5-9-2012

Learning to teach: a multiple case study analysis on the role of professional learning community participation on pre-service teachers enrolled in a professional development school teacher preparation program

Lissette Gonzalez-Perez

LEARNING TO TEACH: A MULTIPLE CASE STUDY ANALYSIS ON THE ROLE OF PROFESSIONAL LEARNING COMMUNITY PARTICIPATION ON PRE-SERVICE TEACHERS ENROLLED IN A PROFESSIONAL DEVELOPMENT SCHOOL TEACHER PREPARATION PROGRAM

by

Lissette Gonzalez-Perez

A Dissertation

Submitted to the
Department of Educational Leadership
College of Education
In partial fulfillment of the requirement
For the degree of
Doctor of Education
at
Rowan University
March 2012

Dissertation Chair: Corine C. Meredith, Ph.D.

Dedication

I would like to dedicate this manuscript to Angelique Alexandria and Alexa Giselle Perez. Thank you for always understanding that mommy had homework, and couldn't go out and play. I've set the bar ladies – go for it!

Acknowledgments

I would like to express my appreciation to my family for all of their support. Thank you Angel and Mami for picking up my slack these past few years, and thank you Melissa for driving the girls to every imaginable function on Saturdays. Rand, thanks for Melissa – she's a great representative!

I would also like to thank Dr. Corine Cadle Meredith for her guidance, support, and encouragement, and Dr. Ane Turner Johnson and Susan Browne for serving on my committee and providing guidance and practical feedback.

Special thanks to all of the study's participants – you know who you are, and to Ms. Dubon for sharing her technological skills with me.

Abstract

Lissette Gonzalez-Perez
LEARNING TO TEACH: A MULTIPLE CASE STUDY ANALYSIS ON THE ROLE OF PROFESSIONAL LEARNING COMMUNITY PARTICIPATION ON PRE-SERVICE TEACHERS ENROLLED IN A PROFESSIONAL DEVELOPMENT SCHOOL TEACHER PREPARATION PROGRAM
2011/2012
Corine C. Meredith, Ph.D.
Doctor of Education in Educational Leadership

Pre-service teaching experiences can influence future teaching practices. The participation of pre-service teachers (PSTs) in a Professional Learning Community (PLC) increases the likelihood of a mental model shift away from the traditional norms of autonomy that characterize teaching. The purpose of this multiple case study analysis was to explore the perceived influence of PLC exposure on PSTs enrolled in a Professional Development School (PDS) teacher preparation program; specifically in the areas of knowledge, interactions, shared practice, and strategies. The design of the study was qualitative; each PST enrolled in the PDS teacher preparation program was viewed as an individual case. The data were gathered via semi-structured interviews, observations of PDS pre-service teacher PLC meetings, and collection of PST journals. The PSTs acknowledged the positive influence of PLC participation on their knowledge base, interactions with one another, as well as with others in the school community, on their perceptions of shared practice, and on their instructional, organizational, and assessment strategies. PST PLC participation resulted in increased self-confidence, the realization

that peers can be resources, and the understanding that teaching does not have to be an isolating profession.

Table of Contents

Table of Contents (Continued)

Table of Contents (Continued)

Table of Contents (Continued)

List of Figures

List of Tables

Table Page

Chapter 1

Introduction

There is a movement in education away from traditional methods of providing professional development. According to the National Commission on Teaching and America's Future (NCTAF) "…today's professional development must go far beyond adding a few more days or even weeks of 'drive-by' in-service training to teacher's calendars. Strong professional development opportunities must be embedded in the very fabric of public education" (NCTAF, 2003, p. 28). One method suggested by numerous researchers (DuFour & Eaker, 1998; Hord, 1997) to improve the quality of professional development is the creation of Professional Learning Communities (PLC). Professional learning communities operate under the belief that improved student learning and achievement is dependent on job-embedded learning for educators (DuFour, DuFour, Eaker, & Many, 2006). PLCs provide teachers the opportunity to collaborate with their peers by sharing practice and exchanging ideas. This open communication among teachers about their practice has the potential to improve school functioning and increase student achievement (Blankenship & Ruona, 2007; Cranston, 2009).

Schools are attempting to create PLCs, but the changes necessary for schools to transition from traditional methods of operation are time-consuming and challenging; the changes signify cultural changes for the schools. Cultural changes require changes in beliefs and values (Evans, 1996), changes that are not easily initiated, and often require the establishment of a sense of urgency to illustrate how current methods are not resulting

in positive outcomes. Additionally, it is difficult for teachers and administrators to step away from their comfort zones to place themselves in positions in which their sense of competence is threatened, and they are unsure of their roles (Evans, 1996). It is much easier for educators to maintain the status quo than to attempt something new.

Amid all these changes, schools continue to function as the training grounds for pre-service teachers. Due to the slow nature of change, pre-service teachers may not be gaining the necessary collaboration skills to share knowledge, strategies, practice, and ideas with their peers when they transition to their teaching careers (Abdal-Haqq, 1991). Pre-service teachers have limited opportunities to collaborate with their peers during their student-teaching experiences (Devlin-Scherer & Daly, 2001). This limited or lack of interaction during teaching internships may sustain the teaching culture of omniscience, autonomy, and individualism (Little, 1990). To counter the loneliness and isolation of the pre-service internship experience some universities and K-12 school districts have created Professional Development School (PDS) partnerships.

"The work in a PDS is designed to improve K-12 student learning, strengthen teacher education, promote professional development, and support collaborative inquiry" (Kean University, 2008). PDS pre-service teachers are assigned to P-12 schools in cohorts with the intention of reducing feelings of isolation during the student-teaching experience (Kean University, 2008). In many cases pre-service teachers complete their junior and senior-internships at the same school. This allows them to form relationships with faculty and staff members, and provides another level of support. It also immerses pre-service teachers in the school's culture.

> Culture exerts a profound impact on the induction and orientation of organizational members and on the way an organization responds to changes in its

> environment. Most institutions make sure that new recruits "learn the ropes," which includes the elementals of task performance and a variety of formal and informal roles and procedures…they also teach and model a fundamental way of seeing, understanding, and responding. (Evans, 1996, p. 44)

Problem Statement

Pre-service teacher induction into the teaching profession provides limited opportunities for collegial peer interactions (Snow-Gerono, 2005). The teaching internship can be an isolating experience, where pre-service teachers are suddenly separated, socially and physically, from their friends and professors and removed from the theory, debate, and academic interactions that they experienced in college classes (Devlin-Scherer & Daly, 2001). Pre-service teacher interactions with peers may also be limited by the culture of the school the pre-service teachers are assigned to and the autonomous nature of the teaching profession (Little, 1990).

The underlying assumption that has been embedded in teacher preparation programs is that individual teachers are content area authorities (Little, 1990). The assumption is that teachers are omniscient, and requesting assistance from peers through shared personal practice is perceived as a weakness in knowledge base (Little, 1990). As a result, pre-service teacher internships often provide limited opportunities for the collegial exchange of knowledge, strategies, and ideas among peers, thereby reinforcing teacher isolation (Snow-Gerono, 2005).

Pre-service teachers participating in PDS partnership programs are placed in partnering schools as a cohort for their junior and senior internships. The expectation is that the pre-service teachers will be able to interact and support one another; thereby "reducing feelings of isolation" (Kean University, 2008). However, the opportunities available for the pre-service teachers to interact with their peers, to share their

knowledge, strategies, practices, and ideas during their internships are dependent on the school to which they are assigned, and the support structures in place that will allow for pre-service teacher peer interactions during the school day.

Participation in a PDS cohort does not guarantee that pre-service teachers will form a community of learners. To form a community, it is necessary for individuals to regulate their activities in order to achieve a common end (Dewey, 1916). Limited pre-service teacher interaction is a shortcoming of teacher preparation programs since "the context most supportive of the learning of professionals is the professional learning community" (Hord, 2009, p. 40). This research study was conceptualized around the central question: What is the perceived influence of PLC participation on pre-service teachers enrolled in a PDS teacher preparation program?

Purpose of Study

The purpose of this multiple case study analysis is to explore the perceived influence of Professional Learning Community (PLC) exposure on pre-service teachers enrolled in a Professional Development School (PDS) teacher preparation program. I specifically examine the perceived influence of PLC participation on pre-service teacher self-perceptions in the areas of knowledge, strategies, shared practice, and interactions. This study was conducted in an elementary school in a suburban town in New Jersey. The elementary school was selected as the site for the case study because of the established PDS partnership between a local university and the P-12 school district. Data were collected using a variety of qualitative methods, for example, semi-structured interviews, observations, and reflective journals. For the purposes of this research, PLC exposure is defined as bi-weekly one hour meetings attended by the pre-service teachers, their

university supervisor, and the participant researcher, and weekly grade-level PLC meetings attended by pre-service teachers, cooperating teachers, and support staff. As a democratic leader, I am interested in learning the influence of PDS pre-service teacher participation in a pre-service teacher PLC from the pre-service teachers' perspectives.

Senior internship experiences influence future teaching practices (Howell, 2004). Pre-service teacher interactions with peers, to share knowledge, strategies, practice, and ideas may establish a norm that permits expressions of help seeking (Gimbert, 2000; Little, 1990). Through PLC interactions the likelihood of a mental model shift away from the traditional norms of autonomy increases. If pre-service teachers learn how to share knowledge, strategies, practice, and exchange ideas during their internships, then they will begin their teaching careers with different mindsets; shared knowledge, strategies, practice, exchange of ideas, and requests for and acceptance of assistance from peers will be the norm. "The tendencies toward individualism, presentism, and conservatism" (Little, 1990, p. 516) will be altered.

The participants of this study are four senior pre-service teachers enrolled in a PDS teacher preparation program, their university assigned on-site supervisor, the school district assigned cooperating teachers, and the participant-researcher. The partnering schools are a northern New Jersey university in an urban area and a northern NJ elementary school in a suburban borough.

The research methodology utilized for this study was a qualitative approach. The qualitative data collection tools were participant journals, semi-structured participant pre/post-PLC participation interviews, and PDS PLC meeting observations. The strategy of inquiry was a case study. Case studies allow researchers to gather information using a

variety of data collection techniques over a sustained period of time (Creswell, 2009). Data for this study were gathered from each pre-service teacher. Each pre-service teacher served as a case being studied, and as the primary unit of analysis. The data collected for each case wee included in a multiple-case study analysis.

The following four research questions guided the case study regarding the perceived influence of PLC exposure on pre-service teachers enrolled in a PDS teacher preparation program:

1. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their knowledge base?
2. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their various interactions:
    a. With other PDS cohort members?
    b. With their cooperating teachers?
    c. With faculty and staff members?
3. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their perceptions of shared practice and exchange of ideas?
4. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their strategies?

Significance of the Study

This study is significant as it could influence the future practices of universities with PDS teacher preparation programs. It will provide information regarding the value of establishing PLCs at P-12 internship sites for pre-service teacher cohorts. According to

Wideen, Mayer-Smith, and Moon (1998), PDSs "are primarily concerned with describing (or prescribing) collaboration efforts rather than with examining their effects on beginning teachers" (p. 156). Currently pre-service teacher exposure to PLCs varies according to their teacher-education program and internship site. This case study provides data that can be utilized by universities to modify teacher preparation programs to best meet the needs of the pre-service teachers. "A sense of community encouraged in cohort structures can foster learning and discourage the intellectual and professional isolation of teachers (Dinsmore & Wenger, 2006, p. 57).

"Collaboration can and should be seen as an essential condition for successful professional practice by teachers and students" (Erickson, 1989, p. 431). This study has the potential of effecting a mental model shift among pre-service teachers. This may lead to pre-service teachers who are not constrained by traditional teaching norms of privacy and isolation, and are able to collaborate with their peers. As pre-service teachers transition to their full-time teaching careers they will have different perspectives regarding the shared learning and exchange of ideas among peers. It is possible that they will not view the request of and acceptance of assistance from peers as a weakness in knowledge base.

This research provides information that could influence future teacher education and certification policy. At present, research on professional learning communities has focused primarily on communities of experienced, rather than novice or pre-service teachers (Gimbert, 2000). PDS pre-service teacher PLC discussions provide insights regarding pre-service teacher concerns as they learn how to teach and come to terms with who they are as teachers. Areas in which pre-service teachers need support or assistance

are identified, and support systems could be put in place to provide any necessary assistance or guidance. This research could be used to support making pre-service teacher PLC participation a mandatory aspect of the pre-service internship experience.

This research is also significant as it may lead to future research. For example, the effect of PLC interactions on PDS pre-service teachers as they transition to full-time teaching positions could be explored as a result of this study. The follow-up study could describe the experiences of the novice teachers during their first year teaching, and how the external supports provided by the pre-established PDS PLC affects their overall job satisfaction. This information is of value as lack of support has been identified as a cause of new teacher attrition. Presently, the attrition rate of new teachers is over 30% during the first three years, and 50% within the first five (Teacher Induction and Retention, 2008).

In short the decision to consciously situate my research study in the exploration of the influences of PLC participation on pre-service teachers enrolled in a PDS teacher preparation program may lead to significant changes in the organization of teacher preparation programs, may lead to mental-model shifts away from isolation and towards collaboration for pre-service teachers, and may also serve as a basis for future research.

Definition of Terms

Professional Development School partnerships – PDS partnerships provide universities with P-12 sites for cohorts of pre-service teachers to complete their sophomore, junior, and senior year internships, and they provide school districts with additional personnel, and increased opportunities for professional development.

Professional Learning Community –

> A PLC is composed of collaborative teams whose members work *interdependently* to achieve *common goals* linked to the purpose of learning for all…In a PLC, *collaboration* represents a systematic process in which teachers work together interdependently in order to *impact* their classroom practice in ways that will lead to better results for their students, for their team, and for their school. (DuFour et al., 2006, p. 3)

Knowledge base – refers to knowledge of students, content knowledge, and pedagogical knowledge.

Strategies – refers to instructional, organizational and assessment strategies.

Delimitations

Delimitations provide information about the participants of a study and the researcher's reasons for selecting particular participants. Delimitations serve to establish the parameters of a study (Hancock & Algozzine, 2006, p. 75). In this study the participants are four female pre-service teachers enrolled a PDS teacher preparation program. They are assigned to ABC Elementary for their senior year internships, they all attend XYZ University, and they all lack prior experience participating in a PLC. Their university assigned supervisor and assigned cooperating teachers also participate in the study in a supplemental role.

The study is a qualitative study and the strategy of inquiry is a case study. The PSTs serve as the unit of analysis. Since there are four PSTs participating in this study there are a total of four cases. According to Creswell (1998), the goal of qualitative research is to attain the best possible understanding of, or deep knowledge of, a social setting or specific phenomenon. I have chosen to conduct a qualitative study because I am interested in exploring the perceived influence of PLC exposure on the self-

perceptions of pre-service teachers enrolled in a PDS teacher preparation program, in the areas of knowledge, strategies, shared practice, and exchange of ideas.

Critics of case study research "typically state that single cases offer a poor basis for generalizing" (Yin, 2009, p. 43) findings. For this reason, I have chosen to conduct a multiple case study analysis in which each PST serves as the unit of analysis; there are four cases in this study. Although similar findings across the cases do not guarantee generalizability to other PDS sites, they do provide strong support for my conclusions and implications; and thereby strengthen the external validity of the study (Maxwell, 2005; Yin, 2009).

To illustrate that the findings are trustworthy I established credibility, transferability, dependability, and confirmability. To establish credibility, I shared my interpretations of the data with the participants to ensure that I described their realities appropriately. I established transferability by providing a detailed description of the case study that future researchers could use to determine if the case study is similar enough to their study to offer usable knowledge (Toma, 2005). Dependability was established by carefully recording all changes to the original research design, and also documenting the reasons for the changes, so that if the study were conducted again with the same participants under the same circumstances the results would be similar (Toma, 2005). Confirmability was established by creating an audit trail. The audit trail illustrates how data were collected and analyzed, it includes references to how my assumptions, values, and biases may have influenced the study, and it also fully considers rival theories or conclusions. Additionally, it includes all interview, observation, and journal entry data.

Organization of the Study

This research study follows the traditional dissertation format. Chapter 1 serves as the introductory chapter. It includes the problem statement, purpose statement, research questions, significance of the study, and the delimitations and limitations. Chapter 2 presents a review of the literature related to PLCs, PDSs, and novice teacher attrition. Chapter 3 contains the methodology used for data collection. The findings are presented in Chapter 4, and the results, conclusions, and recommendations are presented in Chapter 5.

Chapter 2

Literature Review

The purpose of this study is to examine the perceived influence of Professional Learning Community (PLC) exposure on the self-perceptions of pre-service teachers enrolled in a Professional Development School (PDS) teacher preparation program, in the areas of knowledge, strategies, shared practice, and exchange of ideas. The literature reviewed for this study is divided into four sections: Professional Learning Communities, Professional Development Schools, teacher education programs, and novice teacher induction programs. First, a brief history of PLCs is presented. The impact of PLCs on professional development (Clarke, 2009; Rasberry & Mahajan, 2008), how they benefit students and teachers, and challenges to successful PLC implementation are discussed. Second, the purpose of PDS partnerships, and the challenges encountered when attempting to establish partnerships between universities and P-12 schools are presented in the PDS Section. Third, the problems associated with teacher education programs are reviewed. Finally, the role of novice teacher induction programs is discussed.

Professional Learning Communities

The notion that more is accomplished when people work together as a community towards a common or shared goal is not new. Over the past century there have been many researchers/theorists "from Dewey (1916) and Parsons (1959) to Fullan and Hargreaves (1991) who have advocated that schools should look at themselves as social organizations" (Clausen, Aquino, & Wideman, 2009, p. 444). Through the years, there have been many names and shifts in philosophy applied to the 'schools as social

organizations' concept. At this time, the term PLC is being used to identify groups of educators working together to improve student achievement.

The term PLC lacks a universal definition. However, researchers have provided descriptions of PLCs that share commonalities. Hord (1997) referred to PLCs as an ongoing process through which teachers and administrators work collaboratively to seek and share learning and to act on their learning, their goal being to enhance their effectiveness as professionals for students' benefit. DuFour et al. (2006) describe PLCs as educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve. Stoll, Bolam, McMahon, Wallace, and Thomas (2005) describe PLCs as an inclusive group of people, motivated by a shared learning vision, who support and work with each other to inquire on their practice and together learn new and better approaches to enhance student learning. Protheroe (2008) describes PLCs as a school culture that recognizes and capitalizes on the collective strengths and talents of the staff. Feger and Arruda (2008) refer to PLCs as a strategy to increase student achievement by creating a collaborative school culture focused on learning. PLCs are described as team members who regularly collaborate toward continued improvement in meeting learner needs through a shared curricular-focused vision by Reichstetter (2006), and McRel (2003) refers to PLCs as a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive learning-oriented and growth-promoting way (as cited in http://www.centerforcsri.org/plc/index.html).

Although the descriptions come from various sources, they all refer to teacher collaboration and its connection to learning. Researchers promote PLCs as vehicles for

shared learning among educators with the goal of enhancing student learning and increasing student achievement. Currently, PLCs promote collegial interactions as the source of professional development for educators (DuFour & Eaker, 1998; Hord, 1997, 2004).

PLCs and professional development. In the past, school districts relied on traditional modes of professional development to introduce new methods and strategies, and to insure that teachers stayed current in their craft. The traditional modes of professional development focused on bringing in outside experts to present workshops that were often unrelated to teacher and student needs, and teacher attendance of out-of-district workshops, whose strategies they were unable to implement due to lack of resources, and/or support (Clarke, 2009; Clausen et al., 2008; DuFour & Eaker, 1998). In order to substantially improve student achievement, staff development opportunities need to be provided in a supportive collegial environment (Bier, 2009; Clarke, 2009; Cranston, 2009; Hickman, Schrimpf, & Wedlock, 2009; Hipp & Huffman, 2003). In recent years, research has shown that job-embedded professional development is more effective than the traditional offerings (O'Neil, 1995). Therefore, districts are developing PLCs in their schools to better prepare teachers to meet the needs of their students.

PLCs present the means for teachers to learn from one another and to impact student learning. They provide a forum for teachers to collaborate with their peers on a regularly scheduled basis. In effective PLCs, teachers collect and analyze classroom data, share best practices, and make instructional decisions as a team to better meet the needs of their students (Clarke, 2009; Rasberry & Mahajan, 2008).

Benefits of PLC implementation. Instructional quality affects students' abilities to learn new concepts. The quality of instruction received by students is dependent on the professional development available to teachers. Therefore, student learning is dependent on the quality of the professional development provided for teachers (Hickman et al., 2009; Hipp & Hufman, 2003; Rasberry & Mahajan, 2008; Smith, 2009). According to Hord and Hirsh (2008), professional learning communities provide the most supportive learning environments for professionals. Teachers working in professional learning communities interact with their peers to collect and analyze data, share best practices, and make instructional decisions as a team (Clarke, 2009). Their collegial interactions result in enhanced learning opportunities as teaching professionals, and increase their abilities to meet the needs of their students (Rasberry & Mahajan, 2008).

PLCs are beneficial for teachers and students. Some of the benefits for the teachers are: decreased isolation, increased satisfaction, higher efficacy, shared responsibility for student learning, support for student improvement, improved understanding of content, professional renewal, and increased adaptability to change (Hord & Hirsh, 2008; Rasberry & Mahajan, 2008). Some of the benefits for students attending schools that function as PLCs are: improved academics when compared to peers in traditional school settings, also decreased dropout, truancy, and absentee rates (Rasberry & Mahajan, 2008).

Teacher's role in PLC implementation. Traditionally, teachers have spent most of their careers working in physical and mental isolation. Their careers could be described as years spent isolated in classrooms without the support of their colleagues. The opportunities to engage in academic discourse to discuss curriculum, instructional

strategies, student needs, and assessments have been rare (Achinstein, 2002; Darling-Hammond, 1997; Rasberry & Mahajan, 2008). For the most part, teachers plan their lessons and assess their students in isolation. It is possible for students in the same grade level, in the same school, to receive entirely different educations. School cultures negate collegial interactions in which teachers can collaborate by sharing knowledge, practice, skills, and ideas (Fullan, 2006); the request for and acceptance of assistance is often viewed as a weakness in knowledge base or incompetence (Little, 1990). Interactions in schools are mostly congenial in nature; teachers share practice, but advice is not offered unless it is specifically requested (Little, 1990).

Teachers involved in PLC implementation have to move away from the traditional culture of schools in which teachers are autonomous, independent, and all-knowing. They have to work with their school leaders to transform the existing organizational cultures to collegial cultures characterized by (Barth, 2006):

- Teachers talking with each other about practice
- Teachers sharing knowledge about their craft
- Teachers observing each other while engaged in their practice and
- All staff celebrating each other's successes

Some teachers may also work collaboratively with their school leaders, and serve as teacher leaders. Suggested roles for teacher leaders are "serving as grade level team leaders, representatives on the school improvement team and or school's leadership team" (Smith, 2009, p. 57). In these positions of leadership, teachers can facilitate grade level team meetings, act as coaches or mentors (Smith, 2009), and represent teacher's views at school improvement and or school leadership team meetings.

Successful PLC implementation requires that "teachers work collaboratively to reflect on their practice, examine evidence about the relationship between practice and student outcomes, and make changes that improve teaching and learning for the particular students in their classrooms" (McLaughlin & Talbert, 2006, p. 4). Successful PLC implementation is beneficial for all stakeholders.

Challenges to successful PLC implementation. "A school becomes a professional learning community only when the educators within it align their practices with PLC concepts" (DuFour, 2007, p. 4). There are many districts that consider themselves PLCs, but are unaware of how PLCs function. The lack of awareness may be due to the excessive use of the term PLC "to describe every imaginable combination of individuals with an interest in education – a grade-level teaching team, a school committee, a high school department…the term has been used so ubiquitously that it is in danger of losing all meaning" (DuFour, 2004, p. 6).

According to Fullan (2006), there are challenges to the implementation of PLCs. The challenges that concern him are – superficiality, latest innovation, and local change efforts. Fullan is concerned that many educators are using the term PLC to rename practices that were already in place, but do not function as PLCs (Fullan, 2006; Senge, 1990). He worries that educator's will view PLCs as the latest innovation and will discard its implementation if the initial results are not positive. He is also concerned that PLC implementation will not be systemic. Individual PLC schools should not exist. According to Fullan (2006), individual isolated PLCs have no place in school reform.

There are other challenges to the implementation of PLCs. One is related to lack of time for PLCs to meet during the instructional day. There are few opportunities for teachers –

> To engage in continued and sustained learning about their practice in the settings in which they actually work, observing and being observed by their colleagues in their own classrooms and classrooms of other teachers in other schools confronting similar problems of practice. (Elmore, 2004, p. 127)

Another challenge is that schools are structured in ways that support the isolating nature of the teaching profession (O'Neill, 1995). For example, the scheduling of specials, such as art, music, and physical education in elementary schools often limits the ability of grade-level PLCs to interact. Teaching in isolation without any support or collaboration is embedded in the culture of many schools (Fullan, 2006; O'Neill, 1995).

The challenges to PLC implementation may result in PLCs of varying quality and effectiveness. It is possible for schools within the same district to have varying degrees of success when implementing PLCs. This randomness could affect the quality of the student-teaching experience, as pre-service teachers may not learn how to share knowledge, strategies, practice, and exchange ideas during their internships, thereby beginning their careers at a disadvantage. How can pre-service teachers gain the knowledge, strategies, and supports they need to successfully transition to their teaching careers? In the following section I discuss the basic concepts underlying the creation of PDS partnerships and how they provide support for pre-service teachers. I also discuss the difficulties encountered when developing partnerships.

Professional Development Schools

Professional Development Schools represent school-university partnerships that attempt to support pre-service teachers as they connect and apply the theories learned in

university teacher education programs to the real-life situations encountered during student-teaching (Teitel, 2003).

> The basic concept underlying the Professional Development School (PDS) – that is, an elementary or secondary school where teachers learn and research is a part of practice- is not a new idea. Antecedents of the PDSs are found in John Dewey's Laboratory School, in the work of Lucy Sprague Mitchell (1950) and in Schaefer's "schools of inquiry (Schaefer, 1967). (Levine & Trachtman, 1997, p. 1)

The National Council for Accreditation of Teacher Education (NCATE) established standards for PDSs. The standards bring rigor to the concept of PDSs by ensuring that partnerships are not "in name only;" they support developing partnerships by providing guidelines for their development, they are used as an assessment tool by partnering schools and universities, and also by national, state, and local policymakers who "want to create incentives and supports for PDSs, and they provide a structure for conducting and evaluating research associated with PDS partnerships" (NCATE, 2001, p. 2). Although everyone in the PDS community does not embrace the Standards with the same enthusiasm, they are widely seen as the best representation of the consensus of what it means to be a PDS (Teitel, 2003).

PDSs are formed through partnerships between universities with teacher preparation programs and P-12 schools. The goal of the school/university partnerships is the professional preparation of candidates, faculty development, inquiry directed at the improvement of practice, and enhanced student learning (Abdal-Haqq, 1991; NCATE, 2001; Stephens & Boldt, 2004). At PDS sites the entire school community participates in the pre-service teacher's introduction to teaching; it is not limited to just the cooperating teacher and the university supervisor (Abdal-Haqq, 1991).

Challenges to PDS partnerships. In theory, PDSs are beneficial to all involved. However, there are many challenges to the implementation of successful PDS partnerships. Developing partnerships between schools and universities require the establishment of a new culture (Lefever-Davis, Johnson, & Pearman, 2007; Selke, 1996). The new culture necessitates an understanding of the individual participant's knowledge and skills, and stipulates the benefits to be gained from the formation of a PDS partnership (LeFever-Davis et al., 2007).

"Collaboration between mentors, interns, and university faculty has a powerful impact on the classroom and is one key facet of every successful PDS" (LeFever-Davis et al., 2007, p. 205). However, the faculties of the universities and the P-12 schools lack an understanding of collaborative professional practice (Stephens & Boldt, 2004). In K-12 settings, faculties value concrete, practical strategies that can be used in the classroom (Selke, 1996). In universities the emphasis is on the theoretical, "knowledge is an end in itself versus knowledge applied in practice" (Selke, 1996, p. 8). Another hindrance to collaboration is the perception of university professors as all-knowing. For true collaboration to occur both faculties must view each other as equals (LeFever-Davis et al., 2007).

Partner expectations can be a challenge. Some schools view pre-service teachers as additional personnel. They are used to cover classes, "recess duty and physical education, as clean up persons for art activities, or as part of the secretarial staff in duplicating volumes of teacher handouts" (Ledoux & McHenry, 2008, p. 156). "Universities need teacher candidates to achieve adequate and appropriate teaching disposition" (Ledoux & McHenry, 2008, p. 157). Additionally, a perception of lack of

parity and reciprocity can negatively affect the quality of PDS partnerships. There are limited financial supports or incentives provided for P-12 educators who bear most of the responsibility regarding the professional preparation of pre-service teachers (Edens, Shirley, & Toner, 2001). For PDSs to be effective partnership, expectations must be clear.

The implementation of successful PDS partnerships requires careful planning and willingness by all involved to collaborate. The university and school district personnel must work together to develop their joint mission. Collaboration between the university and the school district personnel will help prevent the development of in name-only PDS partnerships. The quality of the student-teaching experience will improve if clear goals are defined, and everyone is aware of their roles and responsibilities. In the following section teacher education programs are discussed.

Teacher Education Programs

Many teachers consider their student-teaching internship the most significant aspect of their teacher education program (Darling-Hammond & Bransford, 2005). The goal of pre-service internships is to prepare pre-service teachers for their professional careers by allowing them to apply the theories learned in their teacher preparation classes to real-life classroom situations (Devlin-Scherer & Daly, 2001; Howell, 2004). Pre-service internships allow pre-service teachers to gain clinical practice in their chosen career fields. Unfortunately, the quality of student-teaching internships varies. Ideally,

> Pre-service teachers are supported by purposeful coaching from an expert cooperating teacher in the same teaching field who offers modeling, coplanning, frequent feedback, repeated opportunities to practice, and reflection upon practice while the pre-service teacher gradually takes on more responsibility. (Darling-Hammond and Bransford, 2005, p. 409)

In reality pre-service internships are often lonely and isolating experiences as pre-service teachers are assigned to schools and provided limited support, such as an off-site university supervisor and a cooperating teacher (Levine & Trachtman, 1997).

The lack of uniformity among university pre-service teacher education programs affects pre-service teacher levels of preparation when they transition from their student-teaching experiences to their teaching careers. Novice teachers that begin their careers with limited instructional strategies, organizational strategies, such as planning, classroom management, and assessment strategies must gain these strategies through trial and error (Freiberg, 2002). Other challenges faced by new teachers are feelings of inadequacy regarding "…classroom management concerns (Grudnoff & Tuck, 2001), lack of curriculum knowledge, (Rea & Parkinson, 1999), and disruptive and unmotivated students (Featherstone, 1993; Fisher et al. 1999)" (as cited in Choy, Chong, Wong, & Wong, 2010, para. 4). Additionally, some novice teachers feel unprepared to address the diverse needs of their students, such as English language learners and special needs students (Berry, Daughtrey, & Wieder, 2010). All these factors cause frustration and may lead to the high rates of new teacher attrition (Darling-Hammond, 2003).

There is much debate among researchers over the "extent to which teachers are prepared before they enter teaching and what counts in order for a new recruit to be deemed qualified and licensed to teach" (Berry et al., 2010, p. 1). The disparity among researchers make it difficult to establish which pre-service teacher preparation programs are providing pre-service teachers the knowledge, strategies, and dispositions they need to be successful teachers. To counteract the disparity found among teacher preparation

programs, many schools offer novice teacher induction programs. In the following section novice teacher induction programs are discussed.

Novice Teacher Induction Programs

"Teaching is the only profession in which entry-level individuals are expected – from Day One – to do the same job and perform at the same level of competence as experienced practitioners" (NCTAF, 2003, p. 27). To ensure that novice teachers receive support and gain the knowledge and skills necessary to be successful teachers, many districts, states, and countries have established teacher induction programs. Induction programs provide support and guidance for novice teachers as they adapt to the demands of their new roles and responsibilities as classroom teachers. Although induction programs use different frameworks, the goal is the same: to help novice teachers. Some of the common characteristics they share are the assignment of mentors for the novice teachers, scheduling of common planning time with grade-level team members, and participation in novice teacher workshops to help bridge the gaps between the novice teacher's theoretical knowledge and practical knowledge (Fry, 2010, p. 1165). Research findings indicate that teachers who are provided support are more likely to remain in the profession (Wilkins & Clift, 2006).

Conclusion

In conclusion, the literature reviewed established that PLCs provide teachers the opportunity to share knowledge, strategies, practice, and exchange ideas with their colleagues with the goal of enhancing student learning and increasing student achievement. The benefits to be gained from successful PLC implementation such as decreased isolation, increased satisfaction, higher efficacy, shared responsibility for

student learning, support for student improvement, improved understanding of content, professional renewal, and increased adaptability to change, outweigh the challenges (Hord & Hirsh, 2008; Rasberry & Mahajan, 2008).

The cultural changes required to successfully implement PLCs are time consuming. School districts have to shift from traditional hierarchical institutions to collaborative institutions. At the school level principals and teachers also have to adapt. For example, principals must adapt from being leaders of followers to being leaders of leaders, and teacher interactions with colleagues will shift from congenial to collegial. As these changes are taking place, future educators must still be prepared for their careers. "Since existing schools provide the setting for field experiences and student teaching, the prevailing school culture not only fails to promote student learning but also fails to nourish the development of expertise in preservice and novice teachers" (Abdel-Haqq, 1991, para. 4). The schools of today cannot sufficiently prepare tomorrow's teachers (Abdal-Haqq, 1991).

The establishment of PDS partnerships is an attempt to provide pre-service teachers the support they need to develop as professionals. Pre-service teachers enrolled in PDS teacher preparation programs are assigned to P-12 schools as cohorts during their Junior and Senior internships; they have an on-site university supervisor, and support from their cooperating teacher, and other staff members. The expectation is that the pre-service teachers will support one another during their student-teaching experiences, and decrease the isolation and loneliness associated with student-teaching. Ideally, the yearlong internships also provide pre-service teachers the opportunity to interact with and learn from other faculty, staff members, and each other.

The literature reviewed illustrated the many factors that can negatively impact the student-teaching experience, such as quality of PLC at P-12 school, ineffective PDS school-university partnerships, and extent of pre-service teacher preparation. However, to sufficiently prepare tomorrow's teachers for their careers, the student-teaching experience should provide pre-service teachers opportunities to collaborate with their peers to share knowledge, strategies, practice, exchange ideas, and learn from one another. A review of the literature revealed a link between increased teacher satisfaction rates, decreased attrition rates, and novice teacher participation in programs that emphasized collegial support (McClure, 2008). However, there was a gap in the literature regarding PDS pre-service teacher cohort participation in pre-service teacher PLCs. This research study is an effort to explore the perceived influence of PLC participation on the knowledge, strategies, and perceptions of shared practice and exchange of ideas of pre-service teachers enrolled in a PDS teacher preparation program.

Chapter 3

Methodology

In this chapter I describe the research design and research methods utilized for this research study. The role of the researcher, purpose statement, setting, research questions, and rationale for selecting a holistic multiple case study design are presented. Participant selection, data collection techniques, and data analysis methods are discussed. Lastly, issues regarding trustworthiness and limitations of the study are also presented.

Role of the Researcher

In this section I position myself as a researcher. This clarifies the place from which I speak (Lather, 1991), and helps others understand the lenses through which I view my research study. My philosophy as a researcher is constructivist. I believe that our understanding of the "world is inevitably a construction from our own perspectives and standpoint" (Creswell & Plano Clark, 2011, p. 45). Through my constructivist lens I viewed the professional growth and development of the pre-service teachers as they participated in their internships. In my dual role as participant researcher and ABC Elementary School principal, I sought to understand what occurred when PLCs, PDSs, and PDS pre-service teacher PLCs intersected from the pre-service teacher's perspective. A gap in the literature regarding this topic was identified.

Conceptual Framework

According to Maxwell (2005), a conceptual framework is comprised of the beliefs and ideas of a researcher regarding the focus of his/her study. My research study was conceptualized around the question: What is the perceived influence of PLC participation on pre-service teachers enrolled in a PDS teacher preparation program? The basic

assumptions, which guided my work, are:

- *PLCs can lead to meaningful collaboration.* My first assumption was that PLCs provide a forum for individuals to share knowledge, strategies, practice and ideas so that everyone benefits. The shared information can serve as professional development; it can drive instruction; it can make best practices available to more teachers and students – as opposed to teaching and learning in isolation (Bier, 2009; DuFour et al., 2006; DuFour & Eaker, 1998; Hord, 1997, 2004; Hord & Hirsch, 2008; Rasberry & Mahajan, 2008).
- *PDSs provide pre-service teachers support.* My second assumption was that PDSs can help pre-service teachers support one another and learn from others in the educational community (professors, cooperating teachers, cohort members, university supervisors, etc...). It is important to note that pre-service teachers are often isolated during their internships. However, if given support via their university supervisor and PDS community, then they will have the opportunity to begin their careers with a mental model shift toward collaboration and away from isolation (Abdal-Haqq, 1991; NCATE, 2001; Stephens & Boldt, 2004).
- *Pre-service teachers and Novice teachers need support.* My third assumption was that pre-service teachers and novice teachers who do not receive support will either not enter or will leave the teaching profession. The districts most likely to suffer from teacher attrition are the low-income districts. This will lead to an endless cycle of novice, unprepared teachers serving our most at-risk students. The result is that everyone – the district, the teachers (novice

and experienced), and the students – lose (Fry, 2010; Ingersoll, 2001; McClure, 2008; NCTAF, 2003; Wilkins & Clift, 2006).

Purpose Statement

The purpose of this multiple case study was to examine the influence of Professional Learning Community (PLC) participation on pre-service teachers enrolled in a Professional Development School (PDS) teacher preparation program. As previously mentioned, data from this study may influence the future practices of universities with PDS teacher preparation programs. It will provide information regarding the value of establishing PLCs at P-12 internship sites for pre-service teacher cohorts. Pre-service teacher participation in PLCs may lead to pre-service teachers who are able to collaborate with peers. Lastly, this research will provide information that could influence future teacher education and certification policy. Most research on teacher PLCs focuses on experienced rather than novice or pre-service teachers. PDS pre-service teacher PLC discussions may provide insights regarding pre-service teacher concerns as they learn how to teach and come to terms with who they are as teachers.

Setting

This multiple case study was conducted in an elementary school in a suburban town in New Jersey. The elementary school was selected as the site for the case study because of the established PDS partnership between a local university and the P-12 school district. Additionally, the site was selected because as the elementary school administrator, I was aware of the existence of a PDS pre-service teacher PLC at this site. Maxwell (2005) refers to this type of selection as purposeful sampling. In purposeful sampling the participants, research sites, and/or events are deliberately selected to

provide data that are specific to those particular participants, research sites, and/or events (Maxwell, 2005).

Research Questions

The following four research questions guided the case study regarding the perceived influence of PLC exposure on pre-service teachers enrolled in a PDS teacher preparation program:

1. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their knowledge base?
2. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their various interactions:
    a. With other PDS cohort members?
    b. With their cooperating teachers?
    c. With faculty and staff members?
3. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their perceptions of shared practice and exchange of ideas?
4. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their strategies?

Rationale for Qualitative Methodology

In this section, the rationale for using qualitative methodology to conduct this research study will be presented. Since I attempted to understand the influence of pre-service teacher PLCs from the pre-service teacher's perspectives, I approached this research study from a qualitative standpoint. Qualitative researchers "seek to understand

and interpret how the various participants in a social setting construct the world around them" (Glesne, 2006, p. 4). In my role as a participant-researcher I became the main research instrument. To ensure that I accurately represented the participants' perspectives, I provided them with the data so they could review it (member checking). I also focused on my reflexivity by maintaining an electronic journal to keep track of my decisions and beliefs in reference to the research study. Additionally, I presented the findings of my study at XYZ University's PDS meeting, and requested feedback from the program director, the PDS university supervisors, and administrators from other PDS school districts. Everyone was interested in the research findings, and some university supervisors made arrangements to attend a future PST PLC meeting at ABC Elementary. They were interested in starting PST PLCs at their school sites. Lastly, through reflection I gained a better understanding of what my lens or lenses allowed me to see, and also how they inhibited my vision (Russell & Kelly, 2002).

Although there are many ways to conduct qualitative research, Yin (2009) suggests that the distinction between different methods is based on three conditions "(a) the type of research question posed, (b) the extent of control an investigator has over actual behavioral events, and (c) the degree of focus on contemporary as opposed to historical events" (Yin, 2009, p. 8). Given that my research questions began with "How," I had little control over the pre-service teacher PLCs; and pre-service teachers were exposed to PLCs during their senior year internship experiences, I identified the exploratory case study method as the appropriate method for my research study (Hart, 2009). According to Hart, exploratory case studies "provide illumination on a process or problem" (Hart, 2009, p. 47).

The case study design was a multiple case holistic design. The case study was holistic because it was concerned with "process and context rather than simply outcomes or focusing on differences and comparisons" (Toma, 2005, p. 407). Holistic case studies focus on the whole picture. In this study, each pre-service teacher enrolled in the PDS teacher preparation program, and participation in the pre-service teacher PLC was viewed as an individual case. Each case consisted of the pre-service teacher, the cooperating teacher, the university supervisor, the PDS cohort members, and faculty and staff members. Analysis of the data illustrated similarities and differences regarding the perceived influence of PLC exposure on each pre-service teacher. Comparison and analysis of data from individual cases increased the trustworthiness of the study, as the outcomes for each case were literal replications: meaning that since the case studies occurred under the same conditions, then the outcomes should have been similar (Yin, 2009). The multiple case holistic design was selected because it may yield more powerful analytic conclusions than single case designs (Yin, 2009). In the following section the criteria used to select the participants for this case study are presented.

Participant Selection

The random sampling techniques used in quantitative studies are inappropriate for qualitative studies, because the aim of qualitative studies is to gain an understanding of complex issues relating to human behavior, not to generalize the results to the population (Marshall, 1996). A purposeful sampling strategy was used to identify and select the participants of this study. Purposeful sampling is "a strategy in which particular settings, persons, or activities are selected deliberately in order to provide information that can't be gotten as well from other choices"(Maxwell, 2005, p. 88). In purposeful sampling, the

researcher selects the most productive sample to address the research questions (Marshall, 1996). The type of purposeful sampling used was criterion sampling. In criterion sampling, cases are selected that meet some pre-determined criteria (Patton, 2002, p. 238).

Pre-service teachers. The pre-service teachers for this research study were selected based on meeting the following pre-established criteria:

1. The pre-service teachers were enrolled in a PDS teacher preparation program.
2. They must have completed their senior year internship in an elementary setting.
3. They must have been assigned to the same elementary school for their junior practicum and senior experience.
4. The pre-service teachers agreed to participate in a pre-service teacher PLC at the elementary school.

Four PDS pre-service teachers completed their junior year internship at ABC Elementary School during the Fall 2010 semester. As the building administrator, I knew that the candidates all met the pre-established criteria. I presented my research study to the PDS pre-service teachers during a meet and greet session arranged by the university assigned on-site supervisor. I provided the eligible candidates with informed consent letters during the meet and greet.

University supervisor. The university supervisor was purposely selected. The university supervisor for this research study was selected based on meeting the following pre-established criterion:

1. The university supervisor was assigned to ABC elementary as the PDS pre-service teacher on-site supervisor.

The university supervisor was aware of the goals of my research study and volunteered to participate in my study. I provided her with an informed consent letter during the pre-service teacher meet and greet.

The university supervisor's responsibilities included being on site every Tuesday and Thursday to meet with the cooperating teachers and pre-service teachers to discuss the pre-service teacher's progress. She formally and informally evaluated the student teachers, and provided feedback to them regarding their lessons. She also met with me on a regular basis to ensure that the elementary school and university needs were being met. Additionally, the university supervisor served as the facilitator during the pre-service teacher PLC meetings.

Unfortunately, University Supervisor Ariella, had to go on emergency medical leave mid-way through the Spring 2011 semester (March 29, 2011). Prior to her leave she arranged for a co-worker to supervise the pre-service teachers for the remainder of the semester. University Supervisor Claire was well-known to the ABC Elementary staff members, as she had served as the university supervisor for the site in the past. The transition from University Supervisor Ariella to University Supervisor Claire went smoothly. University Supervisor Ariella invited University Supervisor Claire to attend a couple of PST PLC meetings so that she could familiarize herself with her new role as PST PLC facilitator. It also helped that University Supervisor Ariella maintained contact with the PSTs, University Supervisor Claire, and myself during her leave. She even facilitated the PST PLC meetings via Skype.

Cooperating teachers. The cooperating teachers for this study were also purposely selected. The cooperating teachers for this research study were selected based on meeting the following pre-established criteria:

1. The cooperating teachers were classroom teachers at ABC elementary school.
2. They were tenured teachers.
3. They served as cooperating teachers for the PDS pre-service teachers assigned to ABC Elementary during the Spring 2011 semester.

The cooperating teachers were asked to participate in the study once the consent forms for the pre-service teachers were received. I presented the study and their roles and responsibilities to them during the grade-level PLC meetings; I also provided them with informed consent letters. I emphasized that participation was voluntary, and they could opt out of the study at any time.

Ethical Consideration: Research with Human Subjects

Prior to beginning my research study I applied for approval from Rowan University's Institutional Review Board (IRB).

> All research involving human subjects that is conducted by anyone affiliated with Rowan (i.e., all faculty, staff, undergraduate, and graduate students) must be reviewed and approved by the Institutional Review Board for the Protection of Human Subjects in Research (IRB) prior to such studies being undertaken. (http://www.rowan.edu/open/provost/research/Integrity_and_compliance/Irb/documents/Policy002.pdf)

The IRB process required that I address the level of risk participants would face by participating in my research study (see Appendix A); how I would select participants and how I would protect their identities; and how I would collect, store, and dispose of data. I also had to complete a web-based training, "Protecting Human Research Participants,"

offered by the National Institutes of Health (NIH) Office of Extramural Research (Appendix B).

The IRB process made me consider how I could ensure that my participants were treated ethically. Although it may have been unrealistic, I did not want my position as school principal to coerce the pre-service teachers, university supervisor, and faculty and staff members into participating in my study. Therefore, I was pleased that the IRB process required that all participants complete informed consent forms prior to participating in the study. The informed consent forms emphasized that participation in the research study was voluntary, and that there would be no repercussions if individuals chose not to participate. The informed consent forms also informed participants that they could opt out of the study at any time, and provided them with the contact information for my faculty advisor and for the Rowan University Associate Provost for research (see Appendices C, D, & E).

Data Collection Techniques

My research questions explore the perceived influence of PLC participation on pre-service teachers enrolled in a PDS teacher preparation program, in the areas of knowledge, strategies, shared practice, and interactions. The data to answer the research questions were gathered during the Spring 2011 semester. They were gathered via semi-structured interviews, observations of PDS pre-service teacher PLC meetings and grade-level PLC meetings, and collection of pre-service teacher journals. As data were collected, they were sorted and separated into like-minded pre-existing data categories aligned to the research questions. Eventually the data were coded, analyzed, and interpreted (Glesne, 2006). Additionally, the semi-structured interview and journal entry

data were analyzed using connecting strategies to identify relationships that link statements and events into a coherent whole (Maxwell, 2005). In the following section I describe the data collection techniques I utilized for this research study.

Semi-structured interviews. Three semi-structured face-to-face interviews of research study participants were conducted. There was a pre-PLC participation interview and a post-PLC participation interview (Appendices F, G, H, I, J, K). There was also one group interview (Appendices L). The semi-structured interviews were scheduled for 30-60 minute blocks, and they were audio-taped, video-taped, and transcribed. The transcribed interviews were read, analyzed, and emerging patterns/themes were coded (Appendix M) (Bogdan & Biklen, 2007; Maxwell, 2005).

Pre-service teacher PLC observations. Observations of PDS pre-service teacher PLC meetings occurred on a bi-weekly basis. The PLC meetings were scheduled for 45-60 minute blocks during the school day. The university assigned on-site supervisor facilitated the pre-service teacher PLC meetings. As a participant-observer I gathered data by writing fieldnotes and videotaping the PLC meetings. The fieldnotes and videotapes allowed for careful review and analysis of the interactions among pre-service teachers, and also between the pre-service teachers and their university supervisor as they participated in the pre-service teacher PLC meetings. My level of participation during the PLC meetings varied, however, the focus of all my interactions with participants was to collect data to further my research goals (Bogdan & Biklen, 2007). The observation field notes were read and the video recordings were viewed in order to identify and code emerging patterns and themes (Bogdan & Biklen, 2007; Maxwell, 2005).

Grade-level PLC observations. The interactions between pre-service teachers and faculty and staff members were observed during grade-level PLC meetings. Data were gathered by writing fieldnotes. The grade-level PLCs occurred on a weekly basis for 40 minutes. As previously stated, my levels of participation varied, but my focus remained constant to collect data to further my research goals (Bogdan & Biklen, 2007). The observation field notes were read and analyzed in order to identify and code emerging themes.

Pre-service teacher journals. The PDS pre-service teachers were asked to keep reflective journals about their PLC experiences. The aim of collecting such materials is to "obtain detailed evidence as to how social situations appear to actors in them and what meanings various factors have for participants" (Angell, 1945, as cited in Bogdan & Biklen, 2007, p. 134). By asking the pre-service teachers to keep reflective journals I helped direct their focus, and had specific data about their PLC participation available to me. The journal entries were read and analyzed in order to identify emerging themes and patterns.

Data Analysis

The data from this study were analyzed using categorizing and connecting strategies. The conceptual differences between categorizing and connecting strategies allowed for a complete analysis of the data.

After collecting the data from the study participants I read, analyzed, and sorted the data into groups by searching for "certain words, phrases, patterns of behavior, subjects' ways of thinking, and events" (Bogdan & Biklen, 2007, p. 173) that repeated or

stood out. By sorting the data I was able to make comparisons between things in the same categories and develop theoretical concepts (Maxwell, 2005, p. 96).

According to Maxwell (2005), researchers should organize their data into broad categories, such as organizational, substantive, and theoretical. Organizational categories are broad areas or issues that are established prior to data collection. They are categories easily derived from the research questions. However, they are not very helpful when trying to make sense of the data. The substantive categories are primarily descriptive of the participant's views or beliefs. They make a claim about the data; the claim may be wrong or right. Lastly, theoretical categories "place the coded data into a more general or abstract framework" (Maxwell, 2005, p. 97). Theoretical categories tend to represent the researcher's beliefs or views. When analyzing the data I attempted to create more substantial and theoretical categories. I also attempted to make connections between the categories.

The transcripts of the semi-structured interviews and journal entries were analyzed using connecting strategies. When reading the transcripts of the semi-structured interviews and journal entries, I carefully read and looked for relationships that connected the "statements and events within a context into a coherent whole" (Maxwell, 2005, p. 98). By using connecting strategies I attempted to gain a better understanding of the relationships among the different elements of the text (Maxwell, 2005). In the following section, the trustworthiness and limitations of the study are discussed.

Trustworthiness and Limitations

Qualitative researchers confirm the accuracy of their findings by utilizing credibility, transferability, dependability, and confirmability standards (Toma, 2005).

These standards mirror the validity, reliability, generalizability, and objectivity strategies used by quantitative researchers. In the following section I discuss the qualitative strategies I used to confirm the accuracy of my findings, as well as the quantitative strategy, that is generalizability, utilized to strengthen my conclusions and implications (Yin, 2009, p. 40).

Credibility refers to the accuracy with which the researcher presents the participants perspective. "Credibility is established if participants agree with the constructions and interpretations of the researcher" (Toma, 2005, p. 413). The credibility strategies used for my study are triangulation, member checking, and clarification of researcher biases.

The use of various methods to collect data from a variety of sources is one aspect of a strategy called triangulation (Maxwell, 2005, p. 93). The use of multiple data-collection methods from different sources contributes to the trustworthiness of the data by decreasing the likelihood that conclusions will represent only the "systemic biases or limitations of a specific source or method, and allows you to gain a better and more secure understanding of the issues you are investigating" (Maxwell, 2005 p. 93-94).

In my research study, data were collected from a variety of sources, including PSTs, CTs, USs, using a variety of methods, such as, participant interviews, observations, and journal entries. The data collected from participant interviews, observations, and journal entries were used to explore the perceived influence of PLC participation on pre-service teachers enrolled in a PDS teacher preparation program. Participant interviews and journal entries were used to gain an understanding of pre-service teacher observed actions. The interview and journal data also provided information that may have been

missed during the observations. Similarly, the data collected from PLC pre-service teacher observations were used to gain an understanding of pre-service teachers theories in use "as well as aspects of the participants' perspective that they are reluctant to directly state in interviews" (Maxwell, 2005, p. 94). Triangulation using multiple sources and multiple forms of data increased the trustworthiness of the study.

Other strategies that I employed to increase the trustworthiness of the study were member checking, as well as clarification of the biases I brought to the study. Member checking gave the study participants the opportunity to identify any researcher misinterpretations of data collected so that revisions could be made. Clarification of researcher biases allowed me to acknowledge that the interpretation of the findings was shaped by researcher background and experiences, such as, culture, gender, history, and socioeconomic origin (Creswell, 2009).

Another way to increase a study's trustworthiness is to demonstrate its transferability. For case studies, that means the researchers should keep careful records of the procedures followed, and that data collected for the study should be accessible to other researchers (Yin, 2009). To ensure that I remained focused on the research study questions, I developed a case study protocol. Additionally, I developed a case study database to ensure that the data collected for the study are accessible to other researchers. I also described each case in sufficient detail that future researchers will be able determine if the study is relevant to their research (Toma, 2005).

The final strategy I used to confirm the accuracy of my findings was generalizability. Critics of case study research "typically state that single cases offer a poor basis for generalizing" (Yin, 2009, p. 43) findings. For this reason, I chose to

conduct a multiple case study analysis in which each PST served as the unit of analysis; there were four cases in this study. Although similar findings across the cases do not guarantee generalizability to other PDS sites, they do provide strong support for my conclusions and implications; and thereby strengthen the external validity of the study (Maxwell, 2005; Yin, 2009).

Although I utilized strategies to increase my research study's trustworthiness, I am aware that there may be limitations to the study. For example, as the administrator of the elementary school where the pre-service teachers completed their internships, I may have influenced the pre-service teachers responses and/or behaviors. Researcher influence on the setting or individuals studied is generally known as reactivity (Maxwell, 2005). Knowing that I might have influenced the data I collected, I made every effort to understand how I may have influenced the participants' responses and/or behavior when interpreting or making inferences about the data. Keeping careful and accurate records of all happenings throughout my study helped increase its dependability. Consequently, if future researchers conducted the same study with the same participants under the same conditions the results would be analogous (Toma, 2005).

Conclusion

In conclusion, I conducted a qualitative case study on the perceived impact of PLC exposure on pre-service teachers enrolled in a PDS teacher education program. In the following section, I present background information for each participant, and provide a cross-case analysis of the categories and the emergent themes.

Chapter 4

Findings

As stated in Chapter 1, pre-service teaching can be an isolating experience, in which pre-service teachers (PSTs) do not have the opportunity to interact with their peers. This lack of interaction may result in failure to gain the necessary collaboration skills to share knowledge, strategies, practice, and ideas with their peers when they transition to their teaching careers (Abdal-Haqq, 1991). Professional Development Schools attempt to counter the isolation characteristic of traditional teacher preparation programs by assigning cohorts of pre-service teachers to a partnering elementary or secondary school for their junior and senior pre-service teaching internships. The expectation being that assignment to the same setting will provide increased opportunities for interaction with cohort members, as well as staff members. Unfortunately, simply assigning cohorts of pre-service teachers to the same site does not guarantee increased interactions or collaboration. Depending on their grade level assignments and schedules, the cohort members may not have the opportunity to interact during the school day, and personal schedules may also hinder their abilities to interact after school. Lack of or limited pre-service teacher (PST) interactions are a weakness of teacher preparation programs. Therefore, examining the perceived influence of PLC participation on pre-service teachers enrolled in a PDS teacher preparation program may yield valuable information for universities with teacher preparation programs, for policymakers, and for future researchers.

Purpose of Study

The purpose of this study was to explore the perceived influence of Professional Learning Community (PLC) exposure on pre-service teachers enrolled in a Professional Development School (PDS) teacher preparation program. In this chapter the results of the data analysis for this multiple-case study are presented. The research methodology utilized for this study was qualitative. The qualitative data collection tools were participant journals, semi-structured participant pre/post-PLC participation interviews, and PDS PLC meeting observations. The following research questions guided this study:

1. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their knowledge base?
2. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their various interactions:
    a. With other PDS cohort members?
    b. With their cooperating teachers?
    c. With faculty and staff members?
3. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their perceptions of shared practice and exchange of ideas?
4. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their strategies?

Participant Biographical Sketches

In this section, biographical sketches of the study's participants – pre-service teachers, cooperating teachers, university supervisors, and the participant researcher – are

provided with the intent of facilitating the reader's understanding of the participants' perspectives.

Pre-service teacher Hailey. Hailey was 28 years old when this study was conducted. She was single, lived at home with her parents, and was completing the post-baccalaureate teacher preparation program at XYZ University. Hailey learned about the Professional Development School field experience when she attended field experience orientation. There she learned the benefits associated with completing her junior and senior pre-service teaching experience at a school that had an established Professional Development School partnership with the University. Hailey's decision to apply for Professional Development School placement was influenced by the additional support provided by an on-site university supervisor, and also by the benefit of being assigned to a school as part of a cohort. Hailey also expected to benefit from three Professional Development School workshops offered to all interns. The first workshop was geared towards the preparation of their teacher work sample; the second workshop was focused on classroom management, and the last workshop dealt with resume writing and interviewing.

I interviewed Hailey prior to her participation in the pre-service teacher professional learning community. At that time I learned that Hailey's baccalaureate degree was in History, and that she felt comfortable with her knowledge base in English and Social Studies, but was a bit insecure in the areas of Mathematics and Science. Overall, Hailey felt adequately prepared to begin her senior year pre-service teaching internship. Hailey expected that her greatest resources during her internship would be her

cooperating teacher, the Internet, and the Professional Development Workshops she was scheduled to attend.

As part of the initial interview I asked Hailey how she had learned about the teaching profession, and what she expected her role to be as a teacher. It was interesting to note that Hailey learned about her future career by going to school and seeing teachers in action. This reminds me of Daniel Lortie's apprenticeship of observation. According to Lortie, "every teacher comes to teaching with a set of experiences and ideas related to previous school experiences that define the teacher's position as a teacher" (as cited in Poetter & Badiali, 2001, p. 16). Hailey also acknowledged that after three weeks in the classroom she realized that the reality of teaching was different from her expectations. She was unaware of the amount of work involved and of the demands on her time to grade papers, plan lessons, interact with parents, etc. In regards to her teaching role, Hailey expected to be a role model, disciplinarian, and provider of instruction. She stressed that her biggest responsibility would be to teach the curriculum and make sure everything was covered. It was interesting that she did not mention the importance of the students mastering the content taught.

Hailey completed both her Junior and Senior pre-service teaching internships at ABC Elementary School, as did her cohort members. However, prior to their senior year she was unable to collaborate with the other cohort members due to conflicting schedules and time constraints. The junior internship consisted of a weekly on-site visit in which she only interacted with her cooperating teacher and her students. Her interactions with other cohort members were amicable, but limited to quick hellos in the hallways.

During the initial interview I questioned Hailey about her experience with professional learning communities. Hailey was unaware of the function of professional learning communities, but she was eager to participate in the pre-service teacher professional learning community once she learned that it would give her the opportunity to interact with her cohort members once every two weeks for one hour during the school day. She was hopeful that professional learning community participation would increase her knowledge base, and would result in increased self-confidence.

Pre-service teacher Kara. Kara was 21 years old when this study was conducted. She lived at home with her parents, worked part-time as a figure skating instructor, and was enrolled as a full-time student in the traditional teacher preparation program at XYZ University. Kara's decision to complete her pre-service teaching internship at a Professional Development School was influenced by a class visit to a Professional Development School during her sophomore experience. She felt welcomed at the school and liked the interactions between the teachers. She expected that by completing her junior and senior pre-service teaching internships at a professional development school she would have access to a support team comprised of an on-site university supervisor, a cooperating teacher, and cohort members. Therefore, she decided to check off the "I would not mind being assigned to a professional development school" box on the field experience application.

I interviewed Kara prior to her participation in the pre-service teacher professional learning community. I asked her how she had learned about the teaching profession, and what she believed her role would be as a teacher. According to Kara she had learned all about the teaching profession through her observations of teachers when

she was in school, and also from family members who were teachers. After three weeks of pre-service teaching Kara realized that her idea of what teaching was had been a fantasy. She had not realized all of the behind the scenes work that teachers do, such as district requirements, school initiatives, etc. Regarding her role as a teacher, Kara believed that she should influence student learning and offer support.

Kara completed her junior and senior pre-service teaching internships at ABC Elementary School. Unfortunately, her interactions with other cohort members during her junior internship were limited by scheduling conflicts and time constraints. Her interactions were primarily with her cooperating teacher and her interactions with cohort members were mostly superficial.

During the initial pre-service teacher pre-professional learning community interview, Kara shared that she did not know the purpose of professional learning communities. After I explained that professional learning communities offer a venue for teachers to collaborate and learn from one another she expressed hope that participation in a pre-service teaching professional learning community would lessen her timidity and allow her to gain the perspectives of other teachers.

Pre-service teacher Jada. At the time that this study was conducted, Jada was 45 years old, married, and the mother of two young girls ages 8 and 11. Jada always had an interest in teaching, but did not pursue a teaching degree as an undergraduate because she wanted to graduate in four years, and she also thought that her youthful appearance would hinder her productivity as a teacher. Instead she graduated with a baccalaureate degree in Environmental Science and worked as a microbiologist for a water company.

As the years went by, Jada realized that she still had an interest in teaching and decided to apply to the post-baccalaureate teacher preparation program at XYZ University.

Jada learned about the professional development school field experience option from her university professors. They explained that a professional development school field experience provides a more supportive environment for pre-service teachers. Jada decided to apply for placement in a professional development school because she thought it would be beneficial to have the additional support provided by having a university supervisor on site, and also because she would be placed with a cohort of pre-service teachers.

I interviewed Jada prior to her participation in the pre-service teacher professional learning community. At that time, I learned that Jada felt well prepared by XYZ's teacher preparation program, and that she expected that with experience she would do well as a teacher. Jada expected that her greatest resources during her internship would be her cooperating teacher, the Internet, and books. Surprisingly, I learned that a reading class she had taken as an undergraduate was counted towards her teaching degree. It surprised me because there have been so many changes in the way that reading is taught over the years. It made me question whether teacher preparation programs are focused on preparing quality teachers or if they are focused on increasing the number of candidates that complete their programs.

During the initial interview I asked Jada to discuss what she expected her role to be as a teacher, and to explain how she had learned about the teaching profession. Jada expressed a desire to meet the students at their level and to help them achieve their full potential. Her role would be to make sure that the students learned. Interestingly enough,

like her cohort members, Jada learned about the teaching profession by attending school since she was five years old. She also mentioned that she had teachers in her family, and that she was entering the profession with open eyes. After spending three weeks in the classroom, Jada was not surprised by the demands of the profession. Over the years she had observed all the work required of her sister and her brother who are both teachers. However, she had not expected to feel so exhausted every night.

Jada completed both her junior and senior pre-service teaching internships at ABC Elementary, as did her cohort members. However, she only met with her cohort members a couple of times to work on a bulletin board together. Otherwise their interactions were simply cordial hellos in the hallways. Their schedules and limited time availability did not allow for more interactions or collaboration. During her weekly junior field experience, the majority of her time was spent with her cooperating teacher.

During the initial interview I explained the purpose of professional learning communities to Jada. She was eager to participate in the pre-service professional learning community because she thought her peers and staff members would serve as good resources.

Pre-service teacher Mia. Mia was 22 years old when she participated in this study. She was enrolled in the traditional teacher preparation program at XYZ University, and she lived at home with her parents. Mia decided to pursue a teaching career because she enjoyed working with children and also because many of her family members were teachers (two aunts and one uncle). Mia learned about the Professional Development School field experience during the field experience orientation. At the orientation she learned that Professional Development School interns receive more support, as they have

an on-site supervisor assigned to their internship site, and the additional support of cooperating teachers who are trained to work with pre-service teachers. The lure of a supportive environment influenced Mia's decision to apply for Professional Development School placement.

I interviewed Mia prior to her participation in the pre-service teacher professional community. During the interview, Mia expressed that she felt adequately prepared in all content areas. She emphasized that she fully participated in all her methods classes, and had received valuable resources from her professors that would help her instruct her students. Mia expected that her greatest resources during her internship would be the Internet and other teachers.

During the initial interview, I asked Mia how she had learned about the teaching profession, and what she perceived as her teaching role. Mia was the only pre-service teacher not to mention observing teachers during her primary and secondary education. However, she did learn about the profession through observation. In her case she observed her aunts and uncle, and was therefore not surprised by the demands of the profession. According to Mia, she knew what would be required of her as a teacher. In her role as a teacher, Mia wanted to help prepare students for their future by teaching academically and developmentally appropriate content, and by making them responsible for their own learning.

Mia completed her junior and senior pre-service internships at ABC Elementary School, as did her cohort members. Mia's interaction with her cohort members during the junior field experience was limited to a one-time meeting to put up a Professional Development School bulletin board. Otherwise, her interactions were primarily with her

cooperating teacher. It was difficult to meet with her cohort members, because they did not know each other, were assigned to different grade levels, and there was not a common time set aside that would allow them to meet during the day.

As part of the initial interview I asked Mia about her prior experience with professional learning communities. Mia had never heard of professional learning communities, but was eager to participate in the pre-service teacher professional community once I explained that it would provide an opportunity for her to interact, share information, and learn from her cohort members. Mia expected that interacting and sharing with the other pre-service teachers would add to her store of strategies.

A summary of the descriptions and background information of all the pre-service teachers in the study is presented in Table 1.

Table 1.

Summary of Pre-Service Teachers' Background Information

PST	Age	Marital Status	Degree	Why PDS?	Gained Professional Understandings by…	Meetings with cohort members prior to PST PLC
Hailey	28	Single	Post-Baccalaureate	Support	Observation	Once during Junior Year
Kara	21	Single	Undergraduate	Support	Observation	Once during Junior Year
Jada	45	Married	Post-Baccalaureate	Support	Observation	Once during Junior Year
Mia	22	Single	Undergraduate	Support	Observation	Once during Junior Year

Cooperating teacher Lindsey. Lindsey has been a first grade teacher for five years. In that time she has had three junior interns and two senior interns. Lindsey is a graduate of XYZ University's teacher preparation program. She completed her Professional Development School field experience at ABC Elementary, and was hired as a teacher after working as a paraprofessional for one year. Ironically, Lindsey does not want to serve as a cooperating teacher in the upcoming year because she feels overwhelmed by always having someone in her room. She wants time to teach her first grade students without worrying about teaching or assisting a pre-service teacher. According to Lindsey, she has had a junior pre-service teacher in her classroom every year since her second year teaching, and this past year she had a senior during the fall semester, and a senior during the spring semester. Lindsey agreed to serve as Hailey's cooperating teacher during the spring semester as a favor to Hailey, as they knew one another on a personal as well as professional level. In the upcoming school year Lindsey will not be assigned a pre-service teacher intern.

Over the years Lindsey has noticed that pre-service teachers are very adept at lesson planning, but lack classroom management skills, and are unprepared to teach reading. However, once the pre-service teachers gain experience, their skills and teaching do improve. In Hailey's case, Lindsey credits Hailey's increase in knowledge and strategies to her desire to learn more. She also believes Hailey's collaboration with her cohort members during the professional learning community meetings has been beneficial because she has increased her pool of resources. It has also been beneficial for Lindsey as Hailey shares whatever she learns at the professional learning community meetings with her, and that in turn increases Lindsey's resources.

Lindsey believes pre-service teacher participation in professional learning communities provides pre-service teachers with more information than they would receive if they only interacted with their cooperating teachers. Lindsey compared the professional learning community meetings to mini-workshops that familiarized the pre-service teachers with all aspects of teaching.

Cooperating teacher Lois. Lois has been a teacher for 11 years. She taught first grade for five years and has taught second grade for six years. Lois likes mentoring pre-service teachers. She loves to see their growth as they gain experience and become comfortable in the classroom. She feels having a pre-service teacher in the classroom is beneficial to all involved as it allows the pre-service teacher to gain experience while providing assistance to the cooperating teacher and students by helping to decrease the student to teacher ratio. Lois has mentored about 13 senior pre-service teachers, and a few juniors. At the time of this study Lois served as Kara's cooperating teacher.

It has been Lois' experience that the pre-service teachers from XYZ University are adequately prepared to teach the second grade content, but are lacking classroom management strategies. However, she has found that as they practice and gain experience they get better. Pre-service teacher participation in professional learning communities and interactions with cooperating teachers and students, help pre-service teachers gain self-confidence and take ownership of their assigned classrooms.

Lois believes pre-service teacher professional learning communities are beneficial as they allow the pre-service teachers to learn from each other, their university supervisor, and in this case, the school principal. They also help to decrease the isolation of the pre-service teaching experience. Pre-service teacher participation in a pre-service

teacher professional learning community also benefits the cooperating teachers as they can learn current strategies from the pre-service teachers.

Cooperating teacher Adele. Adele has been a teacher for 22 years. She has taught kindergarten and first grade throughout her career. She was assigned to the first grade the fall before this study was conducted, and she served as Jada's cooperating teacher in the spring. Jada is Adele's second senior intern since her reassignment to the first grade.

Adele has found that the XYZ University pre-service teachers are adequately prepared to take over her classroom. She believes the pre-service teachers' eagerness to learn and willingness to ask questions and request assistance contributes to their overall levels of preparedness. She also credits the day-by-day experiences gained from being with children for the pre-service teachers' growth throughout their field experience.

Adele feels that pre-service teacher participation in pre-service teacher professional learning communities allows pre-service teachers to "create lessons together, to share ideas, to share what worked with their lessons, what didn't work, to ask advice on how to improve" (Adele Interview), and to compile new lessons to address student or teacher weaknesses. According to Adele, she and her students benefited from Jada's participation in the pre-service teachers' professional learning community as Jada shared and applied her newly gained knowledge and strategies.

Cooperating teacher Joan. Joan has been a teacher for nine years. She taught Kindergarten for eight years, and this was her first year teaching first grade. In the past, Joan worked primarily with junior interns, as XYZ University does not assign pre-service

teachers to complete their senior internship in Kindergarten classrooms. Mia is Joan's second senior intern.

According to Joan, when pre-service teachers first arrive in her classroom they do not know how to pace their lessons, they lack classroom management strategies, and familiarity with the programs used by the district. Joan attributes the pre-service teachers' weaknesses with lack of experience, and she believes that as they gain experience they will improve. Although Joan believes participation in the pre-service teacher professional learning community helps increase pre-service teachers' knowledge and skills, she believes there is no substitute for actual teaching experience. In her opinion participation in a pre-service teacher professional learning community serves as "a supplement to the student-teaching experience" (Joan Interview).

Joan believes pre-service teacher participation in a professional learning community allows the pre-service teachers to interact and share ideas. It also benefits the cooperating teachers as the pre-service teachers share what they learn at their professional learning community meetings, and help keep the cooperating teachers in the loop. A summary of the cooperating teachers' background information is presented in Table 2.

Table 2.

Summary of Cooperating Teacher Background Information

Cooperating Teacher	Current grade level	Years of teaching experience	Product of a PDS teacher education program?	Number of Interns Mentored	Likes to Mentor PSTs	Benefits of Pre-Service Teacher PLCs…
Lindsey	1	5	Yes	2 Seniors, 3 Juniors	No	Increased resources
Adele	1	21	No	2 Seniors,	Yes	Increased resources
Lois	2	11	No	13 Seniors	Yes	Increased resources
Joan	1	9	No	2 Seniors,	Yes	Increased resources

University supervisor Ariella. After her retirement from her position as a district math supervisor for an urban school district, Ariella was hired by XYZ University to supervise math pre-service teachers enrolled in traditional teacher preparation programs. After a few years she was asked to cover for a colleague who was on sick leave. Her colleague was an on-site supervisor for pre-service teachers placed in a Professional Development School for their junior and senior field experience. Ariella enjoyed working in a Professional Development School, and applied for a position as an on-site Professional Development School supervisor when the opportunity presented itself. Ariella has been the on-site supervisor for ABC Elementary School for the past five years.

Ariella views her role as that of a liaison between the university and the school district. She works closely with the director of the Professional Development School program at the university and with the elementary school principal. She represents the interests of the pre-service teachers, the university, and the elementary school. Ariella carefully reviews and interviews all pre-service teacher candidates. Her goal is to select the best candidates possible for placement at ABC Elementary School.

Ariella and I discussed starting a professional learning community for pre-service teachers for a couple of years. Ariella decided to facilitate a pre-service teacher professional learning community in the fall of 2010. The pre-service teachers enjoyed having a set time to meet, interact, and collaborate. The feedback from the pre-service teachers was so positive that Ariella decided to make the pre-service teacher professional learning community a part of the senior field experience at ABC Elementary.

Ariella believes that participation in a pre-service teacher professional learning community illustrates to pre-service teachers that they cannot teach in isolation. The pre-service teachers get to see what the ideal of teaching looks like, and they also have increased resources available to them.

Through her participation in the pre-service teachers' professional learning community, Ariella was better able to focus on areas of weaknesses in the pre-service teacher's preparation. Ariella was forced to stay current in her practice by researching the latest trends in education so she could continue to grow and share with the pre-service teachers. Unfortunately, Ariella became ill and had to go on emergency sick leave. She asked a colleague, Claire, to supervise her pre-service teachers while she was indisposed. Throughout her sick leave Ariella maintained contact with Claire, the pre-service

teachers, and I via e-mail and telephone calls. Ariella was present and facilitated all pre-service teacher professional learning community meetings via Skype.

University supervisor Claire. Claire worked as a principal before becoming a pre-service teacher university supervisor. Claire usually supervises pre-service teachers enrolled in traditional field experiences, but she agreed to fill in for Ariella for six weeks when Ariella had to go on emergency medical leave.

Although Claire was only at ABC Elementary for a short time, she did form definite opinions regarding the value of pre-service teacher professional learning communities. Claire believes that professional learning communities offer pre-service teachers the opportunity to learn from each other. Participation in professional learning communities puts pre-service teachers "in a habit type of format for future functioning as a professional so that it's a built in way of working for them" (Claire interview). Claire strongly believes that pre-service teacher professional learning communities should be a part of all teacher preparation programs. A summary of all the supervisors' background information is presented in Table 3.

Table 3.

Summary of University Supervisor Background Information

University Supervisor	Prior Employment Experience	Current Employment Experience	Years in Current Position	Benefits of PST PLC Participation	Benefits of US PLC Participation
Ariella	Retired District Math Supervisor	Supervisor of PSTs in PDS programs	5	Increased resources and PSTs learn to collaborate	University Supervisor must stay current in her practice
Claire	Retired Principal	Supervisor of PSTs in traditional teacher preparation programs	16	The PSTs will enter the profession expecting to collaborate	University Supervisor is required to stay current in her practice

Participant researcher. As I described in Chapter 3, I have a dual role in this study. I am the principal of ABC Elementary and I am also the participant researcher. My philosophy as a researcher is constructivist. As such, I viewed the professional growth and development of the pre-service teachers through a constructivist lens, and I sought to understand how pre-service teachers enrolled in PDS teacher preparation programs perceived the influence of PLC participation on their knowledge base, shared practice, strategies, and interactions.

Thus, having provided background information regarding all key participants of the study, in the following section I will discuss how the data were collected and analyzed.

Data Collection and Analysis

After collecting the data from the study participants I read, analyzed, and sorted the data by searching for "certain words, phrases, patterns of behavior, subjects' ways of thinking, and events" that repeated or stood out (Bogdan and Biklen, 2007, p. 173). Similarly coded data were then placed into categories (knowledge, strategies, shared practice, and interactions) that aligned with specific research questions.

To further reduce the data, I employed secondary coding methods. The clustered data were reviewed and color-coded to differentiate among emerging themes within the categories. Review of the themes resulted in some of the themes being subsumed due to similarities, others being eliminated due to redundancy, and others being created to increase the clarity of the data. For example, the initial "Learning and Sharing" theme in the Knowledge category, the "Supportive Environment" theme in the Shared Practice category, the "Learning from Others" theme in the Strategies category, and the "Resources" theme in the Interactions category were all grouped together in the "Learning and Increasing Resources" theme. Additionally, the "Supportive Environment" theme in the Shared Practice category was divided into the "Sharing experiences, Discovering Similarities, and Increasing Supports" theme and the "Learning and Increasing Resources" theme. These changes were necessary as there were references in all of the categories to increased human resources, but during initial memo writing and analysis I had subsumed or merged themes and this caused the "Resources" theme to be hidden in some cases.

Reduction of the data revealed that in some instances the different categories had emergent themes in common. The themes that emerged in each category as a result of this

study are presented in Figure 1. In Figure 2 the emergent themes were rearranged to depict instances in which the themes were exclusive to certain categories, and other instances in which the emergent themes overlapped.

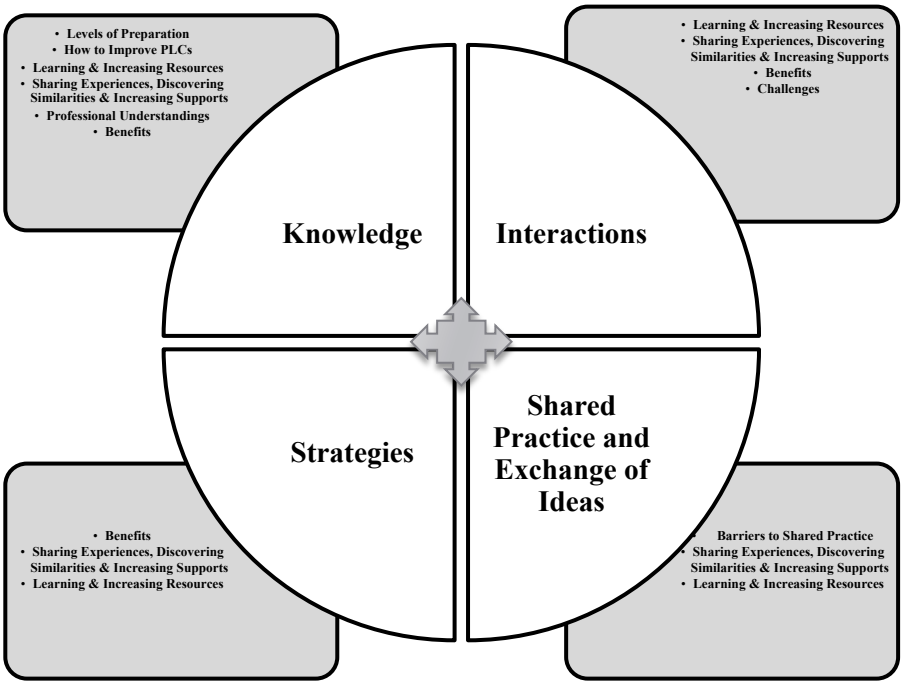


Figure 1. Pre-Service Teacher PLC Categories and Emergent Themes

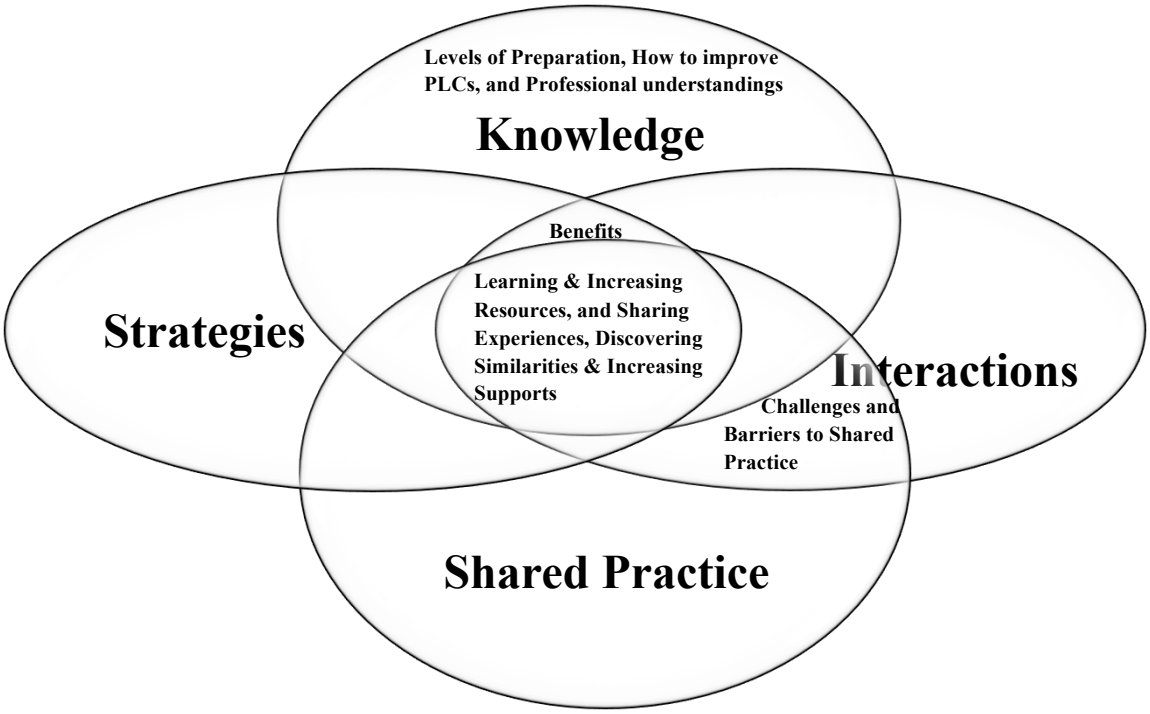


Figure 2. Emergent Themes

In the following section, I discuss the categories and the emergent themes, and how they relate to the study participants' responses and their growth over time.

Knowledge. Data from individual and group interviews, journal entries, and observations of and participation in pre-service teacher (PST) professional learning community (PLC) meetings were collected and analyzed to determine the perceived influence of PST PLC participation on PSTs knowledge base. The data were reviewed and similar codes were placed together based on similarities in their themes. Examination of the data in the Knowledge category revealed the following emergent themes: (a) levels of preparation, (b) how to improve PLCs, (c) learning and increasing resources, (d) sharing experiences, discovering similarities, and increasing supports, (e) professional

understandings, and (f) PLC benefits. The themes universal to every category were: (a) learning and increasing resources, and (b) sharing experiences, discovering similarities, and increasing supports. Another theme that emerged in more than one category was the benefits theme. It emerged in three of the four categories. Lastly, other themes emerged that were specific to the knowledge category. They were: (a) levels of preparation, (b) how to improve PLCs, and (c) professional understandings. In the following section an analysis of the emergent themes is presented.

Learning and increasing resources. PST PLC participation initially provided the PSTs the opportunity to meet and share experiences. As the semester progressed and the university supervisor facilitated the PLC meetings, the PSTs learned how to share classroom practices and ideas for lessons. They built relationships with each other, their university supervisor, and me. They were able to learn from and share with a larger pool of people. According to PST Kara, she "gained the experiences of the other student teachers" as well as her own.

According to the cooperating teachers, PLC participation helped to decrease the isolation that is often experienced by PSTs. It provided the PSTs with a safety net, a group they fit in with and could talk to in their new environment (CT-AR). It also allowed them to learn from a variety of people (CT-LG). According to PST Jada, the PLC provided the opportunity to talk with "other pre-service teachers who had the same level of knowledge…so it was good because we sort of all grew at the same rate"(PST-J).

Learning and sharing and Resources were originally coded as independent themes. However, analysis of the data revealed that the PSTs' perception of resources changed after particpating in the PST PLC. Prior to PLC participation the PSTs' view of

available resources was limited to: books, the Internet, personal motivation, materials learned through coursework, and their cooperating teachers. However, as a result of PLC participation the PSTs viewed their cohort members, staff members, and the school principal as additional resources. Since the change in perception was a consequence of PSTs learning and sharing during PLC meetings, I thought it made sense to expand the theme to include increasing resources.

Sharing experiences, discovering similarities and increasing support. PLC participation provided a venue for PSTs to share experiences with one another, as well as with their university supervisors, and with me, the principal/participant researcher. Participation in the PST PLC helped the PSTs understand that they were all facing similar challenges, for example, increases in noise-level when they took over the classes and lessons that did not go as planned. The realization that they all had similar problems, and that they were all anxious and overwhelmed helped to ease their concerns, and allowed them to serve as a support system for one another.

Similar experiences and Support were initially coded as independent themes. However, after reviewing the data I decided to combine the two. According to the PSTs' feedback, PLC participation helped them realize that they were having similar experiences. This served to comfort and reassure them as they realized "that everyone is in the same boat" (PST-H), and that they were "doing okay. Everyone is going through the same thing" (PST-J). The PST PLC allowed them to "talk as a team and work together" (PST-K) and to support one another. For example, the PSTs recorded themselves teaching a lesson, and shared their recordings during the April 20, 2011 PLC meeting. Sharing their lessons allowed them to compare themselves with their peers, and

to realize that their experiences were not dissimilar. The PSTs had the opportunity to reflect upon their teaching, and to receive and provide feedback regarding ways to improve future lessons. The PST PLC provided a safe learning environment for the PSTs. According to PST Kara it is "…a positive and rewarding experience to know you are not alone. There are other people in the same boat, and you could use them as a resource" (PST-K, Post-PLC Interview). According to US Ariella, the PSTs are learning that they need to be part of the process. They cannot teach in isolation.

Benefits. The benefits associated with PST participation in a PLC are increased sources of knowledge and information, decreased isolation, increased ownership, and gains in self-confidence. As previously mentioned, as the pool of human resources available to the PSTs expands, so do their resources. Participation in a PST PLC decreases isolation as they are given the opportunity to meet with cohort members and other PLC participants. As the PSTs interact with one another, their university supervisors, and the principal, they feel welcomed in the school, they feel that they are part of the staff and it "…gives them a voice" (CT-LG). Sharing their thoughts and ideas within their PLC and having them acknowledged by the university supervisors and the principal makes the PSTs more self-confident and increases their willingness to learn from and to share knowledge with others (CT-AR).

The following data excerpts illustrate the benefits of PST PLC participation from the PSTs' perspectives:

> I think I would have been a little more lost. I think I would have been depending on my cooperating teacher a lot more. Just probably with her the entire time and like not talking to anybody else or leaving the room. (PST-Hailey)

> At our PLC meetings, and even grade-level meetings, we get so much useful information from comments made by both Mrs. Perez and Mrs. Ariella. In hearing

> about how teaching can become an isolated profession, I can see how that can happen, and how a Professional Learning Community might help prevent that. I think that from starting my teaching career in a supportive atmosphere, it is shaping me to be a teacher who will interact with other teachers for advice and information. (PST-Jada)
>
> If we didn't have the PLC I don't think we would have that same bond we do now. (PST-M)

The cooperating teachers and the university supervisor mentioned other benefits associated with the establishment of PST PLCs. According to cooperating teacher Lindsey, PLC participation provided "a broader range of people to get information from" (CT-L), and cooperating teacher Lois stated that PLC participation led to increased confidence. PLC participation was also beneficial for the university supervisors as it helped focus their attention on the PSTs' needs, and it also indicated areas in which they had to grow as professionals in order to serve as a better resource for the PSTs (US-AD).

Levels of preparation. During the pre-PLC participation interviews all the PSTs believed that their teacher preparation program had adequately prepared them to take over their assigned classrooms. The following data excerpts illustrate the PSTs' inability to identify any weaknesses in their teacher preparation program:

> I don't know. I can't really think of any off the top of my head, weaknesses. I think the program is very good. (PST-H)
>
> Academically, I'm fine. (PST-K)
>
> So far, as far as I was concerned the program, you know really gives you everything and more than what you need. It's just that, you know, you don't have that experience until you are thrown in there. (PST-J)
>
> (In response to probing question – So, right now, you don't have any areas in which you feel unsure of yourself or insecure in your teaching?) Not Really. (PST-M)

However, over the course of their internship they acknowledged that their levels of preparation varied depending on the professors who taught their methods classes and the coursework assigned. The following data excerpts illustrate the PSTs' changing views regarding their levels of preparation, and gaps in their teacher preparation coursework.

> I'm like what do I do with these subjects now? Like the science and math that's together, and basically the whole semester was science and the last two weeks was math." In this example, Mia is frustrated because her university professor focused primarily on methods for teaching science. (PST-M)

> I think they should have had a course that was geared to the other side of teaching, the classroom management. (PST-K)

> I wanted to know how do you teach kids phonics? How do you teach them how to read? Basically, right? That's what I wanted to get out of the course, but I got how do you evaluate the kid. So that was useful, but I would have liked more. Kara's response illustrates that while she did receive valuable instruction it was focused primarily on student assessment; Kara also needed to learn strategies for teaching. (PST-K)

> The methods courses were a little higher level than the classroom that I turned out to be in – 1st grade…so the only thing I really needed to supplement my experience here was more information about teaching kids how to read. (PST-J)

Jada's comment refers to her lack of knowledge regarding reading instruction. However, as a post-baccalaureate, Jada was not required to take a course that focused on how to teach reading; instead the university accepted a course she had taken as an undergraduate.

> The math and science were good because it's not really my area so I struggle with that a little bit…The language arts class was good too, it kind of gave us more of an idea of projects that we could do…" (PST-H)

Throughout her internship PST Hailey remained satisfied with the program and with her progress in it.

The pre-service teaching internship is overwhelming as PSTs attempt to apply theory to practice. The PSTs all expressed the belief that there is no substitute for

experience. As stated by PST Hailey when discussing the university coursework, "I don't think any of that matters until you get into the classroom and experience it first hand."

The cooperating teachers and university supervisors agreed that the PSTs are not adequately prepared to teach reading at the K-3 level, and that they are lacking in classroom management strategies. However, they acknowledged that the PSTs improve as they gain experience. Overall, participation in a PST PLC did not affect the PSTs levels of preparation, as they did not participate in the PLC until their internship began. However, they did benefit from "interacting and learning from each other" (US-C).

Surprisingly, the university supervisor's participation in the PST PLCs caused them to be better prepared for their individual and group meetings with the PSTs. University supervisor Ariella shared that her role as the PST PLC facilitator helped her focus on the resources needed to support the PSTs during their internships (Post-PLC Interview) and university supervisor Claire said that facilitating the PLC meetings forced her to "think about the previous meeting and almost prepare mentally for the next meeting" (US-C). University supervisor Claire's forethought was illustrated during the May 2, 2011 PLC meeting when she shared a couple of articles with the PSTs. One article dealt with classroom management strategies and the other described characteristics of effective teachers. Claire advised the PSTs to familiarize themselves with the articles, and to refer to them when formulating responses to interview questions. The timing of the article distribution was perfect, as the only item on the agenda for the last PST PLC meeting was a mock group interview for an elementary school teaching position, and also because the PSTs would be applying for teaching positions in the near future and the articles would be beneficial.

Professional understandings. Through their pre-service teaching internships the PSTs gained a different perspective of teaching. During the PLCs we discussed how their expectations compared to the reality. The PSTs all experienced difficulty with time management. It was difficult to balance the demands of their personal lives and their teaching internships. Their coursework had not prepared them for the realities of teaching, for example, grading, re-teaching, preparing and implementing lessons, and interacting with parents (PST-H). The following data excerpts illustrate a PST's view of teaching:

> Honestly, I think I had a fantasy idea of it. I didn't know there was this much involved. When I say that I don't mean the actual lessons – I mean things that you have to do for the school and things that the district requires of you, and all that stuff. (PST-K)

The teaching internships provided the PSTs with a glimpse of all that teaching entails, and through their PLC participation they were able to support one another as they came to terms with the differences between their expectations and the realities of the teaching profession.

How to improve PLCs. During their post-PLC interviews pre-service teachers Kara and Mia suggested ways to improve the PST PLCs. Kara suggested that having specific topics to discuss during the PLC meetings would make them more beneficial, and Mia suggested scheduling the PLC meetings at different times during the day. The PLC meetings were scheduled at 10:00 in the morning for this study, and that resulted in loss of Language Arts Literacy instructional time for this cohort.

During the 5-2-11 PLC meeting I mentioned the PSTs' suggestions to the other PLC participants in order to gain their perspectives. PSTs Hailey and Jada liked the current PLC structure, but could see the benefit of having a broad topic for discussion on

the agenda for each PLC meeting. The following PLC topics were suggested: strategies for teaching English Language Learners and Special Needs students, how to refer students to the Intervention and Referral Services Committee, and how to write a resume. The PSTs also thought it would be beneficial to invite teachers with specific areas of expertise to the PLC meetings as presenters. Discussing specific topics at future PLC meetings will impact the PSTs knowledge base, as they will be exposed to more materials. The PSTs' suggestions are valuable and will be considered when planning future PST PLC team meetings.

Interactions. In an effort to determine the perceived influence of pre-service teacher (PST) professional learning community (PLC) participation on PST interactions with others, the data collected from individual and group interviews, journal entries, and observation and participation in PST PLC meetings were analyzed. Similarly coded data were grouped together based on their themes. The themes that emerged from the interactions category are: (a) Learning and Increasing Resources, (b) Sharing experiences, Discovering Similarities, and Increasing Supports, (c) Benefits of pre-service teacher PLCs, and (d) Challenges. The universal themes were: (a) Learning and Increasing Resources, and (b) Sharing Experiences, Discovering Similarities, and Increasing Supports. Two other themes presented themselves in more than one category, but not universally in all four categories. First, the Benefits theme emerged in three of the four categories, and second, the Challenges theme emerged in two of the four categories. In the following section an analysis of the emergent themes is presented.

Learning and increasing resources. The resources most often mentioned by the PSTs, cooperating teachers, and the university supervisors were human resources. Through the PST PLC the PSTs were able to learn from each other as well as from other teachers, their university supervisor, and me. According to PST Jada, participating in a PST PLC made her aware that her peers are a good resource (PST-J). Surprisingly the PSTs mentioned the value of having me (the principal), participate in their PLC. PST Hailey feels more comfortable at ABC Elementary because she has been able to build relationships with her peers and also with me.

Participation in a PST PLC made the pre-service teachers feel valued and supported. It may also allow them to begin their careers with a different mindset that allows them to ask for assistance without fear of being viewed as unknowledgeable. By making the PST PLC a part of the Professional Development School experience, the PSTs were not in isolation. The data excerpt below highlights the expanded resources available to PSTs as a result of PST PLC participation from PST Kara's perspective:

> It actually went beyond my expectations. I thought I was just gonna come in and do my student teaching and that would be it. I feel like I got a lot more out of it than I was expecting. I was just expecting to be thrown into the classroom and teach this and do this, but everybody was just helpful. I was able to use my cooperating teacher as a resource and you as a resource and my supervisor as a resource for anything that I needed, and the other student-teachers, you know I didn't think that I would be as much involved with them. I thought it would be me and my Cooperating Teacher and that was it, but it was everybody that was together which was nice. (Post PLC Interview)

According to cooperating teacher Adele, participating in a PST PLC has allowed the PSTs to:

> Create lessons together, to share ideas, to share what worked with their lessons, what didn't work, to ask advice on how to improve it, to define a skill where the

> students were lacking and to gain ideas to compile new lessons from that skill. (CT-AR)

PST PLC participation made it possible for the PSTs to interact with their cohort members at specified times as part of their internship experience.

University supervisor Ariella expressed her belief that PST PLC participation decreased isolation and increased resources. In her view, the best part of PST PLC participation is the increased "resources available to them to help them with their student teaching" (US-AD). The student teachers are not in isolation; they could request assistance from any staff member (US-AD). Cooperating teacher Lindsey echoed university supervisor Ariella's beliefs when she stated that the PLC has,

> Been helpful for them because they've been getting information from the other student teachers and then they come back with more ideas of other things to try in the classroom…Also ideas they get just from talking about their experiences then talking to you and the university supervisors. (CT-L)

A PST PLC serves as a resource and support center built into the pre-service teaching internship.

Sharing experiences, discovering similarities, and increasing supports. Through their participation in PST PLC meetings, the PSTs became conscious of the similarities they shared; the realization that they were having similar experiences served to reassure the PSTs. For example, they all had some lessons that went well and others that went badly, they all experienced difficulty with classroom management, and they all felt overwhelmed at times by the demands of their university coursework, internship, and personal lives. The PST PLC provided a setting for PSTs to share their experiences, and gain confidence in their abilities as they realized that they were not alone. The following

data excerpts illustrate how the realization that they were having similar experiences helped to reassure the PSTs:

> It was reassuring to hear from the student teachers and see that we are all in the same boat. I believe that being in a Professional Development School and having the PLC meetings as well as the workshops is a definite plus to the student teaching experience. (PST-H, Journal Entry, 2/7/11)

> It's nice to commiserate with peers who are experiencing some of the same things that I am. (PST-J, Journal Entry, 2/28/11)

> I think that all of the student teachers get a chance to talk as a team and work together. It is nice to know that there are other people in the same position as you are in…It has made me comfortable know that I was not alone. (Journal Entry, 4/3/11)

The PSTs also mentioned the positive impact of placement in similar grade-levels on their interactions. In this study three of the four PSTs were assigned to a first grade classroom, this provided increased opportunities to interact with their peers as they had similar lunch periods, and common grade level planning times.

Benefits. The benefits theme is comprised of benefits, confidence, and support. Initially these themes were independent of each other. However, after reviewing the data I decided to subsume the confidence and support themes as the gains in self-confidence and the increased support available to the PSTs seemed to be benefits of PST PLC participation. The following data excerpts illustrate this:

> So it's affected my *confidence* because I've been helped as well as critiqued by these members of the PLC. You know you're given advice [from] people that care enough to take the time to make recommendations. (PST-J, emphasis mine)
> It's affected my *confidence* a lot; knowing that people are in the same boat is great. Especially seeing the videos I really think that helped me…just watching the other videos I was like everybody is around the same. (PST-K, emphasis mine)

The PST PLC was beneficial to PSTs because it expanded the human resources available to assist them during their internship. Interacting with university supervisors,

staff members, and me allowed the PSTs to gain feedback from experienced educators in a non-threatening environment. According to PST Jada, she valued the feedback she received from the experienced supervisors and me during PLC meetings. She understood that our role was to help them improve their skills. The PSTs "also gained the experiences of other student teachers" (PST-K) as well as their own, and according to PST Mia if it were not for the PST PLC they would not have interacted as much as they do (PST-M, Post-PLC interview). Additionally, participation in a PST PLC increased the PSTs' independence. According to PST Hailey, an additional benefit of PLC participation was decreased dependence on her cooperating teacher, and increased willingness to share her thoughts with others.

The data regarding the impact of PST PLC participation on the interactions between PSTs and cooperating teachers varied depending on the individuals. For example, PST Kara shared whatever was discussed at the PLC meetings with her cooperating teacher, and PST Mia believed her participation in the PLC made it easier to communicate with her cooperating teacher. However, according to Jada and Hailey, their participation in the PST PLC did not influence their interactions with their cooperating teachers, as they had already established positive relationships with their cooperating teachers.

There are many factors that may have influenced the differences in the PSTs' interactions with their cooperating teachers. For example, Jada and Hailey were both older than Mia and Kara, and both were enrolled in the post-baccalaureate teacher preparation program; both of these factors may have influenced their abilities to interact with others; whereas, Mia and Kara were both enrolled in the undergraduate teacher

preparation program, and were both younger than Jada and Hailey, and may have lacked their life experiences, confidence, and ability to interact with others. Therefore, increased interactions between PSTs and cooperating teachers as a result of PST PLC participation are dependent on many factors, such as pre-service teacher's and cooperating teacher's personality, life experiences, and willingness to interact.

Viewing the interactions from the cooperating teachers' perspectives revealed that PST PLC participation facilitated interactions between the PSTs and their cooperating teachers; the cooperating teachers wanted to know what was discussed in the PLC meetings, and allowed the PSTs to implement newly learned instructional or classroom management strategies. The following data excerpts illustrate the cooperating teachers' interests in the PLC discussions and how PST PLC participation facilitated discussions with the PSTs:

> She always comes back and tells me what was talked about or discussed so then if she got a good idea, she's immediately telling me so then I'm getting additional ideas to help me in the classroom. (CT-LA)

> Well it kept us all in the loop whatever was going on. If she had any questions or problems that the other student-teachers were having, she would bring them back to me, and tell me what was going on…It kept everybody in the loop. (CT-JH)

> After they talk and they gather their ideas she can come and she can share it with me. And if it is something really good and it can benefit the kids then I'd use it. (CT-LG)

The benefits associated with PST PLC participation are increased interactions with PSTs, the university supervisors, staff members, and building administration, and in some cases increased interactions with the cooperating teachers.

Challenges. The PSTs all agreed that a determining factor in their enrollment in a PDS teacher preparation program was the availability of other PSTs assigned to the same

school site. However, they all mentioned that building relationships with one another during their junior field experience was challenging because they were only in the school once per week, and that did not give them an opportunity to interact as a cohort, or with other staff members. Their interactions were primarily with their cooperating teachers and they were basically exposed to that person's perspectives. As clearly stated by PST Jada:

> In my junior field experience with Mrs. White, she stayed in her classroom to eat, and in my senior field experience we eat with the other teachers and it was a great opportunity for me to chat with other teachers, and interestingly get some different perspectives. Cause when you're with your cooperating teacher you definitely get their perspectives. (Post-PLC Interview)

Therefore, Professional Development Schools face the challenge of establishing connections between the PST cohorts during their junior field experience. Perhaps establishing on-line PLCs, or enrollment in the same classes, for example, following similar course sequences, would allow the PSTs to build relationships prior to their senior internship. Strategies to increase PST interactions during their junior internships will be further discussed in the Implications chapter.

As seniors assigned as a cohort to a school site, their opportunities to collaborate in the absence of a PST PLC are dependent on their classroom assignments. If cohort members are assigned to different grade levels, then their opportunities to collaborate are limited, as they will not plan together, and most likely will not have the same lunch periods. For example, PST Hailey commented that if it were not for the PST PLC, she "probably wouldn't see Kara as much because she's upstairs and we usually eat in cooperating teacher Lindsey's room."

In this case, PST Kara was assigned to a second grade classroom, and the others were assigned to a first grade classroom. They had common planning time assigned on different days and times, and they did not have similar lunch periods. Their assignment to different grade levels limited their interactions to sharing strategies. As clearly illustrated when Kara stated,

> When it came to actually teaching in the classroom, some ideas they were all in the first grade, and I was in second. I'm sure they said, 'Oh, I did this,' as far as lessons go I couldn't gain much from them, but they talked about other things they do in the class other than subjects.

Therefore, PSTs assigned to different grade levels may find it difficult to interact with their cohort members to discuss content thereby decreasing the benefits to be gained from enrollment in a Professional Development School teacher preparation program.

Having viewed the data holistically, I believe cooperating teacher burnout is an issue that merits future research. In this study, cooperating teacher Lindsey shared her frustration with constantly having PSTs assigned to her class. She has had either a junior or a senior assigned to her classroom since the end of her first year teaching, and it has negatively affected her view of Professional Development School partnerships, as indicated by the following data excerpt:

> I've never had my own room for an entire year to myself. So I think it probably turned me off right from the beginning…And it's hard because I learned so much from cooperating teacher Lois, like everything I learned I learned from her during my student-teaching, so of course I want to help, but then at the same time I want to teach because that's why I went to school. (Pre-PLC Interview)

The needs of all our teachers – pre-service, novice, and veteran – must be considered when establishing PDS partnerships. The establishment of PST PLCs at PDS sites may foster an environment that allows the PSTs to learn from a broader range of people, thereby lessening the cooperating teacher's responsibilities, as they will not be

solely responsible for the PST's preparation. As illustrated by the cooperating teacher's responses to the question, How has your PST's participation in a pre-service teacher PLC helped prepare her for her teaching career?:

> It's a lot more people, and then not only is she getting ideas from her peers, but then she's getting ideas from her peers, but then she's also getting ideas from their teachers that they are working with, like you just said it's a broader range of people to get information from. (CT-LA)

> I think first of all it gave them confidence, and I think it also gave them good collaboration with the pre-service teachers. They learned different strategies, if they had any problems they would discuss it, and it would be beneficial in that sense. (CT-JH)

> I think that it helped her prepare for her teaching career in that the more people she speaks to now the less nervous she'll be later with interviewing and talking to her supervisors and her principal. It gave her a lot more confidence. It gave her a chance to use her voice, whereas when I was a student-teacher I was all alone and they didn't care. (CT-LG)

> Because of all of the extra growth and knowledge she received. And the fact that opening up and discussing her ideas, having them confirmed; I don't want to say approved, but acknowledged by you and Ariella and Claire, that what you are thinking is correct, and it's great you are thinking that way, now go and do it. (CT-AR)

We must be mindful that our eagerness to prepare tomorrow's teachers does not lead to cooperating teacher burnout.

Shared practice. The data sources for this study were participant interviews, journal entries, and observation of and participation in pre-service teacher (PST) professional learning community (PLC) meetings. The data were analyzed to determine the perceived influence of PST PLC participation on PST perceptions of shared practice and exchange of ideas. The data were reviewed and similar codes were placed together according to their themes. The themes that emerged were: (a) learning and increasing resources; (b) sharing experiences, discovering similarities and increasing supports; and,

(c) challenges and barriers to shared practice. The challenges and barriers to shared practice theme emerged in two of the four overarching categories; the other themes emerged in all four categories; they were universal. In the following section an analysis of the emergent themes is presented.

Learning and increasing resources. The teaching profession can be isolating. Teachers are so focused on their students and on how best to teach them that they lose sight of the benefits to be gained by collaborating with and learning from their peers. Oftentimes, classrooms within schools resemble egg crates; every teacher is within his/her compartment and there is limited or no interaction between colleagues. PSTs prepared in traditional teacher preparation programs run the risk of entering the teaching profession with a mindset that expects little or no collaboration between colleagues. This is unfortunate, as the PSTs, cooperating teachers, and the university supervisors involved in this in the study believed that PST PLC participation was advantageous. According to the PSTs, PLC participation allowed them to build relationships with others, which increased their willingness to approach others to share practice and exchange ideas; thereby increasing the pool of people from whom they can learn, and leading to the realization that their peers are good resources. The following data excerpts from the post-PLC interviews illustrate the PSTs' realization that their peers are a resource:

> I was able to use my other you know friends/student-teachers; I was able to use them like what would you do if this happened? (PST-K)
>
> It showed me that it's a good idea to have something like this where you are able to talk to each other about things and you're not the only one with crazy kids sometimes, and just the instruction as well, you are able to get feedback from them. (PST-M)
>
> I think it has made me more aware that my peers are a good resource. (PST-J)

> I've built relationships with people through our PLC meetings – with the interns, and you, and the clinical instructor. Meeting has definitely helped me throughout. I think that it would have been harder if we didn't meet. We actually got to talk and reflect on everything in our meetings. (PST-H)

University supervisor Arielle and the cooperating teachers mentioned that PST PLC participation decreased PST isolation and increased their resources. Cooperating teacher Lindsey, believes that PST PLC participation provides the PSTs the opportunity to get ideas and information from a broader range of people (CT-LA, Post- PLC Interview), and university supervisor Claire believes that PST PLC participation,

> Puts them in a habit type of format for future functioning as a professional, so that it's a built in way of working now for them; where they are used to talking to each other and learning from each other.

The PST PLC provided PSTs with a range of different perspectives; they were not limited to their cooperating teacher's perspectives. They also learned and gained valuable information from other staff members, the university supervisor, and myself (principal). PST Mia hopes to work in a school where "they have grade level meetings and meetings, like that, where I'm able to participate and talk about different classroom management skills and projects" (Post-PLC Interview). According to PST Jada, beginning her career in a supportive environment has shaped her into a "teacher who will interact with other teachers for advice and information" (PST-J, Journal Entry, 3/7/11). PST PLCs create an environment that encourages and allows PSTs to learn from a variety of people at their assigned schools.

Sharing experiences, discovering similarities and increasing supports. The PST PLC provided a venue for the PSTs to share experiences, such as teaching and management strategies, successes, and failures with others. The realization that they all faced similar challenges and insecurities increased the PSTs' ability to share with others.

The commonalities in their pre-service teaching internship experiences also resulted in increased confidence in their abilities and increased sharing with others. According to PST Jada, "it was reassuring to hear from student teachers and see that we are all in the same boat" (Journal entry week of 2/7/11). PST Kara expressed a similar belief when she stated that participating in a PST PLC affected her confidence; "knowing that other people are in the same boat is great…we're all together, nothing too drastic" (Post-PLC interview). PST Hailey shared that it "kinda makes you feel better knowing that everyone is in the same situation as you" (PST Hailey, Post PLC interview). The PSTs gained self-confidence and were more willing and unafraid to admit that they did not know certain things (PST Kara), and were also more willing to interact and support one another.

PST PLC participation allows PSTs to see the ideal of what teaching can be (US-Ariella). It makes sharing practice, exchanging ideas, and learning from others the norm for PSTs. PST PLCs create a safe and supportive environment for PSTs to share practice, exchange ideas, and develop into the educational leaders of the future. According to university supervisor Ariella, PSTs who are a part of a PLC will most likely take active roles when they are hired as teachers.

The data indicate that as the PSTs' levels of comfort increased, their ability to share practice increased. By participating in the PST PLC the PSTs increased their knowledge, gained confidence, and felt more at ease sharing with others. For example, PST Kara shared strategies learned during the PLC meetings with her cooperating teacher, and she made some changes in the classroom (Post-PLC interview). According to the PSTs, participation in a PST PLC increased their willingness to approach others (Jada and Mia) and to share practice (Hailey). However, the PST PLCs cannot be given

all of the credit for the increased collaboration among PSTs. Individual personalities and life experiences also contribute to the PSTs' abilities to collaborate with others. According to cooperating teacher Adele, "age has a lot to do with it, too. You know sometimes they're younger so they are more intimidated" (Pre-PLC Interview).

Challenges and barriers to shared practice. PSTs who complete their internships in schools that have Professional Development School partnerships with universities are usually assigned to the same school for their junior and senior internships. This allows the PSTs to familiarize themselves with the climate and culture of the school, and to build relationships with staff members, administration, and students. However, regardless of the time spent at the assigned school and the relationships established with others, the PSTs were reluctant to share practice and exchange ideas with peers, staff members, and the administration (in this study, the researcher) prior to participating in the PST PLC.

The barriers to sharing practice were insecurity regarding knowledge base, fear of overstepping boundaries and/or of being perceived as know-it-alls, and the belief that as interns they are not true staff members, and might be viewed as discourteous, if they shared their views or ideas. The following data excerpts illustrate the barriers to shared practice from the PSTs' perspectives prior to their participation in the PST PLC:

> If I wasn't 100% sure on something I wouldn't want to say it and look like I didn't know what I was talking about…You don't want to feel stupid, especially now that you have to see these people every day. (PST-H)

> I know myself and I wouldn't want to feel like I was stepping on anybody's toes by putting an idea out there. (PST-K)

> I think in some ways student-teachers don't really feel a part of the school because they know that they are not hired there…they just kinda feel that they are guests so you don't really want to step on any toes. (PST-J)

As indicated by the data, the barriers to shared practice among PSTs and their colleagues, as well as staff members, are fear of appearing incompetent, and their expectation that their input will not be well received. At some time during their apprenticeship of observation, the PSTs learned that teachers do not welcome feedback from others. This is unfortunate, as the quality of the pre-service teaching internship is questionable if open communication between the PSTs and their cooperating teachers, and other staff members is primarily one-sided. The PSTs' comments accentuate the need for the establishment of PST PLCs to facilitate communication between cohort members, as well as between cohort members and their cooperating teachers and other staff members.

Strategies. Data collected from individual and group interviews, journal entries, and participant researcher professional learning community (PLC) meeting observations were analyzed to determine the perceived influence of pre-service teacher (PST) PLC participation on PSTs' skill sets (teaching/instructional strategies and classroom management strategies). The data were reviewed and similarly coded data were placed together based on their themes. The themes that emerged from the data were: (a) Learning and Increasing Resources, (b) Sharing Experiences, Discovering Similarities and Increasing Supports, and (c) Benefits of PLC participation. The universal themes were: (a) Learning and Increasing Resources, and (b) Sharing Experiences, Discovering Similarities, and Increasing Supports. Another theme, the Benefits theme, emerged in three of the four categories, but not universally in all four. In the following section an analysis of the emergent themes is presented.

Learning and increasing resources. Initially, learning from others and increasing resources were independent themes. However, during second cycle coding I decided to merge the two themes as it became clear that the resources mentioned were all human resources, and that the increases in resources were due to the PSTs' PLC participation. The PST PLC provided the pre-service teachers with opportunities to interact with and learn from others besides their cooperating teachers, thereby increasing their pool of human resources. According to university supervisor Ariella, the PSTs:

> Have been able to take advantage of seeing other teachers teaching, and they have been welcomed in doing so. They are not looked at as an intrusion. The teachers who are in the school, because it is a learning community, the teachers that are in the school are willing to help them, and so they have become familiar with whatever strategies those teachers may be using that their cooperating teachers didn't use; so they have an advantage over somebody who is not in a PLC. (Post-PLC Interview)

PSTs bring varying levels of experience to their pre-service teaching internships. In many instances, their theoretical knowledge outweighs their practical knowledge. Through the pre-service teaching internship, PSTs put theory to practice and determine what works and what does not work for them. The PSTs in this study were interviewed prior to participating in the PST PLC, and they all stated that their university coursework had thoroughly prepared them for teaching. However, by reading their journal entries, interacting with and observing them during PST PLC meetings and conducting post-PLC participation interviews, it became clear that there is no substitute for actual experience and that PLC participation provides PSTs the opportunity to learn from others, as well as from one another. For example, PST Kara "…learned from …the other student teachers who were having different experiences with classroom management…" (Post-PLC Interview).

By participating in PST PLCs, the PSTs move beyond the traditional cooperating teacher and PST mentoring relationship, and are involved in an on-site learning community designed specifically to meet their needs. The PSTs are able to learn from their cooperating teachers and all other PST PLC participants; in this case, the university supervisor and me, the school principal/participant researcher. This is essential, especially in the area of classroom management, as their program does not have a specific course or curriculum that prepares PSTs to deal with classroom management issues. According to cooperating teacher Lois, PLC participation is helpful because the PSTs are able to get "information from the other student-teachers and then they come back with more ideas of things to try in the classroom, whether lessons or some type of management technique." Cooperating teacher Adele, views PST PLCs as "a safe[ty] net, you don't have to know everything going into that meeting. You can go into that meeting and say I need help, and you can receive assistance, and it doesn't penalize you or make you look bad (Post-PLC Interview).

PLC participation increases and improves the PSTs' abilities to reflect on their teaching. During PLC meetings, the PSTs discuss their classroom practices, and why some lessons were successful or unsuccessful. This forces them to question what could have been done differently to improve their lessons, and it also allows them to get feedback from others. It leads to true reflection, not just a journal entry regarding what they did. PLC participation yields better-prepared, more reflective teachers, as illustrated by the following data excerpts:

> We spoke about the lesson in Thursday's PLC meeting and now that I look back at the lesson I see that it was probably not the best idea to follow the book's first lesson of the unit. It might have been more beneficial to come up with my own lesson introducing area to the class. (PST-Hailey)

> I think it helps you get through the program because you're actually meeting and discussing anything that you want to reflect on and you have more of a support system, and more information is given to you. (PST-Mia, Post-PLC Interview)

Having the opportunity to meet helps the PSTs understand that they are not alone. They learn that they are as well prepared as their peers, and everyone encounters challenges. For example, PST Hailey shared that "it is reassuring to speak with other interns, and to hear that they are facing some of the same challenges" (Journal Entry). She did not expect pre-service teaching to be so overwhelming, and she was reassured to learn that the other interns were experiencing similar difficulties.

Sharing experiences, discovering similarities and increasing supports. Initially, Sharing and Support were independent themes within the Strategies category. I decided to merge the two, and to expand the theme to include Discovering Similarities. Sharing experiences during PST PLC meetings led to the PSTs realization that they were facing similar challenges. This realization reassured them and allowed them to support each other's learning. After attending her first PLC meeting PST Hailey wrote the following data excerpt in her journal:

> Thursday we had our first PLC meeting. I enjoyed the meeting and felt that it was beneficial. I liked that we could all speak openly about our experiences, as well as discuss different strategies that can be used in the classroom. It was reassuring to hear from the student-teachers and see that we are all in the same boat. (PST-Hailey, Journal Entry 2/7/11)

Participation in PST PLCs reduces the isolation that often characterizes pre-service teaching internships, as PSTs realize that their experiences are similar to those of other PSTs, and that they can provide valuable support and/or feedback to others. This is evidenced by PST Kara's statement regarding the video-taped lessons the PSTs shared during a PLC meeting:

> It affected my confidence a lot; knowing that other people are in the same boat is great. Especially seeing the videos I really think that helped me…just watching the other videos I was like everybody is around the same. We're all together; nothing too drastic, or while I was watching I was like I would have done that differently. (PST-Kara, Post-PLC Interview)

PST Jada also found that sharing experiences increased the resources available to her and others as illustrated by her comment regarding PLC participation:

> It helped me kinda comparing, I guess, with other pre-service teachers – well you know, we're on this, what did you do for that, so we were able to share where we were with the kids, and what worked and what didn't. (PST-Jada, Post-PLC Interview)

Over the course of their pre-service teaching internship, PSTs are expected to improve as they gain more practice and experience teaching. However, PST PLC participation provides more learning opportunities for PSTs as they are exposed to a larger pool of people from which to learn, thereby increasing their learning potential. The following data excerpts illustrate how the PLC provides the PSTs with access to more individuals:

> At these meetings, all of the interns meet with the principal and our clinical instructor to discuss various topics including what is going on in our classrooms, classroom management skills, etc. (PST-Hailey, Journal Entry)

> I always felt that I could go to anybody and say "what do you think I should do any advice? (PST-Jada, Post-PLC Interview)

> I was able to use my cooperating teacher as a resource, and you as a resource, and my supervisor as a resource for anything that I needed, and the other student teachers; you know I didn't think that I would be as much involved with them. I thought it would just be me and my cooperating teacher and that was it, but it was everybody that was together which was nice. (PST-Kara, Post-PLC Interview)

> Well with talking with the other teachers that helped me gain knowledge, anything I didn't know I just asked the other teachers, and supervisors, and even you for the information that I would need. (PST-Mia, Post-PLC Interview)

PST PLC participation is also beneficial to the cooperating teachers and to university supervisors, as the PSTs share the strategies learned with their cooperating teachers, and the university supervisors gain a better understanding of how they can assist the PSTs. According to cooperating teacher Lindsey, her PST:

> Came back from her PLC…she was getting ideas from other people and what they do, lessons and little classroom management things they do, and hopefully that will help me, you know, say classroom management, I'm looking for new things for that, too. (Pre-PLC Interview)

University supervisor Ariella found that serving as the PLC facilitator helped her focus on the resources she had to make available to her students. It made her aware of the importance of staying current so that she could better prepare the PSTs for their future careers.

PLCs provide PSTs a safe environment in which to learn and gain confidence in their abilities. They also make the PSTs and the other participants aware of the benefits of sharing with one another.

PLC benefits. Initially, this theme was strengths and weaknesses, however review of the data led me to reconsider the theme, as the weaknesses were primarily structural in nature. The PSTs suggested that the PLC meetings be scheduled at different times so that they did not miss instruction of the same content numerous times. Additionally, two of the PSTs suggested having pre-set agendas for the meetings, while the other two preferred having a less restrictive agenda where they could discuss whatever occurred between PLC meetings. I did not perceive the structural concerns as innate weaknesses of PLCs; therefore, I changed the theme to PLC Benefits. I also merged the improved communications theme with the benefits theme, because one of the benefits of participating in PST PLCs is improved communication among all stakeholders.

As previously mentioned, pre-service teacher PLCs lead to improved PST reflections on teaching and learning; provide a venue for PSTs to discuss topics regarding their internship experiences, university coursework, and any other personal/professional issues; and allow PSTs to learn strategies from a larger pool of people as they expand the human resources available to them. According to PST Jada,

> By the nature of the relationships that we have built, I have always looked to you experienced supervisors with a level of comfort, that you are not here to pick us apart, but to help us improve our skills. Sometimes supervisors can be intimidating; this is something I have not felt at ABC Elementary School. I have always felt that it's been a supportive atmosphere, a climate in which it's okay to flounder and improve because you understand that we are beginners. (PST-Jada, Post-PLC Interview)

Additionally, PLCs may facilitate the PSTs ability and/or willingness to share strategies with others. It can be intimidating for PSTs to share their thoughts, ideas, or recommendations, especially with experienced teachers. PSTs are unsure of how they will be perceived, and of how receptive others will be to their input or suggestions. A benefit of PST PLCs is improved communication between cooperating teachers and PSTs. According to cooperating teacher Lois, "without the PLC I think they were afraid to speak, and it kind of gives them a voice. I think they feel more confident now to speak" (Post-PLC Interview). Additionally, the PSTs feel more secure making suggestions, as the suggestions can be framed as something learned in the PLC and endorsed by the principal. For example, participation in the PST PLC facilitated PST Mia's ability to make suggestions to her cooperating teacher. She believes her cooperating teacher was more accepting of her input because she was aware of my participation in the PST PLC, as indicated by her comment, "It makes it easier to talk with her, especially knowing that I'm not the only one doing this…" (Post-PLC

Interview), and her affirmative response to the follow-up question, "Why do you think she is more accepting because she knows we are sitting here together?"

The benefits of PST PLC participation are clearly indicated by PST Kara's response to the question, "How do you believe your pre-service teaching experience would have been different if you had not participated in a pre-service teacher PLC?":

> I think I would have gone through it just fine, just having a relationship with my cooperating teacher, but I don't think I would have been as willing to talk to the other staff, and relate to them as if I were the teacher. I would feel like I was just the student teacher. (Post-PLC Interview)

PST PLC participation is beneficial as it provides PSTs a supportive environment in which they can interact with others, to share, compare, and reflect upon their experiences, strategies, and resources; thereby leading to gains in self-confidence and improved relationships with others.

Conclusion

Data analysis revealed the emergence of themes that are universal to the four overarching categories (knowledge, interactions, shared practice, and strategies) that framed this study. The universal themes are: (a) learning and increasing resources, and (b) sharing experiences, discovering similarities, and increasing supports. Other themes emerged that were common to two or three of the four categories. They were: a) benefits, and b) challenges and barriers to shared practice. Lastly, some themes emerged that were specific to a particular category, in this case the knowledge category, and they were: (a) levels of preparation, (b) how to improve PLCs, and (c) understanding teaching.

Chapter 5

Conclusions and Implications

Today there is a global focus on the importance of effective teachers. The belief that student achievement is dependent on teacher effectiveness is at the forefront of present day educational reform efforts. In the United States the NCLB Act mandated that all teachers be highly qualified by the 2005-2006 school year. In Finland, South Korea, and Singapore, only top students are recruited into their rigorous teacher education programs. Their student achievement results give credence to the belief that teacher quality greatly influences student success (Auguste, Kihn, & Miller, 2010). The link between student achievement and teacher effectiveness is indisputable.

In the United States we are at a critical juncture, as many teachers are approaching retirement age, and we are faced with the challenge of providing highly qualified, effective teachers for every child. Nowadays, there are multiple routes to teaching and we have to ensure that pre-service teachers are given the knowledge, strategies, and resources necessary to make a difference in the education of our students.

The purpose of this study was to explore the perceived influence of professional learning community (PLC) exposure on pre-service teachers (PSTs) enrolled in a Professional Development School (PDS) teacher preparation program. The perceived influence of PLC participation on PSTs in the areas of knowledge, strategies, shared practice, and interactions, was examined.

The research questions that guided this study were:

1. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their knowledge base?
2. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their various interactions:
    a. With other PDS cohort members?
    b. With their cooperating teachers?
    c. With faculty and staff members?
3. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their perceptions of shared practice and exchange of ideas?
4. How do pre-service teachers enrolled in a PDS teacher preparation program describe the influence of PLC participation on their strategies?

The findings of the study were presented in chapter 4. This chapter is dedicated to the discussion of the findings in relation to the overarching categories of knowledge, interactions, shared practice, and strategies, how they correlate with relevant literature, as well as further implications for future study.

Overarching Category: Knowledge

According to the study's participants, PLC participation in a PST PLC influenced the PSTs' knowledge base as they were exposed to a larger pool of people, thereby increasing the human and material resources available to them. Through their interactions with other cohort members, the PSTs realized that they were all going through similar experiences, and that they all shared comparable levels of knowledge. These realizations led to gains in self-confidence, which allowed them to share, support, and learn from one

another; it also decreased the isolation that characterized their junior internship, and often characterizes traditional pre-service teacher internships.

Analysis of the data confirmed the work of researchers, Dewey (1916), Parsons (1959), Fullan (2006), Fullan and Hargreaves (1991), Hord (1997), DuFour et al. (2006), Stoll et al. (2005), Feger and Arruda (2008), Reichstetter (2006), and McRel (2003), who encouraged schools to view themselves as social organizations in which educators participated in shared learning with the goal of enhancing student learning and increasing student achievement. In this study, the PST PLC served as a social organization in which the PSTs were able to learn from others in a non-threatening environment; participation in a PST PLC enhanced their learning and achievement as university students.

Implications regarding levels of preparation. The gaps in the PSTs' knowledge base as they applied theories learned in their classes to real life situations were expected. However, the variance in their levels of preparation was unexpected. During the pre-PLC interviews, all of the PSTs expressed the belief that their teacher preparation program had adequately prepared them to take over their assigned classes as the teachers of record. However, as their internship progressed, three of the four PSTs voiced concerns regarding their levels of preparation. It became apparent that their exposure to specific content, classroom management strategies, and instructional strategies was dependent on the professor teaching the course. Although the PSTs were enrolled in the same teacher preparation program at the same university, they were not exposed to the same curriculum. The disparity in their levels of preparation connects to the findings of Freiberg (2002) and Rea and Parkinson (1999).

It is inequitable for PSTs completing teacher preparation programs at the same university to receive varying levels of content instruction. This is an issue that should be addressed at the university, state, and national level. To ensure that all PSTs receive the same high caliber content instruction and are adequately prepared to transition to their teaching careers, teacher preparation programs should have common standards similar to the Common Core State Standards of p-12 institutions. This is essential as researchers attribute the high rates of attrition among novice teachers to their lack of curricular knowledge, limited instructional and organizational strategies, and inability to meet the diverse needs of students (Berry et al., 2010; Darling-Hammond, 2003; Rea & Parkinson, 1999).

It is time for universities with teacher preparation programs to evaluate the success of their programs in effectively preparing tomorrow's teachers, and to initiate changes that will improve their programs based on outcomes, such as success of program graduates and their students. On a national level, there has been a call for teacher education program reform. The National Council for Accreditation of Teacher Education (NCATE) has "laid out an ambitious plan for reforming programs through greater selectivity, more rigorous accountability, and a focus on clinical practice" (U.S. Department of Education, 2011, p. 8). The American Association of Colleges of Teacher Education (AACTE) endorsed NCATE's plan, and with the assistance of 21 states is developing a performance-based assessment to replace traditional low-level licensing exams. The National Education Association is also supporting national standards for teacher preparation and licensing, a full year residency, and performance-based assessments for licensure (Heitin, 2011).

Implications regarding the addition of PLCs to teacher preparation programs. In this study, PST PLC participation provided the PSTs internship-embedded professional development in a safe, supportive, collegial environment. The PSTs had the opportunity to meet with other PSTs going through comparable experiences at the same site and interacting with the same university supervisor and principal, and with similar students. Through their PLC interactions the PSTs realized that their experiences were not dissimilar, leading to gains in self-confidence, and increasing their access to human resources. The PSTs' willingness to seek and provide assistance increased, as illustrated by PST Kara's reference to gaining the experiences of other pre-service teachers as well as her own. The PSTs realized that no one is all-knowing, and that asking for assistance is not an acknowledgement of ignorance. Through their internship and PLC participation, the PSTs were able to increase their knowledge base by learning from others.

The PLCs also led to increased learning on the part of the university supervisors, as they had to stay current in their craft in order to provide the best support possible for the PSTs, and to successfully facilitate the PLC meetings. Through the careful selection and introduction of relevant PLC meeting topics, the USs focused the PSTs' attention on relevant topics that would facilitate their transition to their teaching careers. According to Bullough, Clark, Wentworth, and Hansen (2001), in order to maximize the educational value of cohorts it is important to consider how novice teachers develop and how they spend their time…

> So that a cohort is not just a matter of rushing through a traditional program as a group–which certainly does have some value—but of proceeding through a different kind of program, one grounded differently, in a commitment to fully exploiting the educational power of group problem solving for the benefit of each of its members. (Bullough et al., 2001, p. 108)

The CTs also acknowledged that PST PLC participation increased their knowledge base, as the PSTs shared their newly acquired knowledge and strategies with them. Exchanges such as these, which increase CT teacher knowledge and resources, may help make the prospect of serving as CTs attractive to teachers. According to Greenberg, Pomerance, and Walsh (2011), in order to increase the quality and quantity of teachers willing to serve as cooperating teachers, more resources have to be offered and higher prestige has to be associated with the cooperating teacher role. For example, assuring cooperating teachers high quality pre-service teacher interns, or publicly acknowledging cooperating teachers for their continued contributions to the teaching profession, might make being a cooperating teacher more appealing. Presently, there are limited financial supports or incentives to attract teachers to serve as CTs (Edens et al., 2001).

My participation in the PST PLC affected learning in three ways: it allowed me to familiarize myself with current content and strategies being taught to the PSTs at the university level, it provided me with increased information regarding classroom practices and student achievement at ABC Elementary, and it made the PSTs feel welcomed at ABC Elementary, thereby increasing their willingness and ability to learn from others, and to relate to others as staff members, not outsiders (PST Kara, Post-PLC Interview).

Research has illustrated that job-embedded professional development is more effective for teachers than traditional out-of-district professional development (O'Neil, 1995). Presently school districts are developing PLCs in their schools to better prepare teachers to meet the needs of their students, as collegial interactions provide greater learning opportunities for teaching professionals (Rasberry & Mahajan, 2008). This

study's participants' positive responses regarding the impact of PST PLC participation on shared learning support Hord and Hirsh's belief that "the context most supportive of the learning of professionals is the professional learning community" (Hord, 2009, p. 40). Consequently, universities may find it beneficial to pilot programs that mimic the work of school districts by adding on-site PST PLC participation to their teacher preparation programs. It may also be beneficial to develop university supervisor and teacher educator PLCs to assist in bridging the gaps that exist between theory and practice, and also to ensure that the PSTs are receiving the same content instruction.

Implications regarding professional understandings. The PSTs in this study gained their professional understandings of the teaching profession during their apprenticeship of observation as P-12 students; three of the four PSTs gained additional insights by interacting with family members and friends who had pursued careers in the field of education.

Unfortunately, the PSTs all found themselves overwhelmed by the demands of teaching, such as long hours, lesson planning and implementation, parent conferences, in addition to district requirements, during their senior internship. Participation in the PST PLC helped the PSTs support one another as they learned what the realities of teaching entailed. However, it would have been beneficial for the PSTs to gain a better understanding of the profession prior to their last semester in the teacher preparation program. The junior internship did not provide the PSTs with a realistic view of teaching as they were only at ABC elementary once a week, and were focused on teaching one lesson during each visit. Their limited time on-site resulted in minimal interactions

between cohort members, and also between cohort members and staff members other than their CTs.

In order to ensure that PSTs have the opportunity to learn about and understand the demands of their future careers, university leaders have to devise ways for PSTS to collaborate. Perhaps university leadership could establish on-line PLCs for PDS cohort members beginning during their junior year internships, and transition to on-site PST PLCs during the senior year internships. Additionally, the senior year internship could be extended to encompass a whole year in the classroom. Presently, Chicago, Illinois, Boston, Massachusetts, and Denver, Colorado have one-year teacher residency programs, which are thriving (Cochran-Smith & Power, 2010). The National Education Association is also supporting full year residencies for teacher licensure among other teacher education reforms (Heitin, 2011), and PDSs provide ideal settings to determine what practices are effective, and then disseminating the findings to other schools (Abdal-Haqq, 1991). A one-year internship, coupled with the support provided by PST PLC participation may reduce the high rates of novice teacher attrition, as the PST would gain an understanding of the core tasks of the work of teaching (Cochran-Smith & Power, 2010). Research findings have indicated that teachers who are given support are more likely to remain in the profession (Wilkins & Clift, 2006). In the following section, the perceived influence of PLC participation on PST interactions is discussed.

Overarching Category: Interactions

PST PLC participation allowed the PSTs to interact on a bi-weekly basis with other PSTs, their university supervisor, and me. The interactions led to gains in PST self-confidence, decreased the isolation that characterized their junior teaching internship, and

broadened the human resources available to them through their interactions with other staff members. The PST PLC provided a safe environment in which the PSTs could voice their opinions and concerns, request assistance, and share their discoveries without fear of appearing unknowledgeable. According to PST Jada, the PLCs allowed them to grow together. Overall, PLC participation increased PST independence, as they did not have to rely solely on their CTs for guidance and support.

Implications regarding PST assignments. Scheduled PLC meetings increased the opportunities available for PSTs to interact. In this study, three of the four PSTs were assigned to first grade classrooms, and one PST was assigned to a second grade classroom. The PSTs' ability to meet and discuss their experiences was limited by their class's scheduled specials (Art, Music, Technology, Foreign Languages, and Physical Education), as well as by their assigned lunch periods. The limited time available for PST interactions is attributable to the ways in which schools are organized; their organization supports the isolating nature of the teaching profession (O'Neil, 1995). In this study, the PST assigned to the second grade classroom would have been unable to interact with the other cohort members during the school day, if it were not for the existence of the PST PLC. Her PDS teacher preparation program experience would have been similar to that of PSTs enrolled in traditional teacher preparation programs. Therefore, when placing PSTs in partnering PDS schools for their internships, the university supervisors should work with the building principals to ensure PST placement in classes that have complimentary schedules, as well as highly qualified and effective CTs. The university must play an active role in assignment selection, as well as CT selection. This is confirmed by a National Council on Teacher Quality (NCTQ) review of 134 universities with teacher

preparation programs, which identified the lack of university involvement in PST placement in partnering districts, as well as "a lack of clear, rigorous criteria for the selection of cooperating teachers" as weaknesses of teacher preparation programs (Greenberg et al., 2011).

Implications regarding PST and CT interactions. The influence of PST PLC participation on PST and CT interactions is unclear. Two of the four PSTs in this study believed their PLC participation positively impacted their interactions with their CTs. They believed the PLCs helped to facilitate discussions with their CTs, and also increased the likelihood that their CTs would allow them to implement new practices. Alternatively, the other two PSTs did not believe their PLC participation affected their interactions with their CTs; therefore more research is required in order to determine the cause of the differing views. At present, there are too many variables that may have influenced the PSTs perceptions regarding the influence of PLC participation on their interactions with their CTs. For example, the differences in the PSTs perceptions may be ascribed to life experiences, self-confidence, and/or incompatible partnerships.

Implications regarding cooperating teacher burnout. After viewing the data holistically it became apparent that cooperating teacher burnout is an issue that merits future research. When developing Professional Development School partnerships between universities and school districts, the size of the schools influence the number of interns assigned to cooperating teachers. In this study, the elementary school only housed four grade levels and that resulted in cooperating teachers having PSTs assigned to them on a consistent basis. Thereby, forcing the cooperating teachers to become PST educators

and possibly limiting their abilities to excel in their craft, as their instructional focus is divided between their students and the PSTs.

PDS partnerships between universities and small schools run the risk of casting classroom teachers in the role of perpetual cooperating teachers. Universities and school districts have to develop criteria for the selection and training of cooperating teachers (Cochran-Smith & Power, 2010). For example, PDS partnering schools may decide that a minimum of five years teaching experience is necessary prior to serving as a CT. Furthermore, CTs could mentor PSTs on an alternating year schedule in order to avoid becoming overwhelmed with the demands of teaching, along with the demands of mentoring PSTs, such as additional responsibilities and increased workloads (NCATE, 2001). This study has illustrated the need for future research in the area of CT burnout.

Overarching Category: Shared Practice

PLC participation allowed the PSTs to establish relationships with a broad range of individuals at their assigned school site. The shared interactions led to gains in self-confidence, and increased sharing as all four PSTs realized that their peers were valuable resources. The data indicate that PLC participation may have influenced a change in the PSTs' personal belief structures regarding their pre-conceived notions of teaching and sharing practice.

Implications regarding PST changes in personal belief structures. PST comments in journal entries, during interviews, and in PLC meetings indicate a change in their perceptions of teaching. The PSTs credit their PST PLC participation for their increased willingness to approach others to seek and offer assistance. The PST PLC provided the initial venue for the PSTs to share practice. However, once the PSTs

realized the value of interacting with others and sharing practice, their interactions were not constrained by their prior beliefs regarding teaching, or the bi-weekly PLC schedule. The PSTs became a community of learners who often met before and after school, or whenever their daily schedules allowed. The PSTs encouraged and supported one another, shared practice, and exchanged ideas on an on-going basis.

The experiences of the PSTs in this study parallel those of PSTs in Bullough et al.'s (2001) study, in which cohort seminars served as ready-made groups for PSTs to share their experiences. The PSTs in both studies "helped one another get through, around, or over problems, gave encouragement and shared strategies that 'worked'" (Bullough et al., 2001, p. 107). PLC participation assists in the socialization of PSTs into teachers who are willing to learn with and from one another, an outcome that should be "a primary emphasis of teacher education" (Howey & Zimpher, 1999, p. 292). Although it appears that PLC participation leads to changes in the PSTs' personal belief structures regarding teaching and sharing practice, there is a need for more systematic research in this area.

In the following section the perceived influence of PLC participation on PST instructional and management strategies is discussed.

Overarching Category: Strategies

PST PLC participation provided the PSTs the opportunity to learn strategies (instructional, organizational, and assessment) from a larger community of educators. This was essential as the PSTs' apprenticeship of observation did not effectively prepare them for the realities of teaching, and their toolbox of strategies varied according to the professors who taught their teacher preparation courses. Through their senior internships

and PLC participation, the PSTs increased strategies available to them. However, in order to develop highly qualified, effective teachers, the acquisition and application of strategies cannot be left to chance.

Implications regarding teacher education programs. Universities with teacher education programs have to be held accountable for the quality of teachers prepared at their institutions (NCTAF, 2003). PSTs should have strong content knowledge, and a breadth of instructional strategies that allows them to unpack the content for their students. Teacher preparation programs should provide a "well-defined curriculum of practice for prospective teachers" (Ball & Forzani, 2010). In this way, PSTs will learn what teaching entails, and how to perform the core tasks of teaching (Ball & Forzani, 2010) prior to beginning their internships. PSTs who are taught organizational, instructional, and assessment strategies "…can build pedagogical repertoires as rich as those of the best veteran teachers," (Freiberg, 2002, p. 60) and are more likely to succeed and remain in the profession.

Conclusion

In conclusion, the PSTs involved in this study all acknowledged the positive influence of PLC participation on their knowledge base, on their interactions with one another, as well as with others in the school community, on their perceptions of shared practice, and on their instructional, organizational, and assessment strategies.

PST PLC participation resulted in increased self-confidence as the PSTs realized that they were all going through similar experiences, such as successes, failures, and challenges. The gains in self-confidence influenced the PSTs' willingness to share practice and learn with and from others. The PSTs began to view one another as

resources, and to offer each other encouragement and support. The PSTs realized that teaching does not have to be an isolating profession. Their assignment as a cohort of pre-service teachers and their participation in a PST PLC shaped them into teachers who are willing to interact with others in order to grow as professionals. Their experiences mirror the expectations put forth in the 1995 Holmes group report regarding pre-service teachers in their own learning communities:

> No longer should any student in a school of education lack the support of a group of students who form their own small learning community. Each student would be part of a group in which fellow students take an interest in each other's attainments. We expect that the members of a cohort will form a mutually supporting network that endures for many of them throughout their professional careers. (The Holmes Group, 1995, p. 50)

Useful information regarding PST PLC participation was provided through the lens of the PSTs, CTs, USs, and the participant-researcher involved in this study. The varying perspectives appeared to indicate that PLC participation positively influenced the PSTs. The study also yielded information that could benefit universities with traditional as well as PDS teacher education programs. For example, universities could use the information from this study to improve their teacher education programs, specifically their course offerings that address occupational realities and internship experiences. Additionally, the study provided data that could be used by universities when establishing PDS partnerships. For example, partnerships with small schools can be ineffective as PST placement would be limited to a small number of teachers, and this could potentially lead to CT burnout.

In closing, the study's outcomes appear to indicate that PLC participation positively influenced the PSTs. The PLC provided a safe environment for PSTs to interact, share practice, and learn with and from one another. Through their PLC

interactions, the PSTs learned the value of collaboration, and experienced gains in self-confidence, as they realized they all "sort of grew at the same rate" (PST-Jada).

It is possible that making PST PLC participation a requirement of teacher preparation programs may lead to decreased novice teacher attrition rates. Participation in PST PLCs may counter the feelings of inadequacy and lack of support that characterize novice teacher experiences. Additional studies in this area would be beneficial. Other areas that require future study are: cooperating teacher burnout, PST professional understandings, PST levels of preparation, PST changes in belief structures, and influence of PLC participation on PST and CT interactions.

References

Abdal-Haqq, I. (1991, September). *Professional development schools and educational reform: Concepts and concerns*. (ERIC Digest No. 91-2). Retrieved from http://www.eric.ed.gov:80/PDFS/ED335357.pdf

Achinstein, B. (2002, April). Conflict amid community: The micropolitics of teacher collaboration. *Teachers College Record, 104*(3), 421- 455.

Auguste, B., Kihn, P., & Miller, M. (2010). *Closing the talent gap: Attracting and Retaining top-third graduates to careers in teaching.* Retrieved from http://mckinseyonsociety.com/closing-the-talent-gap/

Ball, D. L., & Forzani, F. M. (2010). What does it take to make a teacher? *Must reads from Kappan, 2010-2011/Summer Issue #2.* Retrieved from www.kappan.magazine.Org/site/misc/kappan_92MustReads2.pdf

Barth, R. S. (2006, March). Improving relationships within the schoolhouse. *Educational Leadership, 63*(6), 8 -13.

Berry, B., Daughtrey, A., & Wieder, A. (2010, January). *Preparing to lead an effective classroom: The role of teacher training and professional development programs.* Hillsborough, NC: Center for Teacher Quality.

Bier, M. L. (2009). *Professional learning communities: A "think tank" for negotiating critical literacy practices* (Doctoral Dissertation). Retrieved from UMI. (3370462)

Blankenship, S. S., & Ruona, W. E. A. (2007). *Professional learning communities and communities of practice: A comparison of models* (Literature Review). University of Georgia, Georgia.

Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education: An introduction totheories and methods* (5th Ed.). Boston, MA: Allyn and Bacon.

Bullough, Jr., R. V., Clark, D. C., Wentworth, N., & Hansen, J. M. (2001). Student cohorts, school rhythms, and teacher education. *Teacher Education Quarterly, 28*(2), 97-110.

Choy, D., Chong, S., Wong, A. L., & Wong, I. (2010, July). Beginning teachers' perceptions of their levels of pedagogical knowledge and skills: Did they change since their graduation from initial teacher preparation. *Education Research Institute*. DOI: 10.1007/s12564-010-9112-2

Clarke, R. (2009). *Case study: The effect of the implementation of professional learning communities on teacher behaviors at two elementary schools* (Doctoral Dissertation). Retrieved from UMI. (3369523)

Clausen, K. W., Aquino, A., & Wideman, R. (2009). Bridging the real and ideal: A comparison between learning community characteristic and a school-based case study. *Teaching and Teacher Education, 25*(3), 444-452. doi: 10.1016/j.tate.2008.09.010

Cochran-Smith, M., & Power, C. (2010, May). New directions for teacher preparation. *Educational Leadership*, 67(8), 6-13.

Cranston, J. (2009). Holding the reins of the professional learning community: Eight themes from research on principal's perceptions of professional learning communities. *Canadian Journal of Educational Administration and Policy, 90,* 1-22.

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research.* Thousand Oaks, CA: Sage Publications.

Darling-Hammond, L. (1997). *Doing what matters most: Investing is quality teaching.* New York, NY: National Commission on Teaching and America's Future.

Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership, 60*(8), 6-13.

Darling-Hammond, L., & Bransford, J. (2005). *Preparing teachers for a changingworld.* San Francisco, CA: Jossey-Bass.

Devlin-Scherer, R., & Daly, J. (2001). Living in the present tense: Student teaching telecommunications connect theory and practice. *Journal of Technology and Teacher Education, 9*(4), 617-34.

Dewey, J. (1916). *Democracy and education.* New York, NY: MacMillan.

Dinsmore, J., & Wenger, K. (2006). Relationships in preservice teacher preparation: From cohorts to communities. *Teacher Education Quarterly, 33*(1), 57.

DuFour, R. (2004). What is a professional learning community? *Educational Leadership, 61*(8), 6-11.

DuFour, R. (2007). A bandwagon, an idea worth considering, or our best hope for high levels of learning? *Middle School Journal, 39*(1), 4-8.

DuFour, R., DuFour, R., Eaker, R., & Many, T. (2006). *Learning by doing: A handbook for professional learning communities at work.* Bloomington, IN: Solution Tree.

DuFour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement.* Alexandria, VA: Association for Supervision and Curriculum Development.

Edens, K. M., Shirley, J., & Toner, T. (2001). Sustaining a professional development school partnership: Hearing the voices, heeding the voices. *Action in Teacher Education, 23*(3), 27-32.

Elmore, R. (2004). *School reform from the inside out: Policy, practice andperformance.* Boston, MA: Harvard Education Press.

Erikson, F. (1989). Learning and collaboration. *Language Arts, 66*(4), 430-441.

Evans, R. (1996). *The human side of school change: Reform, resistance, and the real-life problems of innovation.* San Francisco, CA: Jossey-Bass.

Feger, S., & Arruga, E. (2008). *Professional learning communities: Key themes from the Literature.* Providence, RI: The Education Alliance, Brown University. Retrieved From www.alliance.brown.edu/pubs/pd/PBS_PLC_Lit_Review.PDF

Freiberg, H. J. (2002). Essential skills for new teachers. *Educational Leadership, 59*(6), 56-60.

Fry, S. W. (2010). Analysis of an unsuccessful novice teacher's induction experiences: A case study presented through layered account. *The Qualitative Report, 15*(5), 1164-1190.

Fullan, M. (2006). Leading professional learning. *School Administrator, 63*(10), 10-14.

Fullan, M., & Hargreaves, A. (1991). *What's worth fighting for in your school?* New York, NY: Teachers College Press.

Gimbert, B. G. (2000, December). *Crescendos of voice and multiple perspectives in an intern learning community in a Professional Development School context.* Paper presented at the Australia Association of Educational Research, Sydney, Australia.

Glesne, C. (2006). *Becoming qualitative researchers: An introduction* (3rd Ed.). Boston, MA: Allyn and Bacon.

Greenberg, J., Pomerance, L., & Walsh, K. (2011). *Student teaching in the United States.* Retrieved from National Council on Teacher Quality: http://www.nctq.org/edschoolreports/studentteaching/report.jsp

Hancock, D. R., & Algozzino, B. (2006). *Doing case study research.* New York, NY: Teachers College Press.

Hart, C. (2009). *Doing a literature review: Releasing the social science research Imagination.* Thousand Oaks, CA: Sage Publications.

Heitin, L. (2011). NEA stakes a claim in teacher effectiveness debate. *Education Week Online.* Retrieved from http://blogs.edweek.org/teachers/teaching_now /2011/12/nea_stakes_a_ claim _in_teacher_effectiveness_debate.html

Hickman, P., Schrimpf, M., & Wedlock, D. (2009). *A problem based learning project investigating the underlying dimensions of professional learning communities in public primary and secondary schools* (Doctoral dissertation). Retrieved from UMI. (3383301)

Hipp, K. K., & Huffman, J. B. (2003, January). *Professional learning communities: Assessment development, effects.* Paper presented at the International Congress for School Effectiveness and Improvement, Sydney, Australia.

The Holmes Group. (1986). *Tomorrow's teachers: A report of the Holmes Group*. East Lansing, MI: Author.

The Holmes Group. (1995). *Tomorrow's schools of education*. East Lansing, MI: Author.

Hord, S. M. (1997). *Professional learning communities: Communities of continuous Inquiry and improvement.* Austin, TX: Southwest Educational Development Laboratory. Retrieved from http://www.sedl.org/pubs/change34/

Hord, S. M. (2004). Professional learning communities: An overview. In S. Hord (Ed.), *Learning together, leading together: Changing schools through professional learning communities* (pp. 5-14). New York, NY: Teachers College Press.

Hord, S. M. (2009). Professional learning communities. *Journal of Staff Development, 30*(1), 40-3.

Hord, S. M., & Hirsh, S. A. (2008). Making the promise a reality. In A. Blankstein, P. D. Houston, & R. W. Cole (Eds.), *Sustaining professional learning communities* (pp. 23-40). Thousand Oaks, CA: Corwin Press.

Howell, P. B. (2004). *Student teachers' reflections about their cooperating teachers influence after teaching several years.* (Doctoral dissertation). Retrieved from Proquest # 305207746

Howey, K. R., & Zimpher, N. L. (1999). Pervasive problems and issues in teacher education. In G. A. Griffin (Ed.), *The education of teachers* (Ninety-eighth Yearbook of the National Society for the Study of Education, Part I), (pp. 279-305). Chicago, IL: University of Chicago Press.

Ingersoll, R. M. (2001). Teacher turnover, teacher shortages, and the organization of schools. *American Educational Research Journal, 38*(3), 499-534.

Kean University. (2008, September). Professional Development School [Brochure].

Lather, P. (1991). *Getting smart*. New York, NY: Routledge.

Ledoux, M. W., & McHenry, N. (2008, March/April). Pitfalls of school-university partnerships. *The Clearing House, 81*(4), 155-160.

LeFever-Davis, S., Johnson, C., & Pearman, C. (2007, March/April). Two sides of a partnership: Egalitarianism and empowerment in school-university partnerships. *The Journal of Educational Research, 100*(4), 204-210.

Levine, M., & Trachtman, R. (Eds.). (1997). *Making professional development schools work.* New York, NY: Teachers College Press.

Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teacher's Professional relations. *Teachers College Record, 91*(4), 509-536.

Louis, K. S., & Marks, H. M. (1998). Does professional community affect the classroom? Teachers' work and student experiences in restructuring school. *American Journal of Education, 106*(4), 532-575.

Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice, 13.* Retrieved from http:www.fampra.oxfordjournals.org

Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd Ed.). Thousand Oaks, CA: Sage Publications.

McClure, C. T. (2008). The benefits of teacher collaboration. Retrieved from http://www.districtadministration.com/viewarticle.aspx?articleid=1682

McLaughlin, M. W., & Talbert, J. E. (2006). *Building school-based teacher learning communities: Professional strategies to improve student achievement.* New York, NY: Teachers College Press.

Mid-continent Research for Education and Learning (McRel). (2003). *Sustaining school improvement: Professional learning community.* Retrieved from www.mcrel.org /pdf/leadershiporganizationdevelopment/5031TG_proflrncommfolio.pdf

National Council for Accreditation of Teachers Education (NCATE). (2001, Spring). *Standards for professional development schools.* Retrieved from http://www.ncate.org/LinkClick.aspx?fileticket=FcHbf2B%2B670%3D&tabid=125

National Council of Teaching and America's Future. (2003). *No dream denied: A pledge to America's children.* Washington, DC: Author.

O'Neil, J. (1995, April). On schools as learning organizations: A conversation with Peter Senge. *Educational Leadership, 52*(7)*,* 20-23.

Parsons, T. (1959). The school class as a social system: Some of its functions in American society. *Harvard Educational Review, 29*(4), 297-318.

Patton, M. Q. (2002). *Qualitative research and evaluation methods,* (3rd Ed.). Thousand Oaks, CA: Sage Publications.

Poetter, T. S., & Badiali, B. J. (2001). *Teacher leader.* Larchmont, NY: Eye on Education.

Protheroe, N. (2008, May/June). Teacher efficacy: What it is and does it matter? *Principal,* 42-45.

Rasberry, M. A., & Mahajan, G. (2008, September). From isolation to collaboration: Promoting teacher leadership through professional learning communities. *Center for Teaching Quality (CTQ),* 1-24.

Rea, J., & Parkinson, A. (1999). Professionals in a few months? Trainee teachers' perceptions of their profession. *Journal of In-Service Education, 25*(1), 151-160.

Reichstetter, R. (2006). *Defining a professional learning community: A literature review.* E & R Research Alert. Retrieved from http://www.wcpss.net/evaluation-research /reports/2006/0605plc_lit_review.pdf

Russell, G. M., & Kelly, N. H. (2002, September). Research as interacting dialogic processes: Implications for reflectivity. *Forum Qualitative Sozialforschung*, *3*(3). Retrieved from http://www.qualitativeresearch.net/index.php/fqs/article/view/831/1807

Selke, M. J. (1996, February). *Cultural analysis of school-university partnerships: Assessing dynamics and potential outcomes.* Paper presented at the Annual Meeting of the Association of Colleges for Teacher Education, Chicago, Illinois.

Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization.* New York, NY: Currency/Doubleday.

Smith, M. J. (2009). *An analysis of one school district's implementation of professional learning communities in its elementary schools.* (Doctoral dissertation). Retrieved from UMI. (3372916)

Snow-Gerono, J. L. (2005). *Professional development in a culture of inquiry: Professional development school teachers identify the benefits of professional learning communities.* (Doctoral Dissertation). Boise State University, Idaho.

Stephens, D., & Boldt, G. (2004, May). School/university partnerships: Rhetoric, reality, and intimacy. *Phi Delta Kappan, 85*(9), 703-707.

Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change, 7*(4)*,* 221-258. DOI: 10.1007/s10833-006-0001-8

Teacher Induction and Retention. (2008, June 30). Teacher Induction and Retention. *DLC State and Local Playbook.* Retrieved from http://www.dlc.org/print.cfm?contentid=252604

Teitel, L. (2003). *The professional development schools handbook*. Thousand Oaks, CA: Corwin Press.

Toma, J. D. (2005, December). Approaching rigor in qualitative research. In C. Conrad and R. C. Serlin (Eds.), *Sage handbook for research in education: Engaging ideas and enriching inquiry* (pp. 405-423). Thousand Oaks, CA: Sage.

U.S. Department of Education. (2011). *Our future, our teachers: The Obama administration's plan for teacher education and reform improvement.* Retrieved from http://www.ed.gov/sites/default/files/our-future-our-teachers.pdf

Wideen, M., Mayer-Smith, J., & Moon, B. (1998). A critical analysis of the research on learning to teach: Making the case for an ecological perspective on inquiry. *Review of Educational Research, 68*(2), 130-178.

Wilkins, E. A., & Clift, R. T. (2006). Building a network of support for new teachers. *Action in Teacher Education, 28*(4), 25-35.

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage Publications.

Appendix A

Institutional Review Board Exemption Letter

Rowan University

January 26, 2011

Lissette Gonzalez-Perez
31 Brinkerhoff Terrace
Palisades park, NJ 07650

Dear Lissette Gonzalez-Perez:

In accordance with the University's IRB policies and 45 CFR 46, the Federal Policy for the Protection of Human Subjects, I am pleased to inform you that the Rowan University Institutional Review Board (IRB) has exempted your project:

IRB application number: 2011-076

Project Title: Learning to Teach: Professional Learning Communities for Professional Development School Student-Teachers

If you need to make significant modifications to your study, you must notify the IRB immediately. Please reference the above-cited IRB application number in any future communications with our office regarding this research.

If, during your research, you encounter any unanticipated problems involving risks to subjects, you must report this immediately to Dr. Harriet Hartman (hartman@rowan.edu or call 856-256-4500, ext. 3787) or contact Dr. Gautam Pillay, Associate Provost for Research (pillay@rowan.edu or call 856-256-5150).

If you have any administrative questions, please contact Karen Heiser (heiser@rowan.edu or 856-256-5150).

Sincerely,

Harriet Hartman

Harriet Hartman, Ph.D.
Chair, Rowan University IRB

c: Corine Meredith, Teacher Education, Education Hall

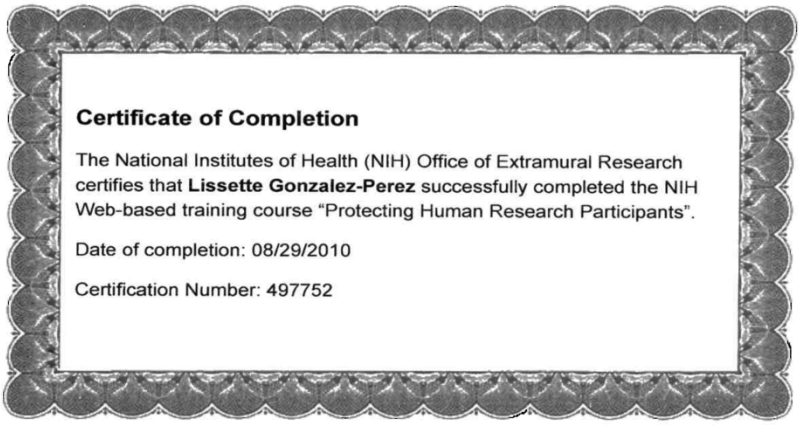
Office of Research
Bole Hall Annex
201 Mullica Hill Road
Glassboro, NJ 08028-1701

856-256-5150
856-256-4425 fax

Appendix B

National Institutes of Health (NIH) Web-based Training

Course Certificate of Completion



Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Lissette Gonzalez-Perez** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 08/29/2010

Certification Number: 497752

Appendix C

Student Teacher Consent Form

I agree to participate entitled "Learning to Teach: Professional Learning Communities (PLCs) for Professional Development School Student-Teachers," which is being conducted by Ms. Lissette Gonzalez-Perez, Rowan University Doctoral Candidate.

The purpose of this study is to explore the perceived influence of PLC exposure during the student-teaching experience on the knowledge, skills, and dispositions of student-teachers enrolled in a Professional Development School (PDS) teacher education program. The data collected in this study will be used for the purpose of dissertation publication at Rowan University.

I understand that participation in this study is for a 4 month period. I understand that I will be observed during my PDS student-teacher PLC meetings on a bi-weekly basis, and during the weekly grade-level PLC meetings. The observations should not exceed 60 minutes each. I will also be interviewed individually or as part of a group. There should not be more than 4 interviews, and they should not exceed 1 hour each. I will share my PLC reflective journal on a bi-weekly basis with the researcher.

I understand that the observations and interviews will be audio taped and videotaped.

_____ (Participant signature)

I understand that my responses will be anonymous and that all data gathered will be confidential. My data will be assigned a code, and the code list will be maintained in a secure location. I agree that any information obtained from this study may be used in any way thought best for publication or education provided that I am in no way identified and my name is not used.

I understand that there are no physical or psychological risks involved in this study, and that I am free to withdraw my participation at any time without penalty.

I understand that my participation in this study is voluntary, and I will not receive any form of compensation.

If I have any questions or problems concerning my participation in this study, I may contact Ms. Lissette Gonzalez-Perez at 201-214-0689.

If you have any questions about your rights as a research subject, you may contact the Associate Provost for Research at:

Rowan University Institutional Review Board

for the Protection of Human Subjects

Office of Research

201 Mullica Hill Road

Glassboro, NJ 08028-1701

Tel: 856-256-5150

_____

Signature of Participant Date

_____

Signature of Investigator Date

Appendix D

University Supervisor Consent Form

I agree to participate entitled "Learning to Teach: Professional Learning Communities (PLCs) for Professional Development School Student-Teachers," which is being conducted by Ms. Lissette Gonzalez-Perez, Rowan University Doctoral Candidate.

The purpose of this study is to explore the perceived influence of PLC exposure during the student-teaching experience on the knowledge, skills, and dispositions of student-teachers enrolled in a Professional Development School (PDS) teacher education program. The data collected in this study will be used for the purpose of dissertation publication at Rowan University.

I understand that participation in this study is for a 4 month period. I understand that I will be observed during the PDS student-teacher PLC meetings on a bi-weekly basis. The observations should not exceed 60 minutes each. I will also be interviewed individually. There should not be more than 4 interviews, and they should not exceed 1 hour each.

I understand that the observations and interviews will be audio taped and videotaped.

_____ (Participant signature)

I understand that my responses will be anonymous and that all data gathered will be confidential. My data will be assigned a code, and the code list will be maintained in a secure location. I agree that any information obtained from this study may be used in any way thought best for publication or education provided that I am in no way identified and my name is not used.

I understand that there are no physical or psychological risks involved in this study, and that I am free to withdraw my participation at any time without penalty.

I understand that my participation in this study is voluntary, and I will not receive any form of compensation.

If I have any questions or problems concerning my participation in this study, I may contact Ms. Lissette Gonzalez-Perez at 201-214-0689.

If you have any questions about your rights as a research subject, you may contact the Associate Provost for Research at:

Rowan University Institutional Review Board
for the Protection of Human Subjects
Office of Research
201 Mullica Hill Road
Glassboro, NJ 08028-1701
Tel: 856-256-5150

_____

Signature of Participant Date

_____

Signature of Investigator Date

Appendix E

Cooperating Teacher Consent Form

I agree to participate in a research study entitled "Learning to Teach: Professional Learning Communities (PLCs) for Professional Development School Student-Teachers," which is being conducted by Ms. Lissette Gonzalez-Perez, Rowan University Doctoral Candidate.

The purpose of this study is to explore the perceived influence of PLC exposure during the student-teaching experience on the knowledge, skills, and dispositions of student-teachers enrolled in a Professional Development School (PDS) teacher education program. The data collected in this study will be used for the purpose of dissertation publication at Rowan University.

I understand that participation in this study is for a 4 month period. I understand that I will be observed during the weekly grade-level PLC meetings. The observations should not exceed 60 minutes. I will also be interviewed individually or as part of a group. There should not be more than 4 interviews, and they should not exceed 1 hour each.

I understand that the interviews will be audio taped.

_____ (Participant signature)

I understand that my responses will be anonymous and that all data gathered will be confidential. My data will be assigned a code, and the code list will be maintained in a secure location. I agree that any information obtained from this study may be used in any way thought best for publication or education provided that I am in no way identified and my name is not used.

I understand that there are no physical or psychological risks involved in this study, and that I am free to withdraw my participation at any time without penalty.

I understand that my participation in this study is voluntary, and I will not receive any form of compensation.

If I have any questions or problems concerning my participation in this study, I may contact Ms. Lissette Gonzalez-Perez at 201-214-0689.

If you have any questions about your rights as a research subject, you may contact the Associate Provost for Research at:

Rowan University Institutional Review Board
for the Protection of Human Subjects
Office of Research
201 Mullica Hill Road
Glassboro, NJ 08028-1701
Tel: 856-256-5150

_____

Signature of Participant Date

_____

Signature of Investigator Date

Appendix F

Pre-service Teacher Pre-PLC Interview Questions

1. Was teaching your first career choice? Why did you decide to pursue a career in teaching?

2. How did you learn about the Professional Development School teacher education program?

3. What factors influenced your decision to enroll in a PDS teacher education program?

4. In what ways do you expect being enrolled in a PDS teacher education program will better prepare you for your teaching career than a traditional teacher education program?

5. Describe the courses that you have taken that you believe will prove most beneficial during your senior teaching internship.

6. What areas do you identify as areas of weakness in your teacher education program (areas in which you do not feel very secure)?

7. What subject area methods classes (classes that teach you how to teach particular subjects) were required as part of your teacher education program?

8. As an elementary school teacher you will be responsible for making content accessible to <u>all</u> of your students. How would you describe your mastery (or knowledge base) of the different content areas you will be responsible for teaching?

9. What can you do to increase your subject area knowledge to meet the needs of your students?

10. What resources do you perceive will prove most useful during your internship?

11. As a teacher you will have diverse (racially, sexually, culturally, socio-economically, etc…) students in your class. How will you adapt your teaching to meet the diverse learning needs of your students?

12. What strategies will you employ to learn more about your students?

13. How do you define classroom management?

14. Classroom management has been broadly defined as the "actions taken to create and maintain a learning environment that supports instructional goals (Brophy, 1988)" (as cited in Darling-Hammond, 2005, p. 330). Do you feel adequately prepared in the area of classroom management?

15. What strategies did you learn as part of your teacher preparation program to help you successfully manage your classroom and support student learning?

16. Describe strategies you will use to create a positive learning environment for your students.

17. How will you engage students in the lessons you are presenting?

18. What do you view as your role as a teacher?

19. Describe your expectations for "a typical day in your life as a teacher".

20. How did you learn about the work that teachers do?

Is it what you expected now that you are on the other side?

21. As a teacher what do you think your greatest resource will be?

22. What do you know about Professional Learning Communities (PLCs)?

23. What does the term "shared practice" mean to you?

24. What does the term "exchange of ideas" mean to you?

25. Over the past four years I have noticed that student-teachers rarely share their ideas, views, opinions, etc.…with teachers and staff members during grade-level PLCs or staff meetings. Why do you think that is?

26. As a student-teacher will you be able to "share practice" and "exchange ideas" with your cooperating teacher? Grade-level teachers?

27. What factors do you think will affect your ability to share your knowledge, skills, practice, and ideas with your cooperating teacher and grade-level teachers?

28. Last semester, you were assigned to this school as part of a cohort. Were you able to meet with the other student-teachers to share knowledge, skills, share practice, and exchange ideas?

29. If not often, why not?

30. How do you think participation in a student-teacher PLC will benefit you?

Appendix G

Pre-service Teacher Post-PLC interview Questions

1. You have spent an entire school year at ABC School. How has your PDS teacher education program met your expectations?

2. What are the areas that you believe require improvement?

3. Reflect on the required coursework. What additional preparation prior to clinical practice would have been beneficial to you during your student-teaching internship?

4. Was the knowledge gained in your methods courses sufficient to successfully meet the needs of your students? If not, what resources helped you to supplement your knowledge?

   What resources would you say helped you supplement your knowledge?

5. This past semester you participated in a pre-service teacher PLC. Describe the benefits of participating in the pre-service teacher PLC.

6. How did participating in the pre-service teacher PLC influence your knowledge base (knowledge of students, content, pedagogy, etc…)?

7. How did participation in the pre-service teacher PLC influence your skill set (managing behavior, lesson preparation, classroom arrangement, instructional strategies, classroom arrangement, etc…)?

8. How has participation in a pre-service teacher PLC influenced your perceptions of "shared practice" and "exchange of ideas"?

9. I guess this is a similar question. Describe the values of "sharing practice" and "exchanging ideas".

10. As a novice teacher in what ways will you "share practice" and "exchange ideas" with your colleagues? Would you ask them to share with you?

11. What do you know about PLCs?

12. In what ways has participation in a pre-service teacher PLC affected your confidence in yourself as a future teacher?

13. Reflect on your student-teaching experience. Describe the perceived positive influence (positive) PLC participation has had on you.

14. Reflect on your student-teaching experience. Describe the perceived positive influence (negative) PLC participation has had on you.

15. As a teacher what do you think your greatest resource will be?

16. Describe your expectations for "a typical day in your life as a teacher".

17. What do you view as your role as a teacher?

18. In what ways did participation in a pre-service teacher PLC influence your ability to share ideas, views, opinions, etc…with your cooperating teacher, teachers, and staff members?

19. Would you recommend that pre-service teacher PLCs become a part of future teacher education programs? Why?

20. How did having scheduled bi-weekly pre-service teacher PLC meetings with your cohort affect your student-teaching experience?

21. How do you believe your student-teaching experience would have been different if you had not participated in the pre-service teacher PLC?

22. Have you spoken up at a grade-level plc meeting?

Appendix H

University Supervisor Pre-PLC Interview Questions

1. Tell me about your career as an educator and what led you to your current position as a student-teacher supervisor.

2. How many years have you been assigned to ABC School as the PDS student-teacher supervisor?

3. During that time how often have the PDS student-teachers had the ability to meet as a cohort?

4. How would scheduling time for the student-teachers to meet be beneficial?

5. Describe your role and responsibilities as the liaison between ABC School and XXX University.

6. Do you believe the teacher education program adequately prepares the student-teachers for their student-teaching internships? Why or Why not?

7. What do you know about PLCs?

8. Last semester a student-teacher PLC was established at ABC School. What factors influenced the establishment of the student-teacher PLC?

9. Describe your views regarding the success of that program.

10. This semester a new PDS student-teacher PLC will be established. As the facilitator what are the potential benefits for student-teachers participating in the PLC?

11. How will PLC participation help prepare student-teachers for their future teaching careers?

12. As the PLC facilitator, how will you identify and select the topics to discuss during the student-teacher PLC meetings in order to address weaknesses in knowledge base?

13. As the PLC facilitator, how will you identify and select the topics to discuss during the student-teacher PLC meetings in order to address weaknesses in skills and strategies?

14. Describe ways in which student-teacher participation in a student-teacher PLC is beneficial to them? Beneficial to you?

15. Student-teachers rarely share practice or exchange ideas with teachers and staff members during grade level PLC meetings or staff meetings. How will student-teacher participation in student-teacher PLCs facilitate their ability to share practice and exchange ideas?

Appendix I

University Supervisor Post-PLC Interview Questions

1. This semester a new PDS student-teacher PLC was established at ABC Elementary. As the facilitator, describe how you think participation in the student-teacher PLC been beneficial for the student-teachers.

2. How has PLC participation helped prepare the student-teachers for their future teaching careers?

3. Describe ways in which serving, as the facilitator of the student-teacher PLC has been beneficial to you?

4. Describe changes you have seen in the student-teachers knowledge base that you attribute to their PLC participation.

5. Describe changes you have seen in the student-teachers skills and strategies that you attribute to their PLC participation.

6. So you attribute those changes to the PLC?

7. In what ways do you think student-teacher participation in the PST PLC has increased the likelihood that they will share practice and exchange ideas with their cooperating teachers, and other teachers and staff members? Why or Why not?

8. Would you recommend that student-teacher PLCs become a part of future teacher education programs? Why?

Appendix J

Cooperating Teacher Pre-PLC Interview Questions

1. Is this your first experience serving as a cooperating teacher? If no, approximately how many student-teachers have you had?

2. In your opinion are the PDS student-teachers adequately prepared to take over your class?

3. Describe how the PDS student-teacher education program can be improved.

4. In what ways do you believe participation in a student-teacher PLC will benefit the student-teachers?

5. Reflecting on your past experience with student-teachers do they participate during grade-level PLC meetings?

6. How do you think student-teacher PLC participation will influence their knowledge base, skill sets, and ability to share practice and exchange ideas?

7. How do you think the student-teachers participation in a student-teacher PLC will benefit you and your students?

8. How do you define PLCs?

9. As a teacher what is your greatest resource?

10. What do you view your role is as a cooperating teacher?

Appendix K

Cooperating Teacher Post-PLC Interview Questions

1. In what ways do you believe participation in a student-teacher PLC has benefitted the student-teachers?

2. Reflecting on this past semester has student-teacher participation during grade-level PLC meetings increased? If yes, what source do you credit for the increased participation.

3. Describe how your student-teachers' knowledge base has changed throughout this semester. What factors do you believe influenced the change?

4. Describe how your student-teachers' skill sets have changed throughout this semester. What factors do you believe influenced the changes?

   Do you think the PLC influenced this at all? Her skill set?

5. Describe how your student-teachers' ability to share practice and exchange ideas has changed throughout this semester. What factors do you believe influenced the change?
6. How has your student-teachers participation in a student-teacher PLC benefitted you and your students?

   Do you think the group was helpful?

7. How has your student-teachers participation in a student-teacher PLC helped prepare her for her teaching career?

8. In your opinion, should student-teacher PLCs become part of teacher education programs? Why or Why not?

Appendix L

Pre-service Teacher Group Interview Questions

1. Can you tell me about your experiences as PSTs participating in a PST PLC?

2. How can participation in PST PLCs influence PST knowledge?
   How has participation in a PLC influenced your knowledge or any other pre-service teachers knowledge?

3. How can participation in PST PLCs influence instructional strategies?

4. How can participation in PST PLCs influence PST organizational strategies?

5. How can participation in a PST PLC influence PST relationships with others?
   Probe: How has participation in a PST PLC influenced your confidence in your abilities?

6. Have your PLC experiences so far changed the way you view teaching? Shared practice? Exchange of ideas?

Appendix M

Coding Data Sample – Knowledge Category

Code/Data Source	*Data Excerpt*	*Comments*
Content (-)/ PST-J-Post-PLC Interview	The methods courses were a little higher level than the classroom than the classroom that I turned out to be in 1st grade…So the only thing that I really needed to supplement my experience here was more so teaching information about teaching kids how to read. It was like a lower level I guess, to scale it down.	Content taught inappropriate for grade level placement.
PDS (+) / PST-H-Journal	It was reassuring to hear from the student teachers and see that we are all in the same boat. I believe that being at a PDS school and having the PLC meetings as well as the workshops is a definite plus to the student teaching experience.	Week of 2/7/11
Content (-) / PST-M-Post-PLC	...I'd rather have that where I feel more prepared than my other courses where they hardly gave me anything to do and then I came to the elementary school and I'm like what do I do with these subjects now? Like the science and math that's together, and basically the whole semester was science and the last two weeks was math.	Levels of Preparation varied according to professors.
PDS (-)/ PST-J- Pre-PLC Interview/	And the more I think about it, we had very little contact as Juniors. Really all we had to do collaboratively was the bulletin board. And I don't know that I would recommend for there to be more communication between the juniors because you know, you have so much going on. You know, it's a lot of work....So getting back to my original point we didn't have a lot of contact as juniors, but I don't want that answer to translate into lets make these student teachers have to have meetings among themselves now because they have so much on their plate.	Cohort has limited time to meet based on placement.