmentally, and what that meant for the child and the teacher. Although the teachers struggled in the ability to engage in teacher inquiry, the use of documentation brought about a greater understanding of what teacher research should look like, and what forms data can take. In many instances, teachers came with preconceptions of what the artifact meant, however after in-depth discussions the teachers began to re-conceptualize what they saw and questioning their classroom practice.

Under what conditions does documentation of classroom practice play a role in teacher learning? All of the teachers were very honest regarding their previous use of documentation. The teachers took pictures of the children engaged in learning experiences and of things they created during the day. These were then compiled into a word document and sent to parents as

an informational daily sheet. When things were placed on the walls of the classroom it was to display a craft, and every child's work was displayed. There was limited use of documentation as a form of authentic assessment, a form of data, or as a learning tool for teachers and children. However, this changed when the teachers were forced to look at documents multiple times.

The teachers' first selected artifacts for their daily sheets, they then selected artifacts to bring to the professional development sessions, and then they discussed these artifacts in the professional learning community. The teachers all noted that having to look at children's work multiple times forced them to look more closely at the artifacts the children created. It gave them a space to reflect on what the children were doing, because they had to decide on what to bring to the sessions and understand why they chose it for discussion. It seems that it was necessary for a professional learning community had to be in place in order for teachers to take the time to revisit children's work. All of the teachers mentioned how time consuming the process was and that they probably would never do it on their own, however they felt accountability because of our weekly meetings. Documentation played a role in teacher learning when they looked at different ways that documentation can be used. As we spoke more about documentation within the learning community we began to discuss children re-visiting work and placing documentation at the eye level of students. The teachers began to do this in their classrooms. They noticed that the children would regularly go look at their work, or discuss their work with their peers. The teachers began to think of documentation differently as a way to display child learning rather than children's accomplishments, the artifacts became more meaningful to the teachers and children. The documentation displayed for the children or discussed in the professional development sessions fleshed out gaps in child learning. This in

turn drove the teachers to expound on learning experiences provided to the children to further their learning.
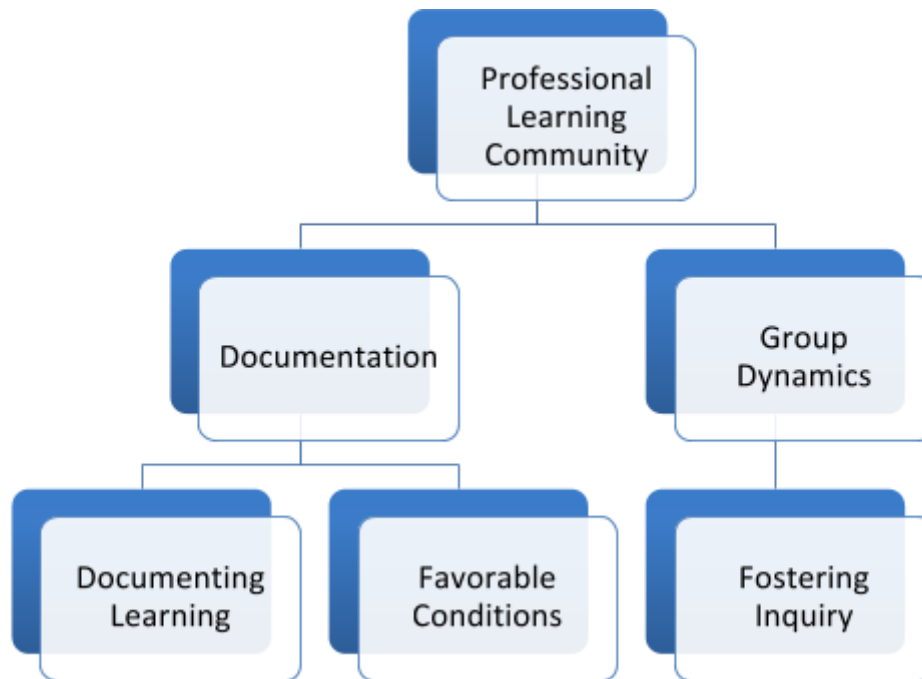

Figure 28. Cross Case Analysis Graphic.

Implications

This multi case study brings to light several implications for the professional development of teachers. Job embedded professional development can develop meaningful professional learning communities for teachers. These learning communities give teachers a safe place to discuss ideas, problems, and solutions. When creating learning communities, group dynamics are of the utmost importance. It is important to consider who will be a part of the group. Including only lead teachers can form segregation among staff, and lead to assistants feeling less valued as professionals. Making professional learning communities an exclusive group can create tension and cause feeling of less worth. Therefore, I think it is important to take a teaching team approach to professional learning.

There is always divided power within any group. It is important to be aware of this power and how it affects group dynamics. Teachers must feel they are in a safe space where they can share what they feel and are allowed to be honest. This adds to previous work on the need to avoid top down models within professional learning communities. Although a coach is usually involved, this coach should be neutral from administrative groups until a true community of inquiry is formed. When powers are balanced true collaboration can occur. When professional learning communities are not well balanced barriers could develop inhibiting teachers from developing stance. This collaboration impacts teachers to feel less isolated and has the power to create autonomy of the teachers within the group.

Due to the current educational climate and school cultures teachers think of themselves as technical practitioners. They are looking for the right and wrong way. In many cases they want to be told what to do in order to 'do it right'. It takes time to develop an inquiry stance and for teachers to feel comfortable about sharing mistakes and using them as learning opportunities. Teachers need the opportunity to discuss inquiry and see teaching as more than technical practice in order to develop stance. Those developing learning communities need to understand the amount of time that is necessary to foster relationships within the group and to change this disposition of teaching as technical practice.

Despite the time it takes to foster an inquiry stance, teachers do feel empowered when they see themselves as learners. It is important to take the time to foster these communities. Professional learning communities allow teachers to look closely at their classrooms and teachers learn a great deal about themselves as well as the children in their classrooms. A space for teachers to discuss issues and opportunities does impact teachers. Through this collaboration and reflection the teachers change their perspectives on teaching and learning.

Bringing documentation to professional learning communities have important implications for teacher learning. Looking at artifacts from the classroom provides a spring board for teachers to look closely at children's work through different lenses. Teachers begin to see things differently about the children in the classroom based on others observations. Documentation also provided a common repertoire for the teachers to discuss children's work. When looking at documentation teachers gain a deeper understanding of child development, especially when mixing teachers from various age groups. Documentation also provided visual evidence on the engagement occurring with children in the classroom. This visual made teachers look closely at what they were doing in the classroom to create engaging learning experiences for the children in their classrooms.

Brining documentation to professional development sessions creates an opportunity for teachers to look once again at their children's work, which can deepen the learning experience for teachers. Despite teachers seeing the value in this, they were unlikely to do this on their own. Therefore it is important to have a facilitator or coach to hold teachers accountable, at least in the beginning stages. It took coaching for teachers to look at children's work beyond an artifact for assessment or a daily sheet for parents. The Project Approach provided a good starting place for teachers to look at documentation differently. Teachers had ample artifacts due to the nature of project work and challenged them to decide what should be brought to the professional learning community. Once teachers develop a sense of the importance of documentation this can transfer into the classroom. Teachers need support to gain understanding of how to document work for the children in the classroom to provide additional learning experiences.

Conclusion

Professional learning communities are a powerful form of professional development for teachers. These communities allow teachers to collaborate and discuss their work, bringing to light a sense of professionalism within their field. Teachers find engaging in professional learning communities as an important place where they can share what is going on in their classrooms and feel less isolated. Belonging to the group transfers beyond the professional learning community itself. It provides rich conversations in the day-to-day life of teachers, beyond the weekly meetings. Inquiry based professional learning communities take time to be fostered and to grow. It requires a deep time investment for teachers to meet on a regular basis for an indefinite amount of time. These communities will not work if only constructed for a short period of time. It takes time for teachers to change their dispositions toward teaching and for this to transfer to the classroom. Administrators must value teaching as inquiry and support teachers in developing stance. In order for teacher inquiry to develop, it must be deemed as important by the school and embedded in the school culture. If inquiry is viewed as an outside force developing stance becomes increasingly difficult and seen as just another task demanded from outsiders.

Documentation is an important component of the professional learning community. It provides teachers a snap shot of a classroom and of a learning experience. It fosters rich conversations that create learning experiences for the teachers. Documentation gives teachers something specific to ponder and discuss. This creates opportunities for teachers to question their beliefs about children and their learning. It forces teachers to take the time to take a closer look at children's work to decide what they consider to be important to share with the group. Documenting is seen as a hassle for teachers initially, and it takes time for teachers to value the

importance of documentation for their own learning as well as displaying documentation for

children's learning.

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Appendix A

Interview Protocol

Interview 1

Describe your teacher preparation/teaching experience.

Tell me a little bit about your classroom at the preschool. What does your day-to-day life look like in the classroom?

How do you engage in reflection on teaching?

What kinds of professional development experiences have you had during your time at the preschool?

In what ways has PD helped you engage in reflection (or not)?

What aspects of your PD experiences have been relevant to your work in the classroom?

What aspects of PD do you think are less relevant to your work?

What kinds of PD sessions do you think would be most beneficial to you?

Interview 2

Describe your experiences working with other teachers in PD sessions.

Do you think discussion with your peers helps your teaching practice?

Do you ever feel uncomfortable sharing within the sessions? Why or why not?

What do you find as the best part of working in groups in PD sessions?

What is the most challenging part of working in groups?

What, for you, is inquiry? How do you define inquiry-based teaching and learning?

Do you think you have engaged in inquiry?

Appendix A (continued)

How would you define the Project Approach?

How do you think the Project Approach will fit in your current classroom life?

What do you think would be most challenging about the approach?

What do you currently document in the classroom? How are these artifacts used?

What other ways have you tried to use documentation?

Do you feel it can be a source of learning for you the teacher? Why or why not?

Do the children ever revisit documents? Do you revisit documents?

Appendix B

Consent for Participation in Interview Research

I volunteer to participate in a research project conducted by Victoria Damjanovic from the University of South Florida. I understand that the project is designed to gather information about academic work of teacher's experiences of professional development as part of the USF partnership.

1. My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty. If I decline to participate or withdraw from the study, no one on my campus will be told.

2. I understand that most interviewees in will find the discussion interesting and thought-provoking. If, however, I feel uncomfortable in any way during the interview session, I have the right to decline to answer any question or to end the interview.

3. Participation involves being interviewed by researchers from the University of South Florida. The interview will last approximately 60 minutes, and will be conducted twice. Notes will be written during the interview. An audiotape of the interview and subsequent dialogue will be make. If I don't want to be taped, I will not be able to participate in the study.

4. I understand that the researcher will not identify me by name in any reports using information obtained from this interview, and that my confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies that protect the anonymity of individuals and institutions.

5. Faculty and administrators from my campus will neither be present at the interview nor have access to raw notes or transcripts. This precaution will prevent my individual comments from having any negative repercussions.

6. I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

7. I have been given a copy of this consent form.

Appendix B (continued)

_____ Signature

_____ Printed Name

For further information, please contact:

Victoria Damjanovic: 813-992-3549   vdamjano@mail.usf.edu

_____ Date

_____ Signature of the Investigator

Appendix C

IRB Approval Form

USF
UNIVERSITY OF
SOUTH FLORIDA

RESEARCH INTEGRITY AND COMPLIANCE
Institutional Review Boards, FWA No. 00001669
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
(813)974-5638 • FAX(813)974-7091

2/25/2013

Victoria Damjanovic
Childhood Education and Literacy Studies
9308 Deer Creek Dr.
Tampa, FL 33647

RE: **Expedited Approval for Initial Review**
IRB#:   Pro00011319
Title: A Case Study of Teacher Inquiry in a University Partnership Preschool

Study Approval Period: 2/25/2013 to 2/25/2014

Dear Mrs. Damjanovic:

On 2/25/2013, the Institutional Review Board (IRB) reviewed and **APPROVED** the above application and all documents outlined below.

Approved Item(s):
Protocol Document(s):

Proposal

Consent/Assent Document(s)*:

Damjanovic IRB 11319, version 1, 2/15/13.pdf

*Please use only the official IRB stamped informed consent/assent document(s) found under the "Attachments" tab. Please note, these consent/assent document(s) are only valid during the approval period indicated at the top of the form(s).

Please be advised data collection cannot begin until the IRB receives and approves the letter of support from USF Preschool for Creative Learning which must be submitted as an amendment.

It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45CFR46.110 and 21 CFR

Appendix C. (continued)

56.110. The research proposed in this study is categorized under the following expedited review categories:

(5) Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis).

(6) Collection of data from voice, video, digital, or image recordings made for research purposes.

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an amendment.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

John Schinka, Ph.D., Chairperson
USF Institutional Review Board

Appendix D

IRB Course Completion Certificate

Appendix E

Request of Study

February 7, 2013

Ms. Paula da Silva
11811 Bull Run Dr.
Tampa, FL 33617

Dear Ms. da Silva and Board Members,

I am writing to request the USF Preschool for Creative Learning as the site for my dissertation research study, *A Case Study of Teacher Inquiry in a University Partnership Preschool*. Through my work as a liaison with the preschool, I became intrigued with inquiry-based teacher learning as well as the project approach. The professional development experiences I had with teachers led me to my research questions and purpose. I look forward to the opportunity to once again work with the teachers at the preschool and explore inquiry-based teacher learning together.

Attached is my research protocol explaining the purpose of my research and research questions. I have included a content guide for my professional development sessions. The data sources are explained with a timeline depicting the amount of time required by the teachers who choose to participate. Documentation of IRB approval will be provided, prior to the beginning of the study.

Thank you for taking the time and consideration of my request to conduct research at the USF Preschool for Creative Learning. If you have any questions, please do not hesitate to contact me at 813-992-3549.

Victoria Damjanovic
University of South Florida
College of Education
4202 E. Fowler Ave.
Office 202W
Tampa, Fl. 33620

Appendix F

Preschool Approval

UNIVERSITY OF
SOUTH FLORIDA

February 16, 2013

To University of South Florida Internal Review Board:

I am pleased to inform you that USF Preschool for Creative Learning (PCL)'s Advisory Board has received and approved Ms. Victoria Damjanovic's dissertation proposal, "A Case Study of Teacher Inquiry in a University Partnership Preschool." Upon review of the information provided by Ms. Damjanovic regarding the study's purpose, rationale, and design, as well as its time frame, data collection, and participant recruitment, PCL's Advisory Board has determined that this project represents an appropriate use of PCL's facility and resources.

Sincerely,

Paula da Silva

Paula da Silva
Interim Director
USF Preschool for Creative Learning
Tampa, FL 33620
(813) 974-5142

Appendix G

Sample Interview Initial Coding

N March 20, 2013

T: Okay, so this is N and interview one. So, the first thing I want you to do is to describe for me your background, basically, how you prepared to be a teacher, like your academic experience, as well as how you got into Early Childhood education.

N: Okay. I guess I've always been around children. I was always a bigger girl and they always thought that I was older than I am, my mom's friends and whatnot, so I would always take care of the kids on the weekends, after school, and I always liked it and I always played teacher and, you know, I liked learning and stuff like that, but then I went to school for nursing and that didn't work out (laughs) 'cause that was all chemistries and stuff, so I kind of put it on the back burner, like, I kind of forgot how much I really liked working with kids. And then I got this job on a whim, which was amazing, because a friend of mine had suggested that I work with children again and so, from then on, I just kind of went and got my CDA right away and all those trainings on line and whatnot. And then kind of went to workshops and then obviously being in the classroom helped a lot with gaining experience with everything from how to change a diaper to how to implement lesson plans, and a lot of that had to do with, you know, just learning through the job. And then I went on to get my national CDA and then I plan to go back sometime. (laughs).

T: So, now this is your first job here?

N: Yeah. Well, my first, like, official, I mean, I used to serve and whatnot and then I interviewed for the assistant position up in the yellow room.

T: Okay.

N: And I think they liked me. K always says I walked in off the street and it was a great deal, so, within two hours I had the job and I was working with the teacher in there pretty closely and ...

T: Who was in there at the time?

N: It was A.

T: Oh, it was A. Oh, that's interesting, you and K both started in the same position with A.

N: With A. Yeah. Yeah, exactly, and she taught me a lot, you know, about even some of the little things to cognitive skills and why we're doing fine motor skills and how it's so important, so I really learned a lot. She was my journeyman, my first CDA there and she would proofread all my papers and ...

T: Well, that's good.

1

Appendix H

Initial Chunk Coding Sample

N'Initial'Chunk'Coding"
"
Background"
Commonality'bw'teachers"
Support"
Teacher'learning"
Developing'teaching'skills"
Education"
Classroom'role"
Lead'teaching"
Teaching'role"
Passion`"
Previous'lead"
Learning"
Roles"
Inferiority"
Role'reversal"
Classroom'behavior"
Role'confusion"
Co'teaching"
Classroom'learning"
Safety"
Struggle/roles"
Learning'from'others"
Collaborative'expertise"
Strengths"
Collaboration"
Daily'schedule"
Child'experiences"
Child'curriculum"
Child'learning"
Child'expectations"
Curriculum"
Classroom'dynamics"
Confidence"
Reflection/preparation"
Reflection'on'practice"
Reflection'on'children"
Reflection'on'improving'practice"
Reflection'on'child'engagement"
Previous'PD"
PD'quality"
PD'support"
PD'book'study"
Current'PD"
NAEYC'PD"

Appendix I

Initial Code to Categories

N Initial Code Categories 2

<u>Background</u>
- Past
- Education
- Teaching role
- Initial support
- Development of teaching skills
- Initial isolation

Classroom Context
- Daily schedule
- Child experiences
- Child curriculum
- Child learning
- Child expectations
- Classroom dynamics
- Child learning abilities (discounting)
- Child participation

Teacher Role
- Classroom role
- Teaching role
- Lead teaching
- Inferiority
- Role reversal
- Role confusion
- Co-teaching
- Struggle with roles
- Assistant role

<u>Insecurity (teacher voice?)</u>
- Confidence
- Inferiority
- Questioning oneself
- Self doubt
- No confidence in response in PD/ or interview
- Questioning teaching ability
- Unsure
- Questions materials
- Doubt in students
- Doubt in project
- Confirming understanding
- Asking questions constantly
- Concerns

Appendix J

Professional Development Code Sample

K: So I'm kind of like, I don't know what if you do clay or Play-doh? And they roll out the Play-doh and cover it and then they can use a fine tip – like cover the little hash marks.

T: Will the Play-doh dry or will it crack? I don't know.

N: I don't know.

S: Or, I mean, this is where I want to go. This is why my question was what it was. I want to cover it with tape and then let them cover it or paint it or something, but I know I can't do that.

T: Right. Because that would almost think like oh, just get white duct tape.

S: Yeah.

T: But again, you're right. That's you doing the project.

S: And I think this was Suzy's …

K: I don't know.

S: Oh, but they were so proud of these and I kept wanting to be like, "Don't you want more tape on it?" No, Natalie carried this around the entire day and was like, "Oooh!" She was so proud of them so I don't want to make them feel like these aren't wonderful and perfect. But is it okay to put this on display? Making we could make meaningful labels. I don't know.

T: What about showing them the picture again and showing them that and saying, "How can we make this look more exactly like the ball?" and see what they …

S: What they come up with because they came up with the newspaper, and I thought that was kind of clever.

T: You could even take white paper and cover it.

S: Oh, yeah.

T: And then have them draw. I mean, I would leave it to be their work. But again, what do you guys think about as far as the interfering and …

K: Well, I agree because then once you start and you decide to cover it with tape, then they won't even recognize their own work.

S: Right.

K: So, I mean, like you said, maybe wrapping it up with white paper so that they can maybe paint the stitches on or …

Victoria Damjanovic 12/23/2014 12:58 PM
Comment [1]: Sharing ideas/ brainstorming

Victoria Damjanovic 12/23/2014 12:58 PM
Comment [2]: Admitting not knowing

Victoria Damjanovic 12/23/2014 12:59 PM
Comment [3]: Agreeing with peer/ brainstorming ideas

Victoria Damjanovic 12/23/2014 12:59 PM
Comment [4]: Brainstorming ideas

Appendix K

Daily Sheet Sample

MP Room Daily Sheet

Friday 6-7-13

Did I Nap?	YES	NO
K	X	
J	X	
W	X	
T	X	
L	X	
K	X	
D	absent	
J	X	
W	X	
W	X	
M	X	
B		X
Q		X
R	X	
T	X	
L	absent	
K	X	
T	absent	

AM Snack: kix, mixed fruit and milk

Sharing videos we created on the butterfly cycle.

Appendix L

Researcher Journal Sample

3/8/13 Initial Teacher Meeting

I went into the preschool today to speak with the teachers about my research. The teachers appeared to be enthusiastic about the project and willing to participate. Natasha seemed surprised and excited to be included in the project. Sarah was willing, but asked a lot of questions and was the most thorough. Kristin mentioned that she was a little nervous, but excited to be a part of it. I am not sure what to expect at this point. I am wondering who will go into the project work full force and who will be hesitant to take part in the process.

3/18/13

Kristin Interview

Today was my first interview with Kristin. She seemed a bit nervous. Her chest was all blotchy while she spoke to me. She loosened up once we got going and started about things going on in her classroom. She really expanded on her responses. She has great knowledge of teaching and classroom practice, almost innately. She is basically doing Project Approach on her own, without really knowing the official steps of it. Kristin is very positive and never says anything negative. She is very enthusiastic about doing a project and sharing with her colleagues. She has a clear idea of what she would like to accomplish. Although she has lots of knowledge, she seems a bit insecure as far as her role in leading others. She doesn't consider herself an expert. Kristin really naturally keys into the environment to find topics for children to explore. She looks at things going on in the school, takes advantage of everyday happenings, and explores her immediate surroundings. In the interview she spoke about how she pretty much already knew what she was going to have the children explore for this project because of the excitement in her classroom about the butterfly garden planting. When she spoke about past projects she spoke of them naturally occurring because of an event in their immediate environment. She discussed the importance of her children being able to see, feel, and explore something every day. During the interview she also eluded to staging the environment and how she thinks about each area of the classroom for different learning opportunities. I am looking forward to see her in the group and the dynamics the group forms, I am also excited to see how Kristin's project develops.

Appendix L (continued)

3/20/13

Natasha Interview

Today I interviewed Natasha for the first time. She was nervous when we began and seemed very concerned about giving the wrong answers. I had to assure her several times there were no wrong answers to any question. She provided in-depth information. Although she didn't have (Appendix L Continued)

specific titles for the things she is doing in the classroom, it appears she engages in many best practices without even really realizing it. She is self-conscious about her not having a degree. You can tell this is something that really bothers her. She did open up as the interview progressed. After some encouragement she definitely opened up and shared her ideas of teaching and her idea of inquiry. It was interesting to note that she had a clear view of what inquiry meant for children, however she did not understand inquiry in relation to teacher learning. She was the only teacher that really mentioned using documentation as a source for child learning in that she puts photos and information at eye level for the children for them to further investigate.

3/25/13

Sarah Interview

Today I interviewed Sarah. She was more sure of herself in the interview than the other teachers. Her interview took less time, she was very succinct. She has a considerable amount of book knowledge about the Project Approach and has some experience doing the Project Approach. However, she is not currently using it in the classroom. In fact, I think she is a bit afraid of it. She explained how her past project did not go well. She knows she should be doing it but she seems to struggle with the transference in the classroom. It will be very interesting to see how she engages in the Project Approach as well as how she interacts within the professional development sessions. I suspect that she will be somewhat of a leader during the professional development sessions because she is working on her doctorate degree and I think the other teachers to consider her input important. I found it interesting that she did not mention the possibility of using documentation as a form of student learning and is not yet using documentation in all arenas as far as child, teacher, and parent learning.
Sarah has learned about the use and importance of documentation in her course work and has had to assist interns in her classroom with creating documentation panels on her own. However, once the interns are out of the room she does not create panels on her own. I could tell from our conversation she is aware of their importance and possible uses, but it seems like a hassle for her… just another extra job to do. Through our interview she talks about documentation primarily in terms of "parent communication" or requirements from the school of collecting work samples. She does not seem to see the value of collecting and studying artifacts for her own personal learning. She also didn't mention the use of showing photos or children's work in

Appendix L (continued)

order for children to engage in learning experiences. I find this very interesting. I am curious how she will collect documents/ artifacts throughout her project and how she will use those documents. I have a feeling that things will go back to the way they were before after my study is complete. She also struggled to define what teacher inquiry meant. However, was able to explain this in relation to children.

3/26/13

After interviewing all three teachers I am struck by various things. I find it interesting that for all of the teachers this was their first teaching job. They all began under the same director, and all (Appendix L Continued)

had minimal professional development in the beginning of their careers. All of them expressed pretty much being thrown into their positions and relying on others, especially Amber, for their training and experience. They all feel that the continued partnership with the university has been beneficial and that their current professional development is much more meaningful for them. They feel a sense of empowerment and that they have more say in what happens with the school with the new director. They are excited about the changes the school has undergone in the last few years. All of them feel that they have an understanding of inquiry, however they only referred to children when discussing this. They do not see themselves as learners. They kept referring to creating experiences for children to inquire, but never for themselves. They do not have a clear understanding of teacher research/ teacher inquiry like I had thought. This is surprising since we have spent several professional development sessions in the past discussing teacher inquiry. They were all proud of the amount of documentation they collect in a day, however they only seem to use the documentation to create daily sheets for parents to see. None of the teachers are using the documentation to reflect on their own practice.