THE INTERACTION OF GEORGIA REGIONAL EDUCATIONAL SERVICE AGENCIES WITH PROFESSIONAL LEARNING COMMUNITIES

by

MARTIE MARIE HUTCHENS

(Under the Direction of Lorilee Sandmann)

ABSTRACT

Continuing education for in-service teachers is shifting from large-scale conferences or out-of-school workshops to the use of professional learning communities (PLCs). The purpose of this qualitative study was to investigate and describe how Educational Service Agency (ESA) personnel contribute to the development and support of PLCs for school improvement purposes. The following research questions were addressed: 1) In what ways do Georgia Regional Educational Service Agency (RESA) personnel support the establishment of professional learning communities? 2) In what ways do Georgia RESA personnel support existing professional learning communities? 3) What are the attributes of innovation that characterize RESA personnel's perspectives related to adoption of professional learning communities? Purposeful maximum variation sampling was used to select three Georgia Regional Educational Service Agency (RESA) school-improvement specialists to participate in semi-structured interviews. Interviews and document data were analyzed via constant comparative method. The diffusion of innovations theoretical framework was used to analyze perspectives of the RESA personnel regarding professional learning communities. Results indicated: 1) ESA personnel

facilitated the organization and conceptualization of PLCs when schools begin the process of forming PLCs; 2) ESA personnel generally provided idiosyncratic and episodic support for PLCs with little or no accountability practices; 3) ESA personnel were unable to provide support to remove the communication barriers within PLCs; and 4) due to its relative advantage, ESA personnel were willing to adopt PLCs as a method of professional learning, however incompatibilities exist between the time needed for PLCs and the current workload of ESA personnel, and ESA personnel were limited in their trialability of PLCs. Implications include a need for ESA personnel to develop training for school-based educators to support collaboration within PLCs, and a need for ESA personnel themselves to participate in training and continuing education for their work in supporting PLCs. There was also a need for ESAs to plan for long-term institutionalization of an innovation, and to implement accountability practices with professional learning. A final implication is that the Georgia RESAs were not adequately staffed to support PLCs on a broad basis.

INDEX WORDS: Professional Learning Communities, Educational Service Agencies, Continuing Professional Education, Diffusion of Innovations, Regional Educational Service Agencies

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A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2012

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December 2012

DEDICATION

This work would not have been completed had it not been for the constant support and understanding from my husband, Herschel Mize. There were many weekends that I wish I could have spent with Herschel rather than my computer and dissertation. He listened throughout and when I was tired, he urged me onwards. For the countless hours we were apart due to this work, this dissertation is dedicated to Herschel.

I also want to dedicate this work to my parents, Margaret and Wayne Hutchens. I was fortunate to grow up in a household where the expectation was that girls were smart and contributing members of society. I remember my father telling me as early as second grade that I could be anything I wanted to be. My mother was a Swiss immigrant who firmly believed the way to happiness was through hard-work and service to others. I am quite sure now that my decision to enter education, which was not my first career-choice, was based on their views on life. I am so glad that I did, and my work, including this dissertation, is dedicated to them.

ACKNOWLEDGEMENTS

There are several people I must acknowledge who supported and frequently inspired my work with this dissertation. First of all, Dr. Lorilee Sandmann, my major professor, who was not in the elementary education department, but willing to take me on as her student. Lorilee added much to this dissertation from her Adult Education background. When I had difficulty understanding a concept, it was Lorilee who swept in and clarified, and remained steadfast in her positive thoughts regarding my work. Lorilee spent countless hours thinking about my work and asking the right questions to take me to a deeper thought process.

In addition to my major professor, I also was provided strong guidance within my committee. Dr. Kyunghwa Lee was amazing in her knowledge of qualitative methodology. Kyunghwa guided me to look at various perspectives and to think about myself as a researcher. Her suggestions for next steps often opened new ideas for me. Dr. Sally Zepeda worked tirelessly to edit my work and direct my organization within my writing. Sally helped me to become a better writer, and no matter what hour of the day or night, she was there responding with encouragement and assistance. She even allowed me to join her own doctoral students during a summer seminar that was uniquely differentiated based on students' needs.

My support network extended beyond the university and into my circle of friends. Dr. Vicki Rosenbaum and her husband, Mickey, found the time to read each chapter and provide editing suggestions for my writing. Often, dinner was waiting when I came in to work with Vicki. I actually grew to enjoy editing sessions. Drs. Teddi and Don Lohmeier also provided editing support and constant encouragement. My dear friend, Michael O'Kelley spent much

time listening and making me laugh at my situation, which is a necessity when writing a dissertation while working full-time.

I was fortunate to be working at this time under the direction of Dr. Russ Cook at RESA. Dr. Cook encouraged me when I was doubtful, supported my work by listening and talking through ideas with me, and provided opportunities to connect my dissertation to my work. I learned about true leadership through Dr. Cook. Also, I was lucky to work with Dr. Rhonda Hefner-Packer, who listened as I developed interview questions, and even provided some edits. Rhonda understood the angst I was living as I worked full-time and completed this dissertation.

Finally, I want to recognize the graciousness of Matt Boggs. Matt was the principal who, many years before this dissertation, allowed me to see the full transformational potential of professional learning communities. Matt treated me not as an outsider to his school, but rather as a colleague. Under his leadership, the culture of his school transformed over the course of three years to a culture of collaboration focused on student achievement. Through this experience, I realized how very important professional learning communities were to teacher learning experiences and the impact they could have on student achievement.

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CHAPTER 1

INTRODUCTION

Continuing education, also known as professional learning, addresses the learning goals of in-service teachers defined as the group of teachers already teaching in the classroom. This training differs from college-based pre-service or pre-professional teacher education, whose goal is to prepare teachers for a career. In 1988, Cervero asserted: "Many people believe that systems of continuing education will be built that rival the preprofessional preparation programs now in existence" (p. 34). Indeed, continuing education for teachers has been a steadily-growing field (Cervero, 2001), but it is also a field in the state of constant change due to its need to adapt to the dramatically shifting external environment and expectations. To become better informed about the impact of these changes, this study seeks to understand how one agency that provides continuing education for in-service teachers is implementing a new method for delivery of instruction that incorporates site-based peer collaboration.

Educational Service Agencies (ESAs) are "a category of organizations whose principal role is that of providing services for a collection of local school districts and/or for the state in a designated, bounded geographic area" (Stephens & Keane, 2005, p. 51). According to Stephens and Keane (2005), the original ESAs were created as cost-saving measures, particularly for small, rural school districts. These governmental agencies are usually mandated by state law and receive funding through federal grants as well as state and local revenues (Stephens & Keane, 2005). The Association of Educational Service Agencies, the professional agency serving ESAs, counts 553 agencies in 45 states as members (Association of Educational Service Agencies,

2011). Baldwin, Carmody, and Talbott (2010) asserted, "ESAs are the largest provider of professional development training in the nation" (p. 3). Yet, many people are unaware of ESAs or the role they perform in schools. Stephens and Keane (2005) proclaimed, "America's educational service agencies … are unequivocally the least-understood and worst-documented component of public elementary and secondary education" (p. xv).

Each ESA serves distinct school districts; therefore, its member school systems usually define the ESA's role. Yet, some commonalities exist. For example, Christiansen (2001) documented that all members of the Association of Educational Service Agencies provide professional development and/or curriculum development services to school systems. Stephens and Keane (2005) reported that in recent years, many ESAs have moved toward a more active role in state-mandated school-improvement strategies. An example of a school improvement strategy that did not mirror traditional professional development occurred in Oregon, where ESAs developed assessments of state standards not covered by the state test (Stephens & Keane, 2005). Frequently, ESAs target their school improvement assistance and professional learning endeavors on identified low-performing schools in their area (Stephens & Keane, 2005; Association of Educational Service Agencies, 2011).

Over the last few years, a new strategy for school improvement, professional learning communities has emerged in many schools. Stoll and Louis (2007) contended:

> During the 1990s, much of the emphasis was on "professional community." It is not insignificant that the word "learning" now appears between "professional" and "communities," because it connotes a shift in the emphasis away from a focus on process towards the objective of improvement. (p. 2)

No longer are teachers simply collaborating, as evidenced by the literature, there is a distinct purpose linked to school improvement attached to the meetings.

While the literature indicates many definitions of professional learning communities (PLCs), a common characteristic is that PLCs are a school-based means of school improvement and teacher learning that specifically focuses on teacher practice to improve student learning in a collaborative environment (Hargreaves, 2007; Hord, 1998; Mason, 2003; Stoll & Louis, 2007; Zepeda, 2008). A PLC's purpose and work is contextually driven (Stoll & Louis, 2007). For instance, in a school where data indicate low language arts performance, the professional learning community may choose to focus its work solely in this area. Usually, the collaboration that takes place in PLCs is informed by a need for improved student achievement in a particular targeted area, and work focuses on curriculum, assessment or instruction, and teachers' actual classroom work (Hord, 1998; Stoll & Louis, 2007). Some PLCs collaboratively create pretests for students, then analyze the data, share strategies with one another, and repeat this process with the post test. The PLC method to teacher professional learning takes an interactive approach and involves learning during implementation, which differs from the traditional presentation-style learning that teachers have experienced in the past.

Evidence shows that school-based PLCs hold great promise for school organizational growth and ultimately greater student learning (Hord, 1998; Louis & Marks, 1998; Mason, 2003; Scribner, Cockrell, Cockrell, & Valentine, 1999; Strahan, 2003). In a three-year study of elementary schools demonstrating improved achievement in low-income, minority students, Strahan (2003) directly correlated academic success to the collaborative culture found within the three studied schools. In a study of management models, Griffith (2003) found that schools concentrating on a human relations management model with emphasis on "concern for

employees, employee teamwork and cooperation, and employee training" (p. 39) have a higher potential for student success. Given the emerging evidence confirming that PLCs are an effective means of school improvement and teacher learning, an examination of how ESAs use them for school improvement initiatives was warranted.

This study was situated in the state of Georgia, where ESAs are called Regional Educational Service Agencies (RESAs) because the Georgia RESAs provide similar services as ESAs and because their demographics represent those of ESAs across the United States. Much like their counterparts across the nation, Georgia's RESAs are one of the largest providers of professional learning for in-service public school teachers within the state (J. Kennedy, Georgia Department of Education, personal communication, March 31, 2011). While it is difficult to ascertain facts and figures on ESAs due to the sheer number of them, a random sampling of demographics from ESAs located across the country revealed a large range of both urban and rural districts. The Georgia RESAs represent a wide variety of sizes and serve both rural and urban districts, which would mirror ESAs across the United States. Reflecting the direction of ESAs across the nation, the Georgia RESAs have begun to undertake school improvement initiatives launched by the state's Department of Education (Stephens & Keane, 2005). Given the direction of school improvement initiatives with Georgia RESAs and ESAs across the nation are parallel, studying Georgia RESAs provided information that would hold true for ESAs in general.

Finally, as recently as 2008, Georgia's RESAs adopted a set of "Standards for Service" that guides their actions. One of the standards mandates the support and establishment of PLCs. Specifically, this standard states: "The RESA provides assistance to systems and schools as they create and sustain professional learning communities focused on priorities identified in the

system/school improvement plans" (Northeast Georgia RESA, 2010). Because the Georgia RESAs have a standard calling for PLC support, the work of Georgia RESAs with PLCs was targeted and documented.

Background to the Problem

Recent reports suggest there is some improvement in student achievement on national assessments, yet a need still exists for ongoing professional development and school improvement initiatives to address identified student achievement gaps and demographic disparity. According to the federally funded report "The Condition of Education in 2010", significant growth has occurred in the academic achievement levels of both fourth- and eighth-graders on national achievement tests from the early 1990s to now (Aud, et al., 2010). However, the report also revealed a growing student achievement gap between students in high-poverty schools versus low-poverty schools (Aud, et al., 2010).

In addition to the widening achievement gap among students from varying socio-economic backgrounds, U.S. students showed no significant growth in reading on the international reading and literacy studies conducted in 2001 and 2006 (Provasnik, Gonzales, & Miller, 2009). The "Trends in Mathematics and Science" study, an internationally administered study, revealed that while the United States is showing some growth in mathematics, it continues to lag significantly behind its counterparts in science (Provasnik et al., 2009). These studies illustrated the need for educators to embrace professional learning and for schools to embrace improvement initiatives as they work toward improving the quality of education.

With the inauguration of the No Child Left Behind act, a federal act that mandates states conduct standards-based tests to determine school ratings, accountability is pervasive in education. This act incorporated standards-based accountability through academic standards,

standardized testing, and accountability for student outcomes (Hamilton et al., 2007). An ancillary impact of the No Child Left Behind act is increased technical assistance and professional development opportunities for schools (Dee & Jacob, 2010). Technical assistance is defined as the work of external contractors in support of project implementation. Technical assistance includes but is not limited to: providing evaluation studies or policy studies, planning for and providing advice on project implementation, or facilitating regional contacts. This study of RESAs and their interaction with PLCs took place against the backdrop of accountability currently prevalent throughout education.

Paradigm Shift in Professional Learning

Presently, an evolution in thinking exists regarding effective professional development of teachers. Cervero (2001) explains, "By way of analogy, at the end of the 20th century, continuing education was in the same state of development as pre-service education was at the beginning of that century" (p. 18). Traditionally, teachers have participated in workshop-based professional learning during the summer or apart from their classrooms with the goal of increased content knowledge. A key finding from a status report regarding professional learning states:

> Effective professional development is intensive, ongoing, and connected to practice; focuses on the teaching and learning of specific academic content; is connected to other school initiatives; and builds strong working relationships among teachers. However, most teachers in the United States do not have access to professional development that uniformly meets all these criteria. (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009, p. 5)

Research no longer supports traditional workshop-based professional learning for teachers.

However, evidence of a lag in practice in regards to how teachers receive professional learning is found in a research study of past Eisenhower grant professional-learning participants. The study determined that almost 79 percent of the professional development that teachers attended was in a traditional format, defined as short workshops away from school or not connected to the classroom (Garet, Porter, Desimone, Birman, & Yoon, 2001). Studies suggest that these types of learning endeavors have limited results. In a large-scale, quantitative study of mathematics professional learning, Garet et al. (2010) found that students whose teachers participated in summer professional development including up to two days of coaching in the classroom fared no better on an academic achievement test than students whose teachers did not. Additionally, the study revealed that teachers did not improve their own content knowledge of mathematics; the only improvement in terms of teacher quality was an increase in number of rigorous-thinking activities provided to students in the classroom (Garet et al., 2010). Because workshop-based learning disconnected from the classroom has shown limited evidence of success, the need for change in professional learning is becoming increasingly necessary.

A growing body of research suggests that PLCs are a more effective means of teacher learning. Foundational to this view is Lave and Wenger's (1991) research on how communities of practice within the workplace learn through legitimate peripheral participation. Lave and Wenger stated, "This view also claims that learning, thinking, and knowing are relations among people in activity in, with, and arising from the socially and culturally structured world" (p. 51). Researchers of Eisenhower grant activities for teachers find that the longer teachers are involved in professional development, the more likely active learning such as observing classrooms or analyzing student work takes place (Garet, Porter, Desimone, Birman, & Yoon, 2001). The study also noted that teachers are more motivated to try new instructional practices when

professional learning provides both coherence with their classroom practices and the capability to communicate with each other about the new learning (Garet et al., 2001). Fogarty and Pete (2010) outlined the facets of successful PLCs in their article on professional learning best practices: "Seven protocols call for professional learning that is sustained, job-embedded, collegial, interactive, integrative, practical, and results-oriented" (p. 32). Studies tend to support a PLC approach, which incorporates collegial collaboration, long-term learning, and a concentration on matters that are relevant and important to teachers (Darling-Hammond et al., 2009; Garet et al., 2001, 2010; Strahan, 2003).

More importantly, some research also indicated that a PLC approach promoting teacher collaboration within the school will positively impact student achievement (Mokhtari, Thoma, & Edwards, 2009; Strahan, 2003; Wiley, 2001). Wiley's (2001) study illustrated this point, finding a positive correlation between student achievement and the teacher professional community when examining high school math achievement in 214 schools. Given the potential of PLCs for both teacher and student learning, a paradigm shift in teacher professional learning from isolated workshops and conferences to onsite, school-based professional learning communities is defensible.

ESAs are also experiencing a need to shift how they deliver their services because teachers' professional learning is at the core of their work. In the past, ESAs have relied on the model of training groups of teachers away from the school environment. Stephens and Keane (2005) explained:

> For many years the standard practice for the delivery of curriculum and instruction services at educational service agencies was to bring the audience to the service center to hear a speaker or to work as a group on curriculum issues. (p. 106)

This system of professional learning contradicts current models of change in schools as well as current research.

When teachers attend workshops provided by ESAs, they are apart from colleagues and the potential for implementation is diminished. Fullan, Cuttress, and Kilcher (2009) asserted that learning from peers onsite is essential to successful implementation of new school-improvement practices. In the past, ESAs have focused on cost-effectiveness of services, (Stephens & Keane, 2005), rather than accountability measures such as outcomes of professional learning. ESAs are experiencing a need to change how they deliver services to become more effective in school-improvement practices. For ESAs, this shift from an economical delivery of services model to a more effective professional learning model represents a unique challenge, one not confronted in their past history.

Challenges Faced by Educational Service Agencies

Based on the literature reviewed in Chapter Two, five salient challenges were identified that ESAs face as they transform to create and support PLCs: 1) a lack of research to guide their own transformation, 2) a need for a new skill set for professional learning delivery, 3) limited resources, 4) a range of PLC implementation levels, and 5) all the issues inherently associated with a new innovation. This change in service is occurring during a time of high demand for professional learning due to the accountability concerns provoked by the No Child Left Behind act.

A primary challenge that ESAs must recognize and address is they are experiencing this shift in how they deliver their services at the same time as school leaders, with no research base to guide their actions. Assisting school leaders as they transition to this new era of PLCs is an important role that ESA personnel may assume. Yet, while there is an abundance of research

available on PLCs and how principals work to establish them, a paucity of research exists on the role of external support. Furthermore, the research available on ESAs is limited in scope. The Association of Educational Service Agencies (2011) has supported a number of studies substantiating the need for ESAs by providing the numbers of teachers served. During the literature review for this study, only one dissertation was located that focused on a description of ESA-provided services (Sherrod, 1991). Essentially, ESAs are expected to assist in this transition to PLCs, yet they have no research-based guidelines.

Another challenge ESAs face is that personnel may need to update their skills used while working with teachers. ESAs support and promote school improvement efforts; however, interacting with communities of practice may require a different skill set from what ESA school improvement specialists have traditionally employed. In a review of conceptualizations of workplace learning, Smith (2003) contended: "Training personnel need to be skilled in developing learner self-directedness" (p. 80). ESA personnel come from a variety of educational backgrounds; frequently, they are former classroom teachers or principals (Georgia RESA 2010 State Annual Report). Many ESA personnel have never participated in an authentic PLC because it's a relatively new innovation; therefore, they may not fully appreciate and recognize the value of a PLC. In addition, because ESA personnel have traditionally provided presentation-style classes, they may need additional training themselves to understand the best strategies for interacting with PLCs.

In addition to a lack of guiding research and possible outdated skills, an additional challenge that ESAs face is limited resources in terms of the numbers of professional staff tasked as school improvement specialists. For example, in the Georgia RESAs, the number of school improvement specialists ranges from a ratio of three school improvement specialists per seven

school systems to a ratio of 16 school improvement specialists to 15 school systems (Georgia RESA State Annual Report, 2010). On average, the ratio of school improvement specialists employed by Georgia RESAs to the number of systems served is about one to two. Adding to the complexity of the resource challenge, school systems vary in number of schools. For example, Gwinnett County, Georgia, has 132 schools (Gwinnett County Public Schools, 2011). Appendix A lists the number of systems and schools served by each Georgia RESA and the number of school improvement specialists employed at each RESA. Given that PLCs may provide a more effective means for professional learning and consequently school improvement, schools are beginning to ask for assistance onsite (Stephens & Keane, 2005). Therefore, a challenge that most ESAs face is how to use the strength of the PLCs for school improvement and professional learning with limited staff.

A different challenge for ESAs is the continuum of implementation levels of PLCs in schools. A school that has not yet implemented PLCs has more diverse needs than a school that has an established PLC. ESA personnel must analyze the needs of the schools and tailor services appropriately. Making this process even more complicated is that no two PLCs are the same (Collinson, Cook, & Conley, 2006; Hord, 1998). As mentioned previously, context generally defines the purpose of the PLC and its goals (Grossman, Wineberg, & Woolworth, 2001). Key operating procedures of a PLC may be dictated by the central office of a school system or generated by a school-based leadership team. Understanding how to interact meaningfully with the various stages of PLCs and how to determine the needs of a PLC is a new challenge for school improvement specialists.

The last challenge is all of the problems associated inherently with change because PLCs are a relatively new innovation for ESAs. Some ESA personnel may perceive PLCs as an

innovation that negates the need for outside support; therefore, they may feel threatened. Organizations do not accept all new innovations, and their adoption takes time. Rogers (2003) asserted, "Innovations that are perceived by individuals as having greater relative advantage, compatibility, trialability, and observability and less complexity will be adopted more rapidly than other innovations" (p. 16). Understanding the perspectives of ESA personnel through a theoretical framework is required to provide guidance to ESAs as they approach this new PLC innovation.

Problem Statement

A call for a shift in how ESAs deliver professional learning services is occurring due to the disparity between traditional modes of teacher learning and PLCs. A growing body of research (Grossman, Wineberg, & Woolworth, 2001; Hord, 1998; Strahan, 2003; Wiley, 2001) suggests that employing a PLC model for teacher learning improves the effectiveness of in-service teacher training. However, due to a dearth of research on ESAs, no research guides their efforts with PLCs.

As PLCs become common in schools, it will be important for ESA personnel to understand how to effectively interact with PLCs to carry out school improvement initiatives. Not all schools have adopted a PLC model for school improvement; therefore, non-adopter schools may need training and foundational understandings. Research that guides ESA interactions with the various stages of PLCs, whether beginning or experienced, will further enhance school improvement efforts and fill this research gap.

Currently, no research exists that uses a theoretical framework to understand how ESA personnel and PLCs interact. Using the theoretical framework of diffusion of innovations, the current relationship between ESAs and PLCs could be explored more thoroughly. Rogers (2003)

recommended measuring user perceptions of innovation attributes to predict the adoption rate. Analyzing ESA personnel's perspectives of PLC attributes will provide data to establish the training needs of ESA personnel as well as provide insight into promising practices.

Purpose of the Study

The purpose of this study was to investigate and describe how ESA personnel contributed to the development and support of professional learning communities for school improvement purposes. This study addressed the following research questions:

1. In what ways do Georgia Regional Educational Service Agency (RESA) personnel support the establishment of professional learning communities?
2. In what ways do Georgia RESA personnel support existing professional learning communities?
3. What are the attributes of innovation that characterize RESA personnel's perspectives related to adoption of professional learning communities?

Significance of Study

Significance of Theoretical Contribution

A need exists for research on ESAs guided by a theoretical framework. Currently, available research offers reports of the numbers of teachers or schools supported, or survey data. A deeper, more theorized analysis of the work of ESAs is warranted, particularly in the area of the development of PLCs, because this challenge is new for ESAs. By using a theoretical lens, this research may uncover new ways of thinking about the interactions of ESAs and PLCs.

Currently, there is a paucity of research using diffusion of innovation theory as the theoretical framework to guide the investigation of the attributes of an innovation and their relationship to adoption. Rogers (2003) estimates that only 1 percent of the publications using

the diffusion of innovation theory have actually utilized it in this manner. In the past, diffusion theory has studied the adopters or the avenues of communication to ascertain information on adoption rate, not the innovation itself. This study would advance work using the diffusion of innovation framework in a non-conventional sense, using an analysis framed by diffusion theory to determine how attributes of an innovation influence adoption. Applying the diffusion of innovation framework in a non-traditional way will uncover additional research avenues to be pursued by this theoretical framework.

In a criticism of the use of the diffusion theory, Rogers (2003) pointed out that there is an over reliance on survey data and a lack of alternative methodologies. Rogers maintained surveys limit the information provided by respondents. Rogers stated, "The research designs predominantly used in diffusion research do not tell us much about the process of diffusion over time, other than what can be reconstituted from respondents' recall data" (p. 128). This study used the diffusion framework in a qualitative inquiry approach. Seeking perspectives of participants provided rich data that the researcher could not have predicted, therefore using a survey methodology would have been less appropriate for this study. Use of diffusion theory within qualitative inquiry will enable other researchers to see the value of the use of this framework.

Research in the education field using the diffusion of innovation framework is limited to technology adoption; however, this framework is evident in the marketing, communications, public health, and agricultural fields (Rogers, 2003). Perhaps one reason is because the diffusion of innovations framework has traditionally been used on innovations that are tangible inventions, such as the use of birth control devices or pesticides. This study proposes to use the diffusion of innovations framework on an innovation that is not concrete but rather is an interactive process.

Applying the diffusion of innovation framework in this context within education may allow others to see the value of this theory in a field in which it has not yet been used extensively.

Significance of Practical Contribution

In terms of practical significance, this study has research, financial, and policy implications. As described previously in this chapter, much research has taken place exploring PLCs and their potential benefits. Because school leaders such as principals and teacher leaders are key figures in PLC development, the literature explains their role as well. Yet, little can be found that illustrates the role of ESAs or other training personnel in the development and support of PLCs. This study proposes to investigate the interaction between ESAs and PLCs to provide insight into possible training implications for ESA personnel as well as other in-service teacher training personnel. Currently, a dearth of research exists on how external agencies interact and support this relatively new organizational learning tool.

Stephens and Keane (2005) estimated that in 2001 and 2002, ESAs "spent over $3.5 billion dollars on direct delivery of programs and services" (p. xvii). Georgia allocated more than $12 million in 2009 for its 16 RESAs. In addition to direct RESA funding, Georgia allocated more than $30 million for teachers' professional learning. During this time of budgetary crisis, it is important to understand the role of ESAs to make informed fiscal decisions.

For those Georgia RESA school improvement specialists who have limited involvement with a PLC, this study provides a deeper understanding of the role an external agent can perform. In addition, this study provides insight into the emerging role of ESAs and expands the knowledge base of PLC support. This study reveals implications regarding policy in terms of hiring practices, resources, and training needed by ESAs to adequately support PLCs.

Definitions

Key terms used frequently in this study are defined.

1) **Georgia Assessment of Performance on School Standards (GAPSS**)- an onsite assessment of a school's progress toward meeting the School Keys (www.gadoe.org, Aug. 2012)

2) **Professional Learning Community (PLCs) -** School-based groups of practitioners meeting on a regular basis for an identified school improvement goal

3) **Regional Educational Service Agency (RESA) -** Georgia's Educational Service Agencies that provide educational support to schools

4) **RESA Standards for Service-** A set of standards developed by the Georgia RESAs that direct how and what services the Georgia RESA provide to school.

5) **School Improvement Plan-** Plan developed by faculty and school leaders that contains goals for student achievement, actions or steps for the school to follow, and artifacts or evidence that is collected by the school

6) **School Keys-** Georgia's standards for schools that describe what Georgia's schools need to know, understand, and be able to do (www.gadoe.org, Aug. 2012)

7) **School Leaders-** school-based administrators, such as the principal or assistant principal, can include the instructional coach

8) **Teacher leaders-** School based teachers who lead and guide PLCs

Chapter Summary

This chapter provided an overview of the evolving state of continuing education of K-12 teachers. A new model of delivery of teacher education, Professional Learning Communities (PLCs), shows great promise in terms of teacher learning and student learning. The PLC model is a relatively new innovation for Educational Service Agencies (ESAs), which are one of the

largest providers of professional learning for teachers. Background information indicated there is currently no research on how ESAs are interacting with PLCs. The purpose of the study, and its significance were outlined based on this information.

CHAPTER 2

REVIEW OF THE LITERATURE

Chapter Two provides an overview of the literature of the study. The following research questions were addressed during this study:

1. In what ways do Georgia Regional Educational Service Agency (RESA) personnel support the establishment of professional learning communities (PLCs)?
2. In what ways do Georgia RESA personnel support existing professional learning communities?
3. What are the attributes of innovation that characterize RESA personnel's perspectives related to adoption of professional learning communities?

The purpose of this study was to investigate and describe how Educational Service Agency (ESA) personnel contribute to the development and support of PLCs for school improvement purposes.

The researcher reviewed four areas of literature to inform this study. The first section of this literature review explores the existing literature on ESAs. The second section of this review focuses on PLC research, how PLCs are developed, and the role of the principal and other school leaders in establishing and sustaining PLCs. The third section delves into literature on accountability since this study takes place during a pervasive era of accountability. The fourth section of this review explores a theoretical framework of diffusion of innovation that analyzes how innovations are adopted and subsequently diffused across a social network. This framework will serve as the theoretical underpinning of this study.

Educational Service Agencies

Research on Educational Service Agencies

ESAs are one of the largest providers of professional learning for in-service public school teachers across the United States (Baldwin, Carmody, & Talbott, 2010). Yet, there are very few research studies available on ESAs. This researcher found only one dissertation that focused on the nature of ESA services. The remaining research was limited to commissioned research studies conducted by professional groups for the Association of Educational Service Agencies (2011).

In her dissertation, Sherrod (1991) explored the services provided by Georgia RESAs as they transitioned from Cooperative Educational Service Agencies (CESAs) to RESAs through a document analysis and structured interviews with then-current directors. According to Sherrod, Georgia RESAs began initially as projects of shared services, where several small school systems joined to share services across county lines. The shared-services projects only lasted six years, largely because there was no definite state funding each year (Sherrod, 1991). Sherrod stated, "These issues were settled during the 1972 legislative session, when the Georgia General Assembly passed Senate Bill 538, the Cooperative Educational Services Act" (p. 11). Sherrod interviewed 32 directors, which included eight shared-services directors, eight former CESA directors, and the 16 incoming RESA directors. Three important findings of Sherrod's study are: 1) the RESA-provided services were influenced by legislation; 2) the RESAs were receiving more direction from the Georgia Department of Education rather than from local decisions, as compared to when they were CESAs; and 3) the RESAs were more similar in their service offerings as a group than in the past, when member systems solely directed them.

Sherrod's (1991) findings regarding the influence of the Georgia Department of Education and school improvement initiatives concurred with the assertions made later by Keane and Stephens (2005) in their book describing ESAs. Stephens and Keane maintained, "One of the more recent patterns in the programming efforts of state networks of service agencies has been the more visible role they have been asked to play in support of state school improvement strategies" (p. 70).

A more up-to-date perspective of the role of ESAs in teacher professional development was provided by an independent study for PBS TeacherLine through an online survey. The PBS TeacherLine study findings indicated that traditional, workshop-driven professional learning was provided by ESAs as the prevalent model (Hezel Associates, 2006). A weakness of the PBS TeacherLine study, however, was the low response rate: only 80 agencies responded out of the 994 agencies contacted (Hezel Associates, 2006); therefore, the study may not have provided a true picture of ESAs. Similar to the Sherrod (1991) finding, this research revealed that state legislation frequently provided funding for ESAs, which suggested that ESAs were taking direction from the state and moving away from member-driven initiatives. Finally, the study found that the evaluation of professional development used most often by ESAs was simply a survey at the end of the event asking respondents about their perceptions of the professional development (Hezel Associates, 2006). Therefore, even the research that ESAs conducted on their own effectiveness was methodologically weak.

Research is available through the Association of Educational Service Agencies (AESA), whose membership includes 553 ESAs in 45 states (Association of Educational Service Agencies, 2010). The most recent research on the AESA website is a white paper prepared by members of the governmental committee of AESA entitled: "Improving American Education

through Educational Service Agencies." Baldwin, Carmody, and Talbott (2010) stated that the goals of their research were to: "1) determine whether ESAs represent an effective investment in school improvement strategies, 2) identify how ESAs assist in improving student learning, and 3) quantify how ESAs assist with cost-saving strategies for school districts through creating greater economies of scale" (p. 1). These goals resonate with the assumption that ESAs are still moving from cost effectiveness to school-improvement effectiveness. The white paper and other research provided on the website primarily contain data on numbers of teachers served. For example, under the statement that ESAs are the largest provider of professional learning for teachers, Baldwin, Carmody, and Talbott (2010) communicated this finding:

> Last year, Grant Wood AEA [Area Education Agency] in Cedar Rapids, Iowa served 33 public school districts and 22 private schools. These schools employ approximately 5,000 teachers. The agency offered 385 different professional development classes and learning experiences for which teachers could register. These classes drew 8,587 participants, which is a rate of over 1.7 classes taken per teacher. (p. 4)

The white paper did not use theory to guide the gathering or analysis of data; rather, the findings described what had taken place and were based on stakeholders' perceptions. Also listed on the AESA's website were a number of self-reported annual reports by various ESAs across the nation. A review of these annual reports revealed that they did not include any documentation of work with PLCs (Association of Educational Service Agencies, 2010).

Section Summary

There is a paucity of research available on ESAs. This researcher found only one relevant theory-based ESA study, which was conducted in the state of Georgia. The available research, with the exception of the dissertation, had low response rates, or was both biased toward ESAs

and methodologically unsound. What has emerged from the literature on ESAs supports Sherrod's (1991) findings that ESAs are impacted by legislation, that they have received more direction from state departments of education (particularly on school improvement initiatives), and that they function more uniformly than in the past. Another finding from the research is that professional learning conducted by ESAs has not moved past the model where teachers come together in a central location for classes (Baldwin, Carmody, & Talbott, 2010; Hezel Associates, 2006).

Professional Learning Communities

The first segment of this section on PLCs will begin with definitions from within the PLC literature, followed by a conceptual explanation of individual and organizational learning. The next segment will explore PLC impact on student learning and teacher practice, followed by an examination of the roles of various individuals in the development and support of PLCs.

Professional Learning Community Definition

Many definitions exist of what constitutes a PLC, most of which are contextually bound (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006; Stoll & Louis, 2007). In her case study of how a PLC was established at an elementary school, Hord (1998) asserted: "A basic feature of professional learning communities is the consistent collaboration among the staff" (p. 2). In their extensive review of literature, Stoll et al. (2006) defined a PLC as a group of practitioners "sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way (Mitchell & Sackney, 2000; Toole & Louis, 2002), operating as a collective enterprise (King & Newmann, 2001) " (p. 223). In their report on PLCs, Stoll and Louis (2007) concluded:

> In sum, the term "professional learning community" suggests that focus is not just on individual teachers' learning but on 1) professional learning; 2) within the context of a cohesive group; 3) that focuses on collective knowledge, and 4) occurs within an ethic of interpersonal caring that permeates the life of teachers, students and school leaders. (p. 3)

While many definitions exist, the constants among all of the definitions is that PLCs are a group of teachers working together to share knowledge about teaching and student learning on a regular basis.

Learning and the Individual

Better understanding of the relationship of PLCs in the implementation of school improvement practices requires conceptualizing how these communities of practice work in terms of individual and group learning. This section will examine diverse research stances on how individuals are impacted by communities of practice. The first stance will be Lave and Wenger (1991), who have provided extensive, seminal, ethnographical research on communities of practice of apprentices.

More than a passive activity, learning is participatory in nature and contextualized within the world (Lave & Wenger, 1991; Wenger & Snyder, 2000). Lave and Wenger (1991) used the term *legitimate peripheral participation* to describe learning as an intentional practice rooted in social behaviors within communities of practice. Lave and Wenger asserted, "Participation is always based on situated negotiation and renegotiation of meaning in the world. This implies that understanding and experience are in constant interaction- indeed, are mutually exclusive" (p. 51).

Research indicates that apprentices form communities of practice apart from their work with masters in their profession (Lave & Wenger, 1991), essentially remaining in the periphery

as they gain knowledge. In the past, the assumption existed that all learning took place through the master-apprentice work, but Lave and Wenger (1991) discovered that much learning takes place within the apprentice community of practice while the apprentices are carrying out their work or task. Lave and Wenger stated, "The effectiveness of the circulation of information among peers suggests, to the contrary, that engaging in practice, rather than being its object, may well be a condition for the effectiveness of learning" (p. 93). This finding suggested that teachers learn best while doing the work involved in a PLC, as compared to non-contextualized learning such as attending workshops.

The real center of learning is the community of practice; the master simply serves as a symbol of authority and provides guidelines for the group (Lave & Wenger, 1991). Intentional learning is located within the community of practice (or in the case of a school, a PLC). As one principal explained regarding the PLC at his school, "I want my weakest teacher hearing from my strongest teacher; but each PLC is only as strong as the strongest teachers in the PLC" (M. Boggs, personal communication, September 23, 2009).

Park and Parks (2010) postulated that newcomers to a community may not necessarily value the practices of a community and therefore may not necessarily be trying to enter the community in the traditional trajectory of peripheral to center of the community as suggested by Lave and Wenger (1991). In their case study, Park and Parks found: "They [induction teachers] wanted to collaborate with experienced teachers and to have their new ideas accepted in the school community" (Park & Parks, 2010, p. 93). The researchers also stated: "However, if we could begin to conceptualize induction teachers as community members who equally contribute to and benefit from the community, then new possibilities for changing school culture could be mapped out" (Park & Parks, 2010, p. 94). The findings of Park and Parks indicated new teachers

valued being equal members of a community of learners, therefore a PLC would be a strong vehicle of change particularly when new teachers are in the community.

Lave and Wenger's (1991) community of practice theoretical framework has been used to study learning in the workplace in more recent years, and suggestions for expansion of the theory have been made. Graven (2004) found that the theory's original elements could still apply to describe teachers who are participating in a professional learning class for math. Yet, Graven alleged that Lave and Wenger's theory seems to be missing the essential element of learner confidence, which she indicated grows within learners as they participate and later becomes a byproduct of their learning.

Through a comparison of case studies carried out in the steel industry and in the school setting, Fuller, Hodkinson, Hodkinson, and Unwin (2005) agreed that *legitimate peripheral participation* described the behavior and learning of newcomers entering into a community of practice. Yet, Fuller et al. claimed: "Not enough attention is paid to ways in which the learning of experienced workers differs from that of newcomers. This leaves a significant theoretical gap" (p. 52). Fuller et al. proposed, "Our research has demonstrated that experienced workers are also learning through their engagement with novices and that part of the process of legitimate peripheral participation for many novices is to help other workers learn" (p. 64). Fuller et al. also postulated that hegemony exists in the workplace and that those who control resources will ultimately control barriers to the success of communities of practice. For example, Fuller et al. documented the resentment generated by apprentices who felt they "trained" older workers yet received less salary.

There are a number of ways that individuals are impacted by communities of practice. Some researchers allege that there are communities of practice within communities of practice,

dependent on a teacher's work stage. Other researchers propose that elements such as how experienced workers learn and learner confidence, as well as workplace hegemony must be addressed to fully understand communities of practice.

Learning as an Organization

The theory exists that learning occurs at the organization level as well as at the individual level (Blankenship, 2009). An essential understanding regarding organizational learning is the definition of knowledge. There are two types of knowledge identified within the literature: tacit and explicit. Research suggests that tacit knowledge is not easy to verbalize and is associated with "know-how," while explicit knowledge can be defined as knowledge articulated or transmitted in formal language (Cook & Brown, 1999; Nonaka, 1994). In his theoretical framework of organizational knowledge creation, Nonaka (1994) contended: "Although the terms 'information' and 'knowledge' are often used interchangeably, there is a clear distinction between information and knowledge.... information is a flow of messages while knowledge is created and organized by the very flow of information" (p. 15). Knowledge is defined as the result of interpreting data or information and is shaped by the beliefs of its holders (Nonaka, 1994). Knowledge ultimately guides actions and changes behaviors **(**Al-Alawi, Al-Marzooqi, & Mohammed, 2007; Cook & Brown, 1999; Nonaka, 1994).

Several models of organizational learning state that individuals first learn knowledge and then share it through groups (communities of practice) within the organization; finally, the knowledge is accepted as organizational learning if the new learning is congruent with current beliefs (Argote, McEvily, & Reagans, 2003; Collinson, Cook, & Conley, 2006; Cook & Brown, 1999; Nonaka, 1994). Strengthening the argument that organizational learning takes place was the theoretical framework proposed by Watkins and Marsick that included individual, team or

group, and system level learning (Yang, Watkins, & Marsick, 2004). Using interactive interviews and surveys to study the interplay between individual and organizational learning in a school, Collinson and Cook (2003) stated, "Recent educational reforms have targeted the school as the unit of change, yet professional development efforts are generally directed toward individual teachers" (p. 3). Crucial findings from Collinson and Cook's study were as follows: a) time has to be explicitly set aside for teachers to share in groups, and b) school norms for sharing are foundational for successful collaboration. In a study using surveys and structured interviews of organizational learning, Al-Awawi, Al-Marzooqi, and Mohammed (2007) found that a critical factor in the success of organizational learning is an established culture of trust.

In their conceptualization of organizational learning specific to schools, Collinson, Cook, and Conley (2006) identified the following six conditions as necessary for fostering organizational learning:

- Prioritizing learning for all members;
- Facilitating the dissemination (sharing) of knowledge, skills, and insights;
- Attending to human relationships;
- Fostering inquiry;
- Enhancing democratic governance; and
- Providing for members' self fulfillment. (p. 110)

The conditions necessary for organizational learning in this conceptualization are congruent with those of PLCs.

Impact of Professional Learning Communities

A significant amount of research is available supporting the idea that schools organize PLCs both for their professional learning structure and for a school improvement practice. In

Strahan's (2003) longitudinal study combining case studies and structured interviews of three elementary schools that showed substantial growth in student academic achievement, the researcher found the common denominator to be the collaborative professional learning culture within the school. Strahan (2003) explained:

> At these schools, the reform spiral was fueled by data-directed dialogue. In their reflections, participants stressed the importance of the time they spent conversing in grade-level meetings, site-based staff development sessions, mentoring discussions, and informal get-togethers. These conversations were purposeful. They focused on meeting the needs of students and supporting each other. (p. 143).

There were many forms of meetings taking place, but what the researcher found was the collaboration that was intentionally focused was more likely to positively impact school improvement.

Another example of evidence of the strength of PLCs was found in a study that initially set out to investigate data-directed collaboration. In an interactive partnership study, Mason (2003) examined how data were utilized for school improvement in the Milwaukee public school system. Mason defined the use of data as, "Learning from data means to transform data into information as it is interpreted in context. Data then becomes knowledge as it is shared, applied, and used to promote change and improvement throughout an organization" (Mason, 2003, p. 8). Whereas initially, the investigation set out to study how data were being used to improve student achievement in the schools, a correlation was found between the use of data and the existence of PLCs. Mason (2003) explained, "Our initial intention was not to study professional learning communities per se, but these organizational structures proved time and again to match the challenges and needs of school-level staff seeking to use and learn from the data" (p. 24).

In a mixed-methods study using surveys, observations, and document analysis of 24 schools (eight elementary schools, middle schools, and high schools), a direct positive correlation emerged between professional community and social support for achievement in the classroom (Louis & Marks, 1998). Using a statistical model to analyze teacher survey results, Wiley (2001) found a positive correlation among achievement, transformational leadership, and professional community when high school math achievement was studied in 214 schools. Transformational leadership occurs when "a principal with a central position in the social network of advice influences instruction through collegial relationships that are based on respect and trust" (Wiley, 2001, p. 4). The findings of this research support the idea that PLCs can impact implementation of school improvement practices.

In addition to the research dedicated to the link between professional learning communities and student achievement, a body of research is also available that supports the development of PLCs to strengthen teacher learning. In her analysis of the research on teacher professional development, Borko (2004) found that the category of research whose goal is to determine impact on teacher learning presented evidence that "strong professional learning communities can foster teacher learning and instructional improvement" (p. 6). In a descriptive study of the development of a professional community in a high school during a two-and-a-half-year period, Grossman, Wineburg, and Woolworth (2001) found: "teachers come to recognize the interrelationship of teacher and student learning and are able to use their own learning as a resource to delve more deeply into issues of student learning, curriculum, and teaching" (p. 989). In another two-year study using interviews and observations of school improvement meetings in three middle schools, researchers concluded the school whose culture most resembled a working PLC had taken the most action toward changing practice (Scribner, Cockrell, Cockrell, &

Valentine, 1999). In a study of surveys gathered from more than 1,000 teachers who participated in an Eisenhower Professional Development program, researchers found several indicators of successful professional development congruent with PLCs. One finding from the Eisenhower Professional Development study maintained: "teachers who experience professional development that is coherent, that is -connected to their other professional development experiences, aligned with standards and assessments, and fosters professional communication- are more likely to change their practice" (Garet, Porter, Desimone, Birman, & Yoon, 2001, p. 934).

Role of the Principal

The principal's role in the establishment and development of PLCs is varied and integral. Literature is devoted to identifying the cultural shifts and relationship development that schools transition through as they move from a traditional model of professional development to a PLC. In Hord's (1998) case study of the development of a PLC, she noted that initially the principal developed a collegial relationship with the teachers and provided them with mechanisms for input in decision-making and leadership opportunities, which established a culture of trust. Using a model-to-data fit statistical analysis to determine organizational models, Griffith (2003) used survey data from students and teachers as well as student achievement data to surmise that a human relations model is the optimal management model for school effectiveness. A human relations management model is characterized by providing job autonomy, variety, involvement in decision-making and positive interpersonal relationships (Griffith, 2003). In their case studies of administrators initiating school improvement, Nelson and Sassi (2005) expanded on the relationship-building role of the principal. They contended that principals need to serve in

learning roles and develop relationships in this manner as well as through their administrative roles.

Another significant aspect to the development of PLCs is that principals vary in their approaches and abilities to develop PLCs. In Williams' (2006) survey study of leadership styles of principals, the researcher determined that a conceptual approach toward leadership that focused on social decisions and was oriented toward the people in the organization is the best way to implement the PLC model within a school. Yet, Williams' (2006) findings indicate that most principals are not oriented toward the conceptual leadership approach and are actually inhibited in their development by hierarchical structures from the central office bureaucracy. Principals may not be ready for or have the capacity for building the relationships needed for PLCs. Grossman, Wineburg, and Woolworth (2001) stated:

> Leadership is not a personality trait but an attribute of self-development in social relationships. In schools, leadership … depends on possessing the right credential rather than attaining the consensual judgment of one's coworkers. Too often the school leader is someone who has completed a degree program rather than someone who has emerged from the social group and *earned* the right to represent the collective vision. (p. 996)

During her case study, Hord (1998) described the outcome when a principal whose leadership style contradicted leading PLCs; the principal was not supportive of the plans for the PLCs, so conflicts arose and the principal was subsequently removed.

Another role the principal engages in during the establishment of PLCs is that of support, which includes ensuring schedules and time is available. According to Hord (1998), "One aspect of support includes the physical elements: the size of the school, the proximity of the staff to each other, well-developed communication structures, a time and place reserved for meeting

together to reflect and critique work" (p. 5). Further evidence of the importance of resources is available in Collinson and Cook's (2003) study on organizational learning: "The most important influence on learning and sharing in this study was time" (p. 12). A lack of time was noted as problematic for the teachers in the study (Collinson & Cook, 2003). Exploring ways to create time for collaboration is a large part of a principal's role, so much so, that literature is devoted to this area. For example, Drago-Severson and Pinto (2006) used interviews with 25 principals and document-analysis methods to explore the multiple ways principals use human resources to provide teachers with time for collaboration in order to reduce teacher isolation. Guiding principals to find ways to free their staff from being prisoners of time is a role ESA personnel could facilitate as they support the implementation of PLCs.

Hord (1998) claimed that another function principals perform as they move from traditional models (teacher isolation) to teacher collaboration is establishing leadership roles for teachers. In her further analysis of the data collected from the 25 principals regarding support for teacher learning, Drago-Severson (2007) substantiated this claim when she identified providing leadership roles for teachers as a key facet of establishing a culture of learning among teachers. One of the leadership opportunities for teachers that principals identified as strategic is the act of sharing with colleagues (Drago-Severson, 2007). Helping principals identify and develop teacher leadership roles as they move toward a collaborative PLC culture or initiate school improvement efforts through a PLC is a critical task for ESA personnel to assume as they work with schools.

How principals use artifacts and activities to initiate PLCs is also influential to the development of PLCs. In case studies examining principal practices, Halverson (2007) described how artifacts can be used strategically to focus conversations and help PLC groups move toward

meaningful collaboration. Halverson considered stage-one artifacts as those that initiate conversations but have not been made by the PLC members; rather, the group receives them. For example, a book study may be considered a stage-one artifact. A stage-two artifact begins to trace problems (Halverson, 2007). Data, such as rates of absenteeism, tracked over time may be considered a stage-two artifact. A stage-three artifact tries to bring initiatives together (Halverson, 2007). A school improvement plan is an example of a stage-three artifact. Halverson contended, "Actualizing the potential of artifacts requires leaders to work with teachers to create a receptive culture for implementation, and artifacts that served to catalyze professional development in one school could be dismissed as irrelevant or resisted in another" (p. 103).

Role of Teacher Leaders

While the role of the principal is essential to the development of PLCs, the literature indicates that principals cannot transform their schools into learning communities without the support of teacher leaders. The role of teacher leaders in the establishment and ongoing dialogues of PLCs should not be underestimated. When Silins and Mulford (2004) used a path analysis to study factors contributing to organizational learning, they determined that in a culture where teachers feel valued, 20 percent of organizational learning is attributed to the impact of teacher leaders. They also found that in schools possessing a lower socioeconomic status, teacher leaders have more leadership roles (Silins & Mulford, 2004). York-Barr and Duke (2004) highlighted an important facet regarding teacher leaders in their literature review: "Background as a teacher seems to account, in part, for what enables teachers to influence the practice of their colleagues" (p. 267). This statement emphasizes that principals simply cannot

transform their schools into learning communities alone; rather, they must utilize and develop teacher leaders.

The roles of teacher leaders seem to encompass both setting the stage for ongoing collaborative dialogue about practice and relationship building (Hipp & Huffman, 2007; Johnson, 2003; Little & Horn, 2007; York-Barr & Duke, 2004). In his comparative case study of teacher collaboration, Johnson (2003) stated, "The study also revealed the affective demands of the learning process and highlighted the need for emotional support and encouragement for teachers engaging in change" (p. 346). In their mixed-methods study, Hipp and Huffman (2007) found that both teachers and administrators working with PLCs benefit from focused practice on dialogue skills for collaboration. Little and Horn (2007) analyzed teacher conversations during collaboration and found that frequently, teachers tried to normalize a problem: "moves that define a problem as normal, an expected part of classroom work and teacher experience" (p. 91). How teachers negotiated normalizing responses impacted the PLC's moves. Little and Horn (2007) affirmed, "Specifically, we see differences in whether the teachers' moves to normalize a problem result in turning a conversation *away from the teaching or toward the teaching as an object of collective attention"* (p. 82).

Teacher leaders assume both formal and informal leadership roles as they work toward collaboration with colleagues. Sometimes, teacher leaders are given formal roles with titles such as literacy coach or department head. Generally, informal teacher leaders are known for their quality instruction. In their analysis of teacher leadership, York-Barr and Duke (2004) cite evidence that informal teacher leaders are often more influential than teacher leaders with assigned titles.

One reason why teachers transitioning into leadership roles frequently face dilemmas could be their lack of training in working with adult groups. In their case studies of a school-wide professional learning community using a specified program, Andrews and Lewis (2007) declared: "Successful change in the school could be attributed to a number of factors, including … use of professional conversation practices" (p. 141). This statement was echoed in Hipp and Huffman's (2007) call for teacher leaders to explicitly practice dialogue skills. Finally, knowing how to negotiate the stages of group development of forming, storming, performing, and transforming (Mulford, 2007) and not internalizing them as personal attacks is essential for teacher leaders.

Another challenge that teacher leaders face is learning to negotiate the political aspects associated with leading collaborative groups. Grossman, Wineburg, and Woolworth (2001) explained the dilemmas they faced as they established PLCs with two high school departments:

> In many ways, starting with a group of colleagues who have worked together may be worse than convening a group of perfect strangers (Wineburg & Grossman, 2001; cf. Rothman, Erlich, & Tropman, 1995). Unlike the people who attend a summer institute, drawn from different venues and often on their best behavior, our group already had a rich and not always congenial history. They had heard about each other from students, worked together on school projects, and engaged in past skirmishes. The conflicts and tensions of the workplace accompanied us from the start. Many teachers had fully developed opinions of each other. In most cases these impressions were developed not from actually seeing each other teach, but from years (in some cases, decades) of reports by 15- and 16-year-old informants. (p. 949)

Johnson (2003) identified teachers' positive and negative feelings associated with PLCs in his study of teacher collaboration. The negative aspects of PLCs included some teachers feeling an increased workload due to meeting collaboratively, pressure to conform to the group, instances of interpersonal conflict, and cases of factionalism between teams (Johnson, 2003).

Role of External Agencies

The research is clear regarding the characteristics of PLCs and the roles of principals and teacher leaders. The research even includes descriptive steps on how to develop PLCs. Yet, sparse research exists that explains the role of ESAs in the development and support of PLCs. Because there is a paucity of research on ESAs, this section will explore research that includes other external agencies to schools, such as colleges or consultants. The goal of this section is to uncover how the research addresses such external agencies.

Limited evidence exists that external agencies have a role in the support of PLCs. For example, in their literature review on PLCs, Stoll, Bolam, McMahon, Wallace, and Thomas (2006) reviewed continuing professional development that mirrors PLCs with its focus on teacher collaboration over time. Stoll et al. stated, "Features of continuing professional development which were linked, in combination, to positive outcomes included: the use of external expertise linked to school-based activity" (p. 230). Stoll et al. identified external agencies that provide support, most notably from the district, but they failed to explain exactly what these external agencies do when providing support. Drago-Severson (2007) reported that principals sometimes use outside experts as a human resource tool for developing collaboration. Another strategy that principals use is developing a partnership with other agencies, such as universities or research centers (Drago-Severson, 2007). Yet, the role of the external agency is not outlined specifically. So, while there is scant research stating that external agency support is

helpful, even less research exists that provides insight into the role of external agencies in schools.

Some research provides guiding principles for external agencies. Fullan (2005), who worked as an independent consultant and evaluator for change projects for schools, referenced outside agencies in his research on change and affirmed explicitly that they are part of the infrastructure of school support. While Fullan provided a guideline for external agencies, he did not illuminate the function of external agencies when he asserted, "Front-end training is insufficient. It does not translate into improvements in the daily cultures of how people need to work in new ways" (Fullan, 2005, p. 2). While this statement indicates that support from outside agencies needs to be ongoing, it does not explicitly state the role of the agency.

One role noted in writings for external agencies in the creation of PLCs is to provide teacher leaders with tools for creating and sustaining dialogue among teacher colleagues. For example, Hord (1998) provided some insight into the role of external agencies in her narrative of the development of a PLC. She explained how a local college assisted a school by providing training to the teacher leadership team in skills for collaborative decision-making while working on a new curriculum together (Hord, 1998). Andrews and Lewis (2007) contended that providing strategies for initiating conversations is critical to the PLC's success. The literature explicitly supports providing training for teacher leaders of PLCs on how to collaborate.

Section Summary

It is now well documented that PLCs hold promise for enhancing teacher learning and practice and ultimately student achievement. Research also finds that learning practices of a PLC mirror those that support both individual and organizational learning. Steps toward creating PLCs in schools are found to be complicated and context-specific, however.

Research on the roles of leaders within schools who are developing or leading PLCs is robust. The research clearly denotes that the role of the principal is multifaceted, from setting up time structures to forming relationships with and among teachers. The role of teacher leaders is more complex but also well-documented within the research. The roles of teacher leaders include, but are not limited to, facilitating professional conversations and helping build cultures of trust. Continued support and training is critical for teacher leaders in establishing and sustaining PLCs due to their impact on collegial learning. Because teacher leaders frequently assume informal roles, this group of professionals may not be identified as a group in need of additional training. Not surprisingly, teacher leaders also face dilemmas of conflict with colleagues. The literature highlights the importance of professional learning to equip these teachers with needed skills and tools to enable them to lead their colleagues in meaningful conversations and work.

Finally, this section highlights the existing gap in PLC research. While some research references a need for external assistance to schools when they work toward establishing a PLC or toward supporting PLC initiatives, little research exists (even as descriptive data) on the role of the external agency. Where such a role is highlighted, ESAs are not specified. The limited available research indicates there is a need for external agencies to provide teachers with tools to enhance their work while leading their colleagues; however, there is no available research that describes how external agencies support principals as they transition to collaborative environments or how external agencies interact with existing PLCs. Additional research in this area is needed to enable external agencies to become more effective in the support they offer to schools in this area.

An Era of Accountability

This study is taking place during an era of high stakes testing imposed by the No Child Left Behind law of 2001. The accountability measures place pressure on school-based educators for high performance. The atmosphere of high stakes testing has caused pedagogical and content changes at the school level and in the classroom. An example of an ethical breach as a result of this pressure took place in the state of Georgia when 178 principals and teachers were accused of testing irregularities for a statistically unacceptable rate of high erasures and corrections of wrong to right answers in 2009 (Samuels, 2012). Serious measures have been taken to ensure that test accountability is maintained, but the continuing demands for student performance on state administered tests remains.

Since this study is about professional learning, it is important to review how professional learning is impacted by high-stakes accountability. In their review of literature for their study of how districts reacted to high stakes testing, Opfer, Henry, and Mashburn (2008) created district profiles of policy and found, "The professional development policies have little connection to accountability or testing policies in almost of their sample states, there is no coherence between these policies" (p. 310). The authors argue that districts and schools make decisions regarding professional learning choices, and therefore there is no quality control from the state (Opfer, Henry, & Mashburn, 2008). The implication the authors alluded to is that schools and districts may not be making choices for coherent, long-term professional learning and could be choosing, short-term, quick-fix professional learning.

A metasynthesis of 49 qualitative studies of the impact of high stakes testing found professional learning may be limited to quick-fix remedies (Au, 2007). In the metasynthesis, Au (2007) reasoned, "the tests have the predominant effect of narrowing curricular content to those

subjects included in the tests, resulting in the increased fragmentation of knowledge forms into bits and pieces learned for the sake of the tests themselves" (p. 264). Teachers were essentially teaching to the test, and limiting content expansion beyond test requirements. Au (2007) further elaborated and explained the results of high-stakes testing on pedagogical decisions when he stated that the testing is, "compelling teachers to use more lecture-based, teacher-centered pedagogies" (p. 264). Less student-centered pedagogical strategies and restricted content in the classroom would lessen the need for ongoing collaboration in a professional learning community.

The idea that professional learning communities are antithetical to high-stakes testing practices was strengthened by Schoen and Fusarelli (2008) when they compared 21st Century School reforms contrast with No Child Left Behind. The authors of the position paper postulated that 21st Century reforms called for new ways of teaching and ongoing professional development, which are in direct opposition to high stakes testing environments that value basic skills for test mastery and convergent thinking (Schoen & Fusarelli, 2008). Basic skills mastery does not require ongoing professional development.

Section Summary

Research indicates that high stakes testing environments have not been conducive to setting up ongoing, collaborative professional learning. Accountability measures have been imposed on schools in terms of testing and mandates for performance, but accountability for quality professional learning has not been standard. Therefore, quality control is often left to principals or district leaders who may be opting for action versus outcomes. During this era of high-stakes testing, schools may be concentrating on short-term goals that are focused on restricting content and teacher-centered pedagogy.

Diffusion and Adoption of Innovations Theory

Uses of Diffusion and Adoption Theory

Diffusion and adoption of innovations is a multifaceted theoretical framework used to examine outcomes of the introduction of an innovation in several research traditions, such as sociology, anthropology, education, marketing, and health (Rogers, 2003). The framework is used as a lens to discover why and how innovations or ideas spread across a social system and how the innovations are implemented (Rogers, 2003; Wejnert, 2002). Researchers using this framework attempt to answer questions such as the following: 1) Why has an innovation spread quickly? 2) Why has an innovation not been adopted? 3) What are the characteristics of adopters? (Rogers, 2003)

Diffusion theory has a long research history. In her conceptual framework outlining diffusion theory, Wejnert (2002) stated, "Although the study of diffusion of innovations began with Tarde's 1903 book on *The Laws of Imitation*, a more concerted development of this approach did not occur until 40 years later" (p. 298). Both Wejnert (2002) and Rogers (2003) asserted that researchers used diffusion theory more after Ryan and Gross (1943) utilized the theory in research involving Iowa farmers' widespread use of hybrid corn. Everett Rogers was a leading diffusion scholar who wrote five editions of a book that chronicles "turning points in the growth of the diffusion field" (Rogers, 2003, p. xviii), each edition about a decade apart. In his last edition, Rogers estimated approximately 5,200 studies used diffusion theory.

A close alignment exists between diffusion and adoption; therefore, it is important to understand the difference between the study of diffusion and adoption. Diffusion of an innovation refers to how information regarding a new innovation is spread across the social system (Rogers, 2003). Studies using diffusion focus on how information regarding attributes of

the innovation, such as relative advantage (or more specifically, costs, returns, or efficiency), influences the extent of communication regarding these innovations (Abrahamson & Rosenkopf, 1997; Meyer, Johnson, & Ethington, 1997; Rogers, 2003; Sahin & Thompson, 2006). Another approach to studying diffusion of an innovation is examining the identity of change agents and how they identify and communicate with the social group targeted for adoption (Locock, Dopson, Chambers, & Gabbay, 2001; Rogers, 2003; Ryan & Gross, 1943). According to Rogers (2003), adoption is "a decision to make full use of an innovation as the best course of action available" (p. 473). Studies involving adoption of an innovation generally focus on the characteristics of the adopters (Rogers, 2003; Stephenson, 2003; Wejnert, 2002).

Early History of Diffusion Research

Credited with the first study using diffusion theory (Rogers, 2003; Stephenson, 2003; Wejnert, 2002), Ryan and Gross (1943) examined the diffusion of hybrid corn seed among Iowa farmers and found that the rate of adoption actually fell within a normal frequency curve. Ryan and Gross stated, "It has been evident that the acceptance sequence of hybrid seed in these communities has followed a bell-shaped pattern" (p. 21). In addition to the rate of adoption, Ryan and Gross also investigated the impact of change agents and found that "with the passing years neighbors gained almost consistently in importance and salesmen lost" (p. 21), establishing the importance of change agents and identification of opinion leaders. According to Stephenson (2003), much of the research foundation of agricultural extension agencies and how they operate stems from the early research of Ryan and Gross.

Rogers (2003) asserted there are nine major diffusion research traditions: 1) anthropology; 2) early sociology; 3) rural sociology; 4) education; 5) public health and medical sociology; 6) communication; 7) marketing, and management; 8) geography; and 9) general

sociology. Within education, Rogers claimed, "Early educational diffusion studies were almost all completed at one institution, Columbia University's Teacher College, and under the direction of one scholar, Dr. Paul Mort" (p. 61). In the early 1930s through 1950s, Mort studied the correlation between local control of financial resources and school innovation (Rogers, 2003). Ultimately, the Columbia diffusion studies "found that the best single predictor of school innovativeness was educational expenditure per student" (Rogers, 2003, p. 61).

Diffusion Research in Education during the 1970s

During the 1970s, Rand-funded studies researched how the federal government supported change in schools. The first of these studies outlined a conceptual model to study change that drew heavily upon diffusion theory. In this model, Berman and McLaughlin (1974) provided an improvised stage of innovation that included implementation. Underscoring that this research is dated, diffusion scholars now recognize the implementation stage as a stage of adoption (Rogers, 2003). In their model, Berman and McLaughlin contended that an educational innovation is different from a product or technology usually studied within diffusion literature. Berman and McLaughlin argued, "Drawing primarily from the fields of medicine and rural sociology, the diffusion literature frames the central problem of innovation in terms of *adoption*, and the central issue for analysis as the identification of differential *rates of adoption"* (p. 9). The researchers proposed the three-stage process of innovation for analyzing implementation, which included support, implementation, and incorporation (Berman & McLaughlin, 1974).

Outcomes from the Rand-funded studies were collected through case studies of educational change within 25 schools culled from survey data collected initially from 293 schools (Greenwood, Mann, & McLaughlin, 1975). The study was broken into three segments reflecting the conceptual framework following diffusion theory originally set forth by Berman

and McLaughlin (1974): support, implementation, and incorporation. The findings in the implementation stage included: "where significant change occurred in district practices, project implementation was characterized by adaptation in the initial project design over time and by modification or change in the institutional setting and its members" (Greenwood, Mann, & McLaughlin, 1975, p. 65).

While the Rand-funded studies used diffusion theory, today's diffusion theory concepts have evolved, thus rendering these studies useful yet outdated from a theoretical perspective. For example, today's diffusion theory includes an analysis of the attributes of an innovation as a theoretical lens for discerning reasons for adoption or non-adoption of an innovation. According to Rogers (2003), five main attributes impact how a group accepts an innovation: 1) relative advantage, 2) compatibility, 3) complexity, 4) trialability, and 5) observability. He maintains: "Relative advantage is the degree to which an innovation is perceived as being better than the idea it supersedes" (Rogers, 2003, p. 229). Rogers defined compatibility of an innovation as its congruence with the existing beliefs and culture of the social group considering the innovation. Regarding complexity, Rogers stated, "Complexity is the degree to which an innovation is perceived as relatively difficult to understand and use" (Rogers, 2003, p. 257). Rogers described observability and trialability as the degree to which a group can observe an innovation in use or the ability to actually try the innovation. Benefits versus costs are also variables involved with the decision to use an innovation, according to Wejnert (2002).

When Greenwood, Mann, and McLaughlin (1975) discussed adaptation, they referred to what today's diffusion scholars call "reinvention" (Rogers, 2003; Wejnert, 2002). How an innovation is adapted to fit the needs of the group is its reinvention. In some cases, reinvention

may not be detrimental to the outcome of the innovation; however, in other situations, a substantive change could alter its impact (Rogers, 2003).

The Use of Diffusion Theory in Education Today

Today, the use of diffusion theory in education has most widely been used to describe the adoption or non-adoption of technology. As educational technology began to emerge in education, the applicability of diffusion research was renewed. In 1990, Ely used diffusion research as well as theory from several school leaders to devise his list of conditions needed for technological change. Ely (1990) tested his conditions in several countries by using a structured interview with a variety of types of educators, including educational technologists. In his findings, Ely included the following conditions as necessary for implementation of technological change:

- Dissatisfaction with the status quo
- Knowledge and skills of adopters
- Adequate resources
- Time made available during the workday to learn
- The presence of rewards or incentives to encourage adoption
- A strong level of commitment by those involved
- Participation expected and encouraged by leadership

While Ely's (1990) conditions are similar in nature to Roger's (2003) attributes of an innovation, they lack the breadth of Roger's attributes because they focus primarily on educational technology implementation.

A more recent application of diffusion theory is visible in a quantitative study analyzing innovation attributes to determine the likelihood of the instructional use of computers by college

of education faculty (Sahin & Thompson, 2006). These researchers analyzed the survey responses of 117 faculty members, and their study reflected Rogers' (2003) diffusion theory attributes. A key finding concluded that when faculty members report positive attitudes toward relative advantage, compatibility, and complexity, they are more likely to remain positive overall about using computers for instructional purposes (Sahin & Thompson, 2006).

Demonstrating the emphasis in education of the use of diffusion theory with technology, another recent study using diffusion theory by Lai and Chen (2011) investigated the factors influencing secondary teachers' adoption of teaching blogs in Taiwan. The researchers analyzed 325 questionnaire responses and discovered the following: "Enjoyment in helping others was a key factor affecting the adoption of teaching blogs" (Lai & Chen, 2011, p. 956).

To determine how educational technology is being adopted via diffusion theory, Kebritchi (2010) carried out a study of the factors influencing the non-adoption of computer games. In the study, Kebritchi used grounded theory analysis to interpret interview data from three teachers to determine the important attributes of a computer game that influenced the decision not to adopt. Kebritchi found that both relative advantage and compatibility were key adoption factors.

Two educational studies examined the adoption of programs using diffusion of innovation theory. Wilson, Pruitt, and Goodson (2008) used the diffusion of innovations framework to study the likelihood of adoption of "abstinence only until marriage" programs by middle school principals. In their quantitative study, they found that principals in general believed "abstinence only until marriage" programs have great relative advantage and are compatible with their needs and beliefs (Wilson et al., 2008). An interesting outcome of this study is that many of the principals were not aware of whether their schools were eligible to

receive funding to adopt these programs (Wilson et al., 2008). Using the diffusion of innovations theory framework enabled the researchers to see that while principals would be likely to adopt based on the innovation's attributes, the principals were not the decision-makers for adoption of the innovation,

In a three-year descriptive statistical study of the engagement of Hispanic students in the Future Farmers of America (FFA) association, Roberts et al. (2009) found that the use of change agents and opinion leaders increased the adoption of the innovation (or, in this case, the participation of Hispanic students in the club). For their study, they systematically employed methods that aligned with Rogers' (2003) diffusion of innovations theory on change-agent practices as interventions to increase participation by Hispanic students (Roberts et al., 2009). The interventions in the Roberts et al. study included targeting parent groups and student leaders in an effort to create opinion leaders as well as provide on-site change agents. Roberts et al. stated in their findings, "These accomplishments can be made through designing and implementing a series of interventions based on Rogers' (2003) theories of diffusion innovations by identifying key opinion leaders and providing targeted experiences to engage these individuals" (p. 78). The Roberts et al. study did not use diffusion theory to analyze its results but rather applied it to design the interventions, which is a departure from how the theory has been used in other recent education studies.

Issues related to the Diffusion of Innovations Theory

One of the significant issues surrounding diffusion of innovations theory is the validity of the assumptions regarding adopter categories. In their review of diffusion of innovations theory use in service agencies, Greenhalgh et al. (2004) emphasized that adoption is a complex process with many associated actions. Greenhalgh et al. believed that individuals assumed many roles

when considering adoption of an innovation. The researchers were referencing these roles when Greenhalgh et al. stated:

> This diverse list of actions and feelings highlights the complex nature of adoption as a process and contrasts markedly with the widely cited "adopter categories" ("early adopter," "laggard") that have been extensively misapplied as explanatory variables. There is little empirical support for these stereotypical and value-laden terms. (p. 598)

In her conceptual framework integrating models of diffusion of innovations found in the literature, Wejnert (2002) never mentioned the adopter categories theorized by Rogers but instead asserted that characteristics of innovators are extremely important.

In his article on the flaws of the underlying theory of the agricultural extension agency, Stephenson (2003) asserted that the adopter categories in diffusion of innovations caused services for farmers to be skewed toward large, more affluent farms. He claimed this situation emerged because the farmers were characterized as more likely to lead the innovation and that the group that needs the most support is the smaller farm, which was left out. He also noted that non-adopters were affected by the adoption of an innovation simply because when larger farms adopted and were able to increase production, non-adopters also had to accept the prevailing lower prices. Because diffusion of innovations is the underlying theory for extension agencies, Stephenson questioned whether the use of adoption categories in the development of their service model may have actually contributed to the demise of smaller farms.

Abrahamson and Rosenkopf (1997) argued that "social-network effects must be incorporated into theories that explain when and to what extent innovations diffuse" (p. 290). In Abrahamson and Rosenkopf's theory paper that outlined a computer simulation of social networks, they proposed that "information is channeled by social networks only to certain

potential adopters" (p. 290). They asserted that social networks impact the order in which potential adopters learn new information and therefore the order of adoption.

Rogers (2003) proposed several shortcomings to the diffusion of innovations theory, such as a pro-innovation bias and an individual-blame bias. Rogers asserted that because diffusion innovations theory concentrates on innovations that have been widely adopted, there has been a neglect of study of slowly adopted innovations, reasons for rejection, and reasons for discontinuance. Rogers also ascertained that sometimes innovations are not good or healthy for the adopters. For example, Rogers cited the outcomes of the preference for sons in India and China and how this idea has led to problems within the population. Rogers defined individual-blame bias as "the tendency to hold an individual responsible for his or her problems, rather than the system of which the individual is a part" (p. 119). Rogers maintained that this situation occurs because it is easier to study the individual as the unit of analysis rather than the system.

A problem with the methodology that Rogers (2003) cited is that an over-reliance on survey data exists and that often, the data is gathered long after implementation has taken place. Rogers contended that surveys may not portray an accurate picture and that a need exists to study the diffusion process in context. Rogers also believed the recall ability of participants can be problematic for researchers. For example, in the hybrid corn study conducted by Ryan and Gross (1943), it appeared that the researchers studied the adoption rate by asking farmers about important change agents three years after adoption of the new seed. The length of time between adoption and the ability of farmers to accurately recall is a concern.

Section Summary

Diffusion and adoption theory has a long research tradition, and while it has been used in education, many of the studies are outdated. Today's education studies using diffusion and

adoption theory are limited to studies of the factors influencing the adoption of educational technology. Problems cited with diffusion theory includes: 1) an over-reliance on survey data, 2) misleading adopter categories, and 3) neglect of studying innovations that have not been widely adopted.

Chapter Summary

This chapter reviewed the literature on ESAs, PLCs, high stakes testing accountability, and the diffusion and adoption of innovations theory. One finding of this review is that scant ESA research is available. This is important since ESAs are the largest providers of professional learning for in-service teachers of public schools. The research on PLCs indicated that they hold promise for school leaders in implementing change, yet there is a shortage of literature on how external agencies support PLCs. Professional learning during high stakes testing environments may focus on short term goals and have not been held to accountability standards. Diffusion and adoption of innovations theory has been used in a variety of research fields, including education. Yet, the current research in education appears to be limited to the adoption of educational technology, such as games or blogs.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter describes the research methods used to investigate how Educational Service Agency (ESA) personnel in Georgia interacted with Professional Learning Communities (PLCs). The research sought to address the following research questions:

1. In what ways do Georgia Regional Educational Service Agency (RESA) personnel support the establishment of professional learning communities?
2. In what ways do Georgia RESA personnel support existing professional learning communities?
3. What are the attributes of innovation that characterize RESA personnel's perspectives related to adoption of professional learning communities?

The purpose of this study was to investigate and describe how ESA personnel contribute to the development and support of PLCs for school improvement goals.

Four sections make up this chapter. The first section connects the general conceptual framework for this study with its purpose. The second section explains the design of the study including choice of analysis method, participant selection, and the intention of the interview questions. The third section provides specificity of the data analysis methods. Finally, the fourth section elucidates limitations of the study.

General Conceptual Framework

The theoretical framework of diffusion of innovations was used to guide the discussion of research question three. Chapter two illuminated an area of diffusion research that focused on

decisions to adopt or not adopt an innovation. According to Rogers (2003), there were five variables that determined the rate of adoption of innovations. These variables included: perceived attributes, the type of innovation decision, communication channels, nature of the social system, and the extent of change agents' promotion efforts. Each of these variables was discussed in detail in chapter two. This study focused on the perceived attributes of an innovation to aid in analysis and these attributes include: relative advantage, compatibility, complexity, trialabilty, and observability. Using diffusion theory and RESA personnel perspectives of PLCs, the researcher aimed to provide not only a description of ESA work with PLCs, but also to ascertain why the work that ESAs do with PLCs has evolved to its current state.

Based on the review of literature, the conceptual model for this study was developed using a modification of Rogers' (2003) model of the variables determining the rate of adoption. The model was modified for three reasons. The first reason to modify Rogers' model was to concentrate the focus on the perceived attributes of the innovation. The second reason for modification was because unlike most diffusion studies, the innovation in this study was not a tangible item, but rather a process. The third reason to modify was the original model includes an economic focus and RESAs are a non-profit organization. A basic visual model linking the perceived attributes to the research questions is presented in Figure 1.

The perceived attributes have a hierarchy within themselves. Rogers (2003) states, "Diffusion scholars have found relative advantage to be one of the strongest predictors of an innovation's rate of adoption" (p. 233). Often when scholars study relative advantage, they include such features as economic factors, status aspects, effects of incentives, or mandates for adoption (Rogers, 2003). Since RESAs are driven more and more by state school improvement

agendas (Stephens & Keane, 2005) economic factors were replaced by school improvement goals and the efficiency of the PLC model for this study.

Rogers (2003) defined observability as the "degree to which the results of an innovation are visible to others" (p. 258). In this study, the observable outcomes were categorized as relative advantages for two reasons. First, the researcher determined during the analysis that the RESA personnel valued the outcomes of the PLCs. Therefore, the data fit into the relative advantage category more so than observability. Secondly, RESA personnel did not have opportunities to simply observe a PLC in action except in cases where they were providing feedback. Observing was not a part of the regular work or training of RESA consultants. Therefore, for this study, the observable outcomes were considered relative advantages and observability was not part of the theoretical framework.

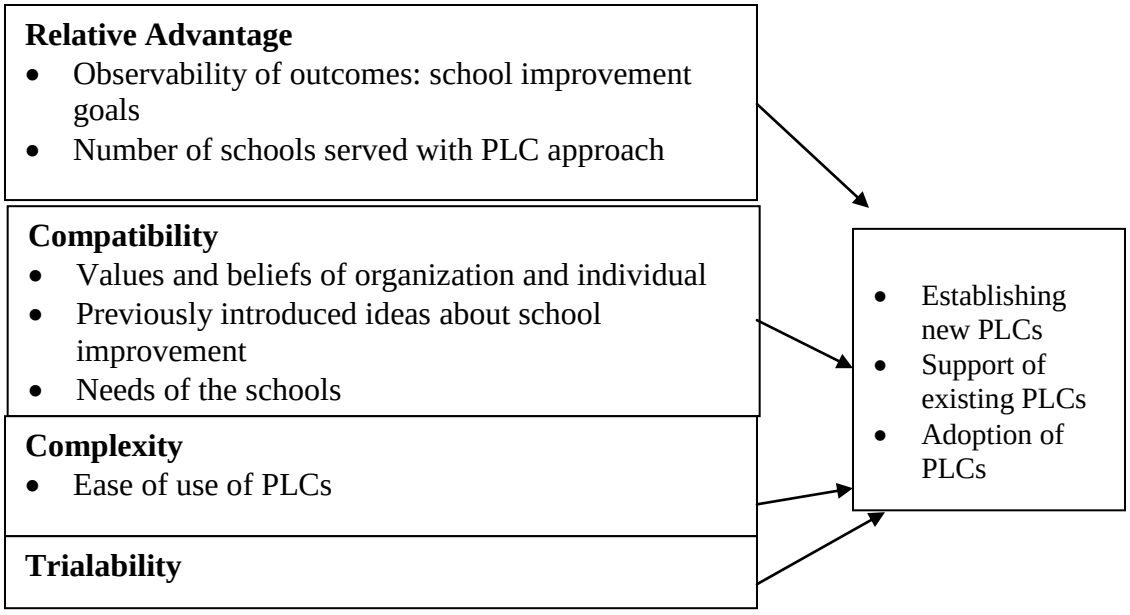

Figure 1. Conceptual framework for the study (Adapted from Rogers, 2003).

Rogers' (2003) original model for compatibility, complexity, and trialability remained intact in this study. Rogers maintained that if an innovation is not compatible with existing

beliefs then its rate of adoption will be affected negatively. This study attempted to determine compatibility of PLCs with existing beliefs, previous ideas, and needs of both the RESA personnel and the schools they served, which is congruent with Roger's (2003) definition of compatibility. There was already compatibility with the RESA standards for service, since one of the standards calls for support of PLCs. This study provided insight into how RESA personnel were enacting this standard for service.

Perceptions of complexity and trialability were also included in the theoretical framework. Rogers (2003) maintained that the more complex an innovation is perceived, the less likely it will be adopted. Rogers (2003) claimed that greater trialability of an innovation will increase the likelihood of adoption. This study investigated complexities associated with PLCs and the levels of trialability of PLCs that the RESA personnel experienced.

Design of Study

Qualitative Lens

There is debate regarding the motivating factors for a researcher to choose a qualitative design. Glesne (2006) asserted that a researcher's beliefs about how to make sense of the world guide the researcher to choose a qualitative design. Creswell (2007) concurred that a researcher chooses qualitative inquiry methods based on philosophical views. Creswell maintained, "Five philosophical assumptions lead to an individual's choice of qualitative research: ontology, epistemology, axiology, rhetorical, and methodological assumptions" (p. 15).

Although Glesne (2006) and Creswell (2007) built a case that philosophical underpinnings determine methodology, Merriam (2009) believed pursuing a problem is the determinant for choosing qualitative design. Merriam clarified: "Rather than determining cause and effect, predicting, or describing the distribution of some attribute among a population, we

might be interested in uncovering the meaning of a phenomenon for those involved" (p. 5). Corbin and Strauss (2008) asserted that qualitative researchers frequently provide the following reasons for choosing a qualitative approach over a quantitative approach: "qualitative research allows researchers to get at the inner experience of participants, to determine how meanings are formed through and in culture, and to discover rather than test variables" (p. 12). Based on the various perspectives presented, researchers choose qualitative methods to study a phenomenon based on their own philosophical views and/or the intent of their study.

This study sought to understand how RESAs support PLCs as well as understand the perspectives of RESA personnel regarding PLCs. In order to do this, the researcher needed to move beyond simply asking survey questions and tallying up responses. In order to truly understand what relative advantage participants saw in the use of PLCs, it was important for their experiences to be revealed. To comprehend how compatible PLCs were with the beliefs of the study participants, it was essential to first understand those beliefs. These are not topics that are answered in "yes" or "no" formats. Therefore, a qualitative lens that sought to determine meanings through interactions thereby discovering emerging themes and patterns was the most congruent approach to this study.

Issues to Confront in Qualitative Inquiry

It is important to draw attention to issues regarding qualitative research to provide context for the products generated by the researcher during the analysis. Qualitative analysis is performed with some level of subjectivity; therefore many within the research community call for transparency of the methods used for analysis (Bowen, 2009; Butler-Kisber, 2010; Freeman, deMarrais, Preissle, Roulston, & St. Pierre, 2007). A number of actions on the part of the researcher can enhance trustworthiness in a study. Butler-Kisber's (2010) suggestions included

researchers: ensure methods are transparent, acknowledge their assumptions and biases, and demonstrate length of time in the field as well as multiple data sources. This study employed triangulation, a negative case, and regular member checks to ensure congruence of data, as well as researcher reflexivity in order to achieve trustworthiness. Transparency of methods, including how the constant comparison analysis was applied, is a goal of this chapter.

Often, quantitative and qualitative methods are contrasted by members of the research community and generalizability is a term frequently used to describe a characteristic of a quantitative study. Generalizability means that the findings are from a large enough data source that they did not just happen by chance, however large numbers of data are not the case with qualitative inquiry (Butler-Kisber, 2010). In place of generalizability, Butler-Kisber suggested that qualitative studies work toward particularizability or striving to resonate with other people or studies; this is accomplished through thick, rich description and a thorough, transparent analysis. This study provided rich descriptions from participants to clarify points throughout the analysis.

Finally, this author agrees with Butler-Kisber (2010) who "argues that questions of reliability have no relevance in qualitative theory" (p. 13). Reliability is the idea that a study could be replicated and the findings would be the same (Butler-Kisber, 2010). Reliability is not a desired feature in qualitative studies, and Butler-Kisber (2010) reasoned that this "undermines the very assumptions on which qualitative inquiry is based" (p. 15). This study sought to go deeper with fewer participants, which enhanced the particularizability.

Selection of Sites and Participants

A purposeful maximum variation sample was used for this study. Creswell (2007) explained purposeful sampling: "This means that the inquirer selects individuals and sites for

study because they can purposefully inform an understanding of the research problem and central phenomenon in the study" (p. 125). Merriam (2009) defined maximum variation sampling as a sample that includes the widest variation of the range of characteristics of interest in the study. A maximum variation sample was used to analyze the experiences of three RESA personnel chosen from a continuum of little or no interaction with PLCs to frequent interactions with PLCs.

This study purposively included a negative case selection, which is defined as a participant with little or no exposure to PLCs. The negative case revealed important information regarding why a RESA school improvement specialist was limited in his/her work with PLCs. The negative case in this study provided data for further probing questions across all three participants.

To identify participants for the study a participant selection survey was sent via email to RESA school improvement specialists in four different RESAs within a 100 mile range of the researcher's RESA. See Appendix B for the participant selection survey as well as the informational letter. The participant selection survey provided data along a continuum regarding participant work with school or system-based PLCs. The responses from the survey were divided into groups of individuals who self-selected that he or she had: (a) little and/or no interaction to either establishing or existing PLCs, (b) a high level of interaction with existing school- or system-based PLCs, or (c) a high level of interaction with working toward establishing a school- or system-based PLCs. There were eight respondents to the survey. Almost all the participants reported some level of engagement with PLCs, although the amount ranged from "very little" defined as one to three times per year, to regular engagement which was defined as on a monthly or more basis. Only one participant responded that he or she never

worked to establish a PLC. Possible participants were invited to participate by the researcher but not coerced or mandated to do so.

From the selection survey data, three participants were chosen to participate in the study based on their level of activity with establishing PLCs. No one from the selection sample indicated that he or she did not work with PLCs; therefore, the negative case was based on the responses regarding establishing PLCs. Figure 2 presents the basis for participant selection.

Participant	*Level of activity with establishing PLCs*	*Level of activity with existing PLCs*
A	Low or none	Frequently
B	Some	Some
C	Regular Basis	Regular Basis

Figure 2. Desired participant characteristics for the study.

Data Collection Methods

In order to collect and triangulate data, a number of methods were used. Semi-structured interviews were used with all participants, as well as an analysis of documents. The researcher was a key instrument in both data collection and analysis in this study and has the same job title as the participants. All of these conditions allow an enhanced responsiveness and adaptation during the collection of data, which is beneficial to data collection in the qualitative tradition (Merriam, 2009). However, closeness to the subject matter also introduced bias, which is discussed later in this chapter.

Interviews. The choice of a research method is dependent on the purpose of the research. In this case, understanding perspectives of RESA personnel toward PLCs was a goal of the

research which aligned with the use of interviews. In his book outlining interviewing, Seidman (2006) explained the virtue of the interview: "At the root of in-depth interviewing is an interest in understanding the lived experience of other people and the meaning they make of that experience" (p. 9). In the same vein, Roulston (2010) claimed that qualitative interviews seek to understand feelings and perceptions. Using interviews allowed access to an understanding of the experiences of participants with the various phases of PLCs (establishing and existing) and their perspectives toward them.

Semi-structured interviews of approximately 90 minutes per interview were initially planned. After the first round of interviews though, the length was shortened to an hour, due to noted fatigue of participants since often they were interviewed at the end of a workday. Interview questions were open-ended when possible and face-to-face, permitting use of probes during the interview. Roulston (2010) clarified: "Probes frequently *use the participant's own words* to generate questions that elicit further description" (p. 13). According to Roulston, mirroring the participant's words lessened the chances of the participant recycling the interviewer's words, and instead improved the chances that the participant would stay true to his or her own thoughts. The researcher employed this technique as frequently as possible.

The design of the interview questions was purposeful as well. Glesne (2006) suggested beginning with experience/behavior type questions. For this reason, the semi-structured interview for this study began with demographic questions and flowed into questions that provided information regarding experiences with PLCs that aligned with the first two research questions of this study. There were also questions interspersed in the interview for research question three, which had a more direct link to the diffusion of innovation framework. Follow-up interviews were dependent upon participant answers within the initial interview and designed

to be participant specific, with the goal being to explore experiences in depth. A copy of the interview questions and a possible order of the questions can be found in Appendix C. Questions from ensuing interviews by participant can be found in Appendix D.

Figure 3 presents the interview questions and to which of the three major research questions they were linked. However, some of the interview questions addressed multiple research questions, depending on the response of the participant.

Research Question	**Interview Question**
Question 1: In what ways do Georgia Regional Educational Service Agency (RESA) personnel support the establishment of professional learning communities?	Within the past three years, describe an experience you had working with establishing a new PLC. Describe what you are currently doing in terms of working with establishing a new PLC. What has this RESA offered in the past to school leaders who want to establish school-based PLCs? If a school leader approached you regarding establishing a PLC in his or her school, what course of action might you take? During that experience [a time you worked on establishing a PLC], how did you plan your work?
Question 2: In what ways do Georgia RESA personnel support existing professional learning communities?	Describe your current efforts with existing PLCs. Describe a time you had working with an established PLC. During that experience [of working with an established PLC], how did you plan your work? In what ways does this RESA support established school-based PLCs? In what ways does this RESA support leaders in established school-based PLCs? If a principal approached you to ask about working with an established PLC, what steps might you take?

Question 3: What are the attributes of innovation that characterize RESA personnel's perspectives related to adoption of professional learning communities?	There are different models of educator professional learning, such as workshops during the summer, after school classes, PLCs…which models have you worked with? In what ways and to what extent do these models impact teacher and student learning? What changes did you note in the school as a result to a move to a PLC structure? Using that example [a time participant worked with existing PLC], what advantages are there to using PLCs as a vehicle for school improvement? What challenges do you encounter when working with a school or system-based PLC? Where do you find support to overcome these challenges? What do you see as the goal for education? How do you see your work supporting this goal? What do you see as the role of RESA? How does this RESA define PLCs? How congruent was this support to your beliefs regarding PLCs? To what extent does your RESA function as a PLC? What steps has your RESA taken to enable you to support PLCs? What additional support does your RESA need to provide? Describe a time you have observed a PLC in action. In what capacity were you there?

Figure 3. Proposed interview questions linked to research questions.

There were tentatively six interviews per participant planned for this study. In actuality, three interviews took place with one of the participants, and four interviews took place with the

other two participants. Total time spent in the field interviewing was approximately twelve hours. On occasion, all three study participants took part in follow-up phone calls for clarification, which totaled an hour. The actual number of interviews was dependent on the time it took for data saturation to take place. Glaser and Strauss (1967) defined data saturation as: "no additional data are being found whereby the sociologist can develop properties of the category" (p 61). There was a time period of three to ten days between the interviews of each participant. The time period was allotted so that each interview could be coded prior to the next interview in the series. Coding prior to subsequent interviews was a step taken to enhance the data collection, allowing for additional questions to be developed if needed based on the data.

There were multiple interviews planned in order to ensure that participants were comfortable with the interviewer, and to provide greater clarity of details. Seidman (2006) explained: "Interviewers who propose to explore their topic by arranging a one-shot meeting with an interviewee whom they have never met tread on thin contextual ice" (p. 17). Creating semi-structured, face-to-face interviews allowed a rapport to grow between the participant and interviewer as well as created an opportunity to explore the participants' experiences more deeply.

Another important factor considered was the setting of the interview. Roulston (2010) suggested that the place is important since some venues, such as a restaurant, would not be advantageous due to interruptions. For this study, in order to generate a rapport, participants chose the setting of their choice. Two participants chose their offices while the other participant chose restaurants and her own home. Supporting Roulston's contention that setting could impact the interview, it was noted in this study that interviews that took place in the office setting appeared to be comfortable for the participants and there were less distractions. The interviews

in the restaurants, while comfortable for the participant, were not as comfortable for the researcher since they were filled with distractions from wait-staff, as well as fellow customers who knew the participant. Wait-staff seemed to regard the recorder with some apprehension.

Since RESA School Improvement Specialists' work runs parallel to the school year, the early fall is a new school year and consequently an extremely busy time. Therefore, the interviews began in January, which provided time for RESA personnel to have established their work for the year. The majority of the interviews were completed by mid- April. The final interview, which also served as a final member check, took place in August. The timeline of this study can be found in Appendix E.

The interviews were recorded on audiotape in order to accurately capture what was said during the interview. Merriam (2009) offered: "verbatim transcription of recorded interviews provides the best database for analysis" (p. 110). An audiotape is preferred over taking notes during the interview simply because of the negative non-verbal messages that can be sent to the participant during note taking such as his or her words are not important when note taking has stopped (Glesne, 2006). The recorded interviews were transcribed within one week after the interview to facilitate recall of important details regarding the actions of the participant during specific interview segments. Handwritten notes regarding facial expressions or other participant actions were taken immediately after the interview, to enable the researcher to remember as many details as possible.

Documents. Documents were also a valuable information source to the study. According to Merriam (2006), document data "can furnish descriptive information, verify emerging hypotheses, advance new categories and hypotheses, offer historical understanding, track change and development, and so on" (p. 155). For example, one item that all RESAs collect is end-of-

course surveys which reveal how teachers and other school leaders who have taken a course felt about their experience in a course. The design of the "end of course" survey is left to the RESA, so the questions on the survey were of particular interest, revealing whether or not the RESA was trying to work toward a PLC approach.

Another public record of all RESAs is a listing of all the courses they have provided over a three year period. This document provided information regarding whether the courses offered had any links to PLCs. An analysis of documents provided additional insight into how the RESA was working with PLCs, and on occasion provided additional interview questions.

Sometimes documents are not easy to follow or they do not readily connect to research. Merriam (2009) explained the normal problems associated with document analysis: "Because documents are not produced for research purposes, the information they offer may not be in a form that is useful (or understandable) to the investigator" (p. 154). Since the researcher is a school improvement specialist, there was greater clarity to the documents due to familiarity. See Appendix F for the list of documents that the researcher invited the participants to share or use if publicly available as well as a rationale for the use of the document. In addition, participants were asked to provide any other documents they felt would be relevant to the study that was not on the list.

Data Analysis

Constant Comparison Analysis

This study employed a constant comparative analysis on the interviews as well as the documents. The constant comparative analysis method is rooted in grounded theory (Butler-Kisber, 2010; Charmaz, 2006). Glaser and Strauss (1967) claimed, "In discovering theory, one generates conceptual categories or their properties from evidence; then the evidence from which

the category emerged is used to illustrate the concept" (p. 23). While the constant comparative method does not seek to generate theory, its use does follow the initial steps outlined in grounded theory.

One of the first steps in the constant comparative method is to code the initial data which could be a sentence, a paragraph, or an exchange between the researcher and participants. The code should represent what is taking place in the unit of data. Saldaña (2009) explains: "A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 3). For this study, after each interview, the data were transcribed. Then, each interview transcription was read and a code that described what was taking place was applied to the data.

The goal of the initial step of coding was to look at chunks of the interview and begin assigning what was happening during a given instance. For example, here is an excerpt from an interview which the researcher coded "*Negotiating scope of work*": "But when I come in each August I really don't know what my job is going to look like that year. You know, it depends on what new comes down from the state, what schools need for me to do." This excerpt provided insight on how the RESA participant in the study determined her work each year.

Researchers must be careful and thoughtful when assigning initial codes. Suddaby (2006) asserted that researchers, at times, believe that the initial coding step is formulaic and therefore they may lose or skip the analysis. Sipe and Ghiso (2004) claimed that assigning too many codes is often a mistake that newcomers to the field encounter. So, while constant comparative analysis offers a systematic process, there is danger that the process can overshadow the analysis, which is a weakness of the methodology. To ensure that the coding did not become formulaic or too bulky, the researcher in this study brought coded interviews to share with peers

in a doctoral class. The peers and instructor provided feedback and shared their own coding procedures, providing greater insight to the coding process.

At times, there was more than one code on a segment of data. For example, on another segment of an interview, the codes "Working with school improvement plans" in conjunction with "Negotiating scope of work" were applied when the participant described a negotiation and a more specific description of her work. The participant stated, "Our principals didn't even know how to write school improvement plans when I started. But you know so we work on it, [our work] depends, it changes every year." During this second segment of the interview, the participant was still describing how her work was determined but she was also providing a detail of how she focused on school improvement plans.

After assigning codes, the researcher copied the code and defined it separately on a new document, and often provided an example from a participants' interview. The glossary of codes is found in Appendix G. The purpose of this document was to remind the researcher of the definitions of the various codes, which facilitated the identification of new ideas emerging in the interview and ensured that data were grouped correctly.

The next step in the constant comparison analysis was for data to be compared to other data units within the evidence as well as across sets of data, as a preliminary step to building a category. Boeije (2002) claimed this is problematic: "The literature does not make clear how one should 'go about' constant comparison, nor does it address such issues as whether different types of comparisons can be distinguished" (p. 393). To enhance the comparison in this study, the researcher placed all of the coded data into a spreadsheet and then sorted the data by codes. The data code was in the first column, what the participant said and any questions or comments from the researcher were in the next column. Data were then sorted by the code. Loading to a

spreadsheet facilitated the comparison of similarly coded data within the interview and across the three interviews. This process was repeated for each series of interviews. Table 1 illuminates the spreadsheet set-up using an excerpt from a sorted interview.

Table 1

Set-up of Spreadsheet Sorted Data

Code	Interview Data
Complexity of Collaboration	I: Alright, you mentioned to me that last time, and you know what – I feel badly because I didn't look at my notes, but you mentioned that the principal in Burns County chose to kind of do more of an after school workshop – or that's how you described it as opposed to a PLC. Why do you think that principal decided to go that route? G: He was retiring at the end of the year and some of the fourth and fifth grade departments were reticent to participate in a PLC because they knew everything about their subject already, and they didn't need to learn anything. I: That whole mentality – G: So rather than fight that, I think he chose to do it during a time that they already knew was dedicated to meeting after school as a faculty, and rather than just have faculty meetings, he wanted it to be a learning session,

Parallel to the coding and categorization process, it is important to reflect and record memos (Charmaz, 2006; Saldaña, 2009). During this study, the researcher wrote reflections immediately after each interview, and also during coding and categorization. The reflections served as a guide during the coding of the data, to help the researcher remember pertinent details. Using categorization and memos, the researcher continued the analysis at a deeper level.

To illustrate how the memos guided the analysis process, an early memo from an idea that kept emerging is provided below. Initially, this idea began to form when the participants explained what they believed was the role of RESA. For example, in reference to how technology was changing education, one participant stated: "That's right. And that's the difference. And I think RESAs are ideally positioned to help those things because we can talk to the teachers with some expertise. And that's who has to change." The researcher began to look

at how expertise was being referenced in the interview. An example of the contents of the memo is provided:

> Expertise is so power-driven, was this participant feeling that it was important that RESAs speak with expertise? Is this congruent with the norms of a PLC? PLCs seem to usually not be power-driven by one person, but rather they are collaborative in nature, one person does not usually take control. On the other hand, is this the role of RESA with a PLC? Are we invited in from time to time to be the expert since a group can only rely with the expertise they have within? (Personal memo, March 2012)

In this memo one can see that the researcher was confused by the data- this was either a role RESAs perform with PLCs or, this was how this person perceived working with PLCs. Clarifying what the participant believed was the role of RESA would be a goal in an upcoming interview.

After sorting the codes in the spreadsheet, the researcher began to categorize data that were relevant to the study. Initially, similar codes were grouped together. After grouping the codes, names were developed for the categories that described what was taking place in the data. For example, one category that emerged was: "Influence of the State Department". To develop this category, several groups of codes were placed together and after examination, the common general idea was the state department. For example, Table 2 below provides the overall category and the codes that were grouped together and fit into this category. The first two codes have an obvious link to the state department. The third code is linked to the state department since "school keys" are a set of rubrics designed by the state department. The fourth code actually is a small category in itself, it was noted the negative case participant's examples always began with

the school improvement plan which is a mandate of the state department. (Alice is a pseudonym for the participant. In fact, all names of participants and schools in this study are pseudonyms.)

Table 2

Codes that Build the Category: Influence of the State Department

Category	Influence of the State Department
Codes	State Dept. requires PLCs
	State Dept. provided PLC training
	School keys are not describing PLCs
Alice's examples of current work- often reflect the influence of the state dept.	

To see how the various categories emerged, the codes were placed into a Data Analysis Map which is provided in Appendix H. The categories that emerged were placed into alignment with the research questions. Since research question three addresses the factors of adoption as outlined by Roger's diffusion of innovations theoretical model, the categories were based on this framework.

Like the interviews, the document analysis was carried out both inductively and deductively. The documents were analyzed inductively to find emerging themes. A deductive document analysis was used as a means of verification of the emerging themes from the interviews and to pursue the research questions. Yin (1994) suggests: "For case studies, the most important use of documents is to corroborate and augment evidence from other sources" (p. 86). While this study did not employ case study methodology, each participant was treated as a case.

Findings from documents that corroborate interviews were recorded in the notes section of the analysis table. Document findings were coded in a separate table format in order to keep track of the evidence. The table for documents included the participant and the document as well as the code and notes. See Table 3 for an example of how document data were tracked.

Table 3

Table Format for Document Data Analysis

Participant	Document	Code	Notes
Alice	End of Course Survey	Complexity of Collaboration	No mention of collaboration skills or PLC to be used at school

Data Triangulation and Member Checks

As with any study, qualitative studies must ensure steps are taken to assure the reader that the study is valid and reliable. One important step toward validity is triangulation of the data, which can be done a number of ways. Merriam (2009) outlined triangulation: "the best known discussion of triangulation is Denzin's (1978), in which he proposes four types of triangulation: the use of multiple methods, multiple sources of data, multiple investigators, or multiple theories to confirm emerging findings" (p. 215). This study used two different methods of triangulation: multiple methods and multiple sources of data. Two different methods were used in the study to verify data: interviews and document analysis. Three data sources were pursued within this study as well, ensuring triangulation of the data.

Member checks carried out throughout the study were another strategy employed to enhance validity and reliability. Merriam (2009) ascribed the reason for the member check is to ensure the researcher's interpretation is parallel with the participant's experience. To ensure that the categories and emerging data mirrored the view of participants, member checks were employed regularly during this study. A member check of data from each interview was completed at the beginning of each interview to ensure interpretation was correct. A final member check was carried out after the findings were written via phone conversation with each individual participant in August.

Reflexivity Statement

This researcher is a RESA school improvement specialist with ten years of experience. The researcher's role as a school improvement specialist was valuable in this study for a number of reasons. First, the role provided familiarity of the context and the language used in education. Second, the role enabled the researcher to be considered a colleague with the participants. While the role had its value connected to this study, it also could have become a weakness due to prior assumptions. In many ways the researcher that is studying within his/her own field has a more challenging job, and basically the challenge in this study was to overlook my own past experiences with PLCs. One way to overcome this challenge was to acknowledge prior assumptions during data analysis.

This researcher's prior experiences with PLCs in the role as a RESA school improvement specialist has led to the formation of a set of assumptions about the ways RESA personnel should interact with PLCs. The assumptions were:

1. Professional learning communities are school or system based, as opposed to large regional consortia.
2. RESA personnel should seek ways to enable PLC leaders to facilitate knowledge and not take the lead facilitation role.
3. RESA personnel may at times be presenters of knowledge to PLCs, but they should provide PLC leaders with ways to connect presentations to classrooms.
4. RESA personnel are change agents.

Self-awareness of assumptions enables researchers to listen with an open-mind to the participants. Awareness of possible biases is yet another strategy to ensure validity (Merriam, 2009). During data analysis and coding, taking the time to reflect on whether or not my

assumptions influenced my analysis was essential. Ultimately, the experiences of the participants described the interactions between RESA personnel and PLCs.

Limitations of Study

One criticism to qualitative inquiry is how and what the researcher chooses to illuminate (Merriam, 2009). This could be dependent upon the researcher's own biases. While it is hoped that frequent member checks will eliminate bias, it is acknowledged that the researcher has chosen what to highlight.

A limitation of this study was that there were a limited number of cases presented. While the negative case provided insight for research question three, her limited work with PLCs provided no answers to research questions one and two. Another limitation to this study is time. In the limited time available, observation data were not gathered, which would provide a richer description of the interaction between RESA personnel and PLCs. Finally, the number of documents examined was limited. Some were public documents while others were provided by participants, not randomly selected.

Chapter Summary

This chapter outlined the method used for the study. A qualitative methodology was chosen because this study sought understanding of a process, as well as understanding of perspectives of participants. The diffusion of innovation theory was used to develop a conceptual model for understanding this phenomenon. Questions for interviews were developed using the conceptual model to answer the research questions. A constant comparison analysis was used to analyze the data that were generated. Three participants with a range of experience working with either existing or established PLCs were selected for this study. Methods for data collection included face-to-face, semi-structured interviews, and document analysis.

CHAPTER 4

STUDY PARTICIPANTS AND CONTEXT OF STUDY

This chapter introduces the reader to the three participants in this study and describes the settings in which they work. Each participant provided data through interviews and documents. This study addressed the following research questions:

1. In what ways do Georgia Regional Educational Service Agency (RESA) personnel support the establishment of professional learning communities?
2. In what ways do Georgia RESA personnel support existing professional learning communities?
3. What are the attributes of innovation that characterize RESA personnel's perspectives related to adoption of professional learning communities?

The purpose of this study was to investigate and describe how ESA personnel contribute to the development and support of PLCs for school improvement purposes.

Chapter Four is organized into three sections. The first section explains what RESAs are and their purposes. The second section describes each of the three RESAs in which the participants worked. The final section introduces the reader to the role of a school improvement specialist and the three participants from this study.

What is a RESA?

Educational Service Agencies (ESAs) are "a category of organizations whose principal role is that of providing services for a collection of local school districts and/or for the state in a designated, bounded geographic area" (Stephens & Keane, 2005, p. 51). ESAs can be found

throughout the United States. The Association of Educational Service Agencies, which is the professional organization serving ESAs, listed membership in 45 states (http://www.aesa.us). Stephens and Keane (2005) claimed the original ESAs were created as cost-saving measures, particularly for small, rural school districts. RESAs are the Educational Service Agencies in the state of Georgia.

Sherrod (1991) asserted that in 1966, the Georgia State Board of Education adopted policies that made it possible for a system of shared services between schools to be established. These shared service organizations were the first ESAs in the state of Georgia. There are now 16 ESAs across the state. The Education Reform Act of 2000 is the state law that required every school system to maintain a membership in the ESA and pay a fee to do so. Since each of the ESAs serves a geographic region, they are collectively named Regional Educational Service Agencies (RESAs). Each RESA has distinct characteristics based on its geographic region and the needs of its member systems. Originally, the RESA areas were determined with geographical features in mind. Unfortunately, this division has lead to some size distinctions over time as population shifts occurred. Table 4 illustrates the size distinctions across the 16 RESAs and while the number of school systems served only ranges from 7 to 19, the number of schools served is quite discrepant.

Cost effectiveness and school improvement appear to be the purpose of the various RESAs. For example, the Northeast Georgia RESA website proclaimed, "The purpose of RESA is to improve the effectiveness of the total educational program in member school systems by providing a mechanism for sharing services not economically or educationally feasible for a single system to institute on its own." The Central Savannah River Area RESA website echoed the idea of customer satisfaction and school improvement when it asserted, "Staff members are

committed to leading and supporting change within member systems. This is done by focusing on results and allowing flexibility to address local initiatives. Plans and other activities are formulated with our customers in mind." In addition to cost-effectiveness for member systems, Stephens and Keane (2005) as well as Sherrod (1991) found that RESAs also work under the directives of their respective state departments of education.

Funding for RESAs comes from state and federal appropriated fees and membership fees from local systems. The fee structure of each RESA, which is based on the Federal Tax Exemption (FTE) count, is set by its governing board, which consists of the school superintendents of the member school systems, as well as partnering colleges and technical schools. The FTE count is the number of students being served by a school system in October. Fees vary from RESA to RESA with the lowest being $3.00 per FTE and the highest being $10.00 per FTE (R. Cook, personal communication, June 26, 2012). Membership into a RESA provides the school system with an array of services, such as cost-effective access to teacher endorsements, data analysis services for schools, and a variety of student services such as teachers for hearing impaired students. Among the many services provided, the RESA also provides professional learning for teachers through their core group of school improvement specialists.

In addition to the funds generated by member systems, the state of Georgia also allots monies in its budget. In recent years, the state budget has reduced the funding for the RESAs. In 2011, the governor of Georgia proposed zero funding in his initial budget; legislators restored about half of the funding that year. Since 2011, there have been ongoing austerity reductions. Some funding has been restored but earmarked for specific programs, such as math mentors and technology.

Table 4

Number of Systems and Schools Served by Georgia RESAs in 2011

RESA	Number of Systems served	Number of Schools served	Number of Students based on FTE Count
Pioneer	14	108	72,357
Northeast Georgia	13	114	72,239
Central Savannah River Area	12	127	75,814
Oconee	7	28	17,262
Heart of Georgia	10	39	22,064
First District	18	186	122,759
Okefenokee	8	48	26,585
Coastal Plains	12	73	50,777
Southwest Georgia	15	86	54,135
Chatahoochee/Flint	15	101	52,095
Middle Georgia	7	107	66,338
Griffin	8	138	106,457
West Georgia	8	99	67,617
Metro	17	753	644,373
Northwest Georgia	16	168	112,861
North Georgia	7	97	77,644

Each RESA is different, and the needs and therefore staff are determined by the member systems. Many RESAs have personnel that work in schools to teach content-specific school improvement or leadership. For example, at the researcher's RESA, math is an area deemed of

high importance by the member systems, so there are three math content specialists while until recently there was only one part-time content specialist for English language arts. Yet, in a nearby RESA, there are no math content specialists.

Three Distinct RESAs

For this study, one person from each of three diverse RESAs was interviewed. The participants were chosen based on their responses to a survey that was sent to RESAs that were within a 100 mile radius of the researcher's RESA. Surveys were sent to personnel in the RESA based on their job description on the website. The researcher chose participants that were likely to interact at the school level with their member systems as opposed to facilitating classes at the RESA. Following is a brief description of the three RESAs from which participants were chosen.

RESA-1

The first RESA to be discussed, RESA-1 is a small, rural RESA. Two of the school systems in the RESA-1 area have only one high school whereas most of the school systems have a regular high school and a specialized high school focused on career education. There is one significantly larger school district that is a member of RESA-1. The larger district has over 40 schools; however, the majority of the member systems have less than ten schools. The governing board of RESA-1 includes a local library system, one small technical school, and a small state college.

In the researcher's experience as a RESA school improvement specialist, sizes amongst school systems can be problematic for RESAs. Larger systems or school systems with a higher tax-base tend to have more personnel in the central office to handle facilitation and school improvement needs, while smaller systems have greater demands for onsite support from the

RESA personnel. Depending on the relationships between school systems, at times, it is difficult to work as a region due to feelings of inequity.

On the drive to RESA-1, the notable industry appeared to be tourism and the area catered to persons in retirement. There were no apparent subdivisions, just large tracts of land with signs offering jellies and honey for sale. Frequently, there were signs for apples. Mixed with the signs for various food experiences were signs for golf carts or firewood, which were always handmade, spray-painted signs with a phone number and area code. The presence of the area code indicated to the researcher that second homes were prevalent in the area. (Later, an internet search provided information on an 8,000 acre project in the area that contained over 600 homes, many of which were touted as retirement homes or second home cabins.) The road had no sidewalk, and at times, the woods came right up to the road and the road curved around the outgrowth of the woods. The demographic data from the 2010 Census for the member systems can be found in Table 5. Of particular interest was the discrepancy between median income and poverty levels among the member systems.

The RESA building itself was small with a flat-top roof. It was located in a valley not far from an area high school. The parking lot was paved but extremely bumpy from the tree roots growing under it. The main door was a double door of glass, located at the top of three concrete steps that had no railing. Inside, the walls were wood-toned paneling. On the front of the building was a dedication plaque from the early fifties.

Table 5

Demographics of Member School Systems of RESA-1

System	Median Income	Percent of Population:		
		Over 65	School-Aged	Below Poverty Level
A	$66,320	9.2%	20.1%	7.4%
B	$49,945	16.3%	16.7%	11.6%
C	$42,345	11.2%	20.6%	19.2%
D	$38,798	10.7%	20.4%	24.4%
E	$38,226	10.8%	19.8%	17.1%
F	$36,741	17.7%	16.1%	18.1%
G	$34,145	21.9%	14.3%	16.2%

In addition to the wide range of median incomes and poverty levels, the range of education levels also varied across the member systems of RESA-1. Alice, from RESA-1 mentioned early on that increasing the high school graduation rate was a large emphasis for the member systems. Table 6 contains the education levels of the member system populations based on US Census data from 2010. There is an obvious discrepancy among the percent of bachelor degrees of the member systems.

Table 6

Education Levels of Member School System Populations of RESA-1 based on US Census Data 2010

System	Percent of Bachelor Degrees	Percent of High School Graduates
A	33.6%	88.9%
B	22%	79.3%
C	15.1%	67.4%
D	20.5%	63%
E	6.7%	66.2%
F	13.4%	75.4%
G	16.2%	77.9%

According to the Georgia state audit site, RESA-1 employed approximately 105 people (http://www.open.ga.gov/sta/search.aud). There were only two people employed in the school improvement division. Alice responded to the initial survey that she rarely worked with establishing new PLCs but that she frequently (five times or more per month) interacted with school-based PLCs. Alice reported that 65% of her time in a month was devoted to providing or planning professional learning. Her job title is Director of School Improvement of RESA-1.

RESA-2

The second RESA chosen for the study, RESA-2, is a relatively larger RESA when compared to RESA-1. Yet, the RESA-2 member systems reflect a more rural constituency. Most of the school systems have only one high school. There is only one larger system that has

more than 30 schools. The governing board includes a regional library system, two medium-sized colleges, two technical school and the school system members.

Since the researcher is a RESA school improvement specialist, she is aware that RESA-2 is known for its use of data and has even developed a value-added growth model that its member constituents deem of great importance. The value-added growth model applies a statistical computation to student scores which then attributes student learning growth to specific teachers. In addition to the data, RESA-2 is well-known for a leadership conference offered in the summer. RESA-2 is distinguished for its use of technology, the website is much more interactive and this RESA offers more distance learning classes than other RESAs.

The drive to RESA-2 site included a relatively newly developed double lane highway for most of the way. There were two medium-sized cities nearby where restaurants abound. There were frequently concrete trucks or vans with tradesmen driving on the road. Among the various roadside advertisements were a number of outdoor sports such as river rafting or zip-lining. While this was a rural area, there were also a number of shopping areas with department store labels and names. The researcher believed the shopping was indicative of the presence of second homes for more affluent outsiders. The demographic data from the 2010 Census for the member systems can be found in Table 7. Of the three RESAs studied, the median income for RESA-2 member systems is highest.

Table 7

Demographics of Member School Systems of RESA-2

System	Median Income	Percent of Population:		
		Over 65	School-Aged	Below Poverty Level
A	$51,128	14%	17.1%	12%
B	$50,876	11.1%	20%	14.8%
C	$43,394	12.7%	14.9%	15.2%
D	$41,756	17.5%	16.9%	19.4%
E	$41,298	26.6%	13.5%	13.9%
F	$40,455	12.5%	19%	15.9%
G	$40,192	15.3%	17.2%	19.6%
H	$39,540	29.2%	12%	9.3%
I	$36,739	16.9%	16.6%	17.8%
J	$36,109	18%	16.2%	22.4%
K	$34,938	16.6%	16.5%	18.8%
L	$34,406	21.3%	16.1%	18.5%

The RESA-2 building was an older building sitting at the top of a paved parking area that held 20 to 25 cars. There were two entrances, each one glass with neat lettering in black block lettering announcing the name of the RESA. Inside the building, the old facade gave way to carpet that was fairly new, walls that were light green. The secretary sat behind a large, pristine, black, shiny counter. The offices were in different muted, colors such as tan and yellows, each one was decorated with pictures and neat, cushioned, striped chairs. Each office had a glass door

rimmed in off-white trim. The workers were wearing shirts and sweaters with the logo of RESA-2.

The education levels of the various constituent systems of RESA-2 vary widely. Education level often informs how much the member systems value school improvement efforts. The level of attainment of high school and bachelor degrees or higher can be found in Table 8.

There were 125 people employed by RESA-2 in 2011 according to the Georgia State Audit website (http://www.open.ga.gov/sta/search.aud). The job title of Gandolph, the study participant from RESA-2, is "School Improvement Specialist," and there were two people that retained this title. When Gandolph answered the survey, he reported that he worked with establishing PLCs "some- 3-5 times per year" and that he worked with PLCs already in place "some- 3-5 times per year." Gandolph included PLCs as a function of school improvement, which he reported working on about 20% of his time each month.

Table 8

Education Levels of Member School Systems Populations of RESA-2 based on US Census Data 2010

System	Percent of Bachelor Degrees	Percent of High School Graduates
A	18.8%	84.6%
B	21%	76.5%
C	19.5%	80.9%
D	19.6%	83.3%
E	21.6%	82.9%
F	10.5%	73%
G	18.7%	75%
H	20.8%	86.5%
I	13.6%	74.3%
J	15.2%	75.3%
K	13.3%	74.8%
L	24.7%	80.5%

RESA-3

The third participating RESA for this study was also a larger RESA district both in number of member systems, and geographically. Yet, this fact can be deceiving, since RESA-3 counted amongst its members three school systems who have consolidated their schools, so that they do not have a distinction between the school levels of elementary, middle and high. In addition to the three consolidated systems, the majority of the other member systems have only

one high school. Two of the member systems have more than 30 schools. The governing board includes a regional library system, an advanced specialty college, two medium sized colleges and a technical school.

There have been three different directors of RESA-3 in the last six years. Currently, the director of RESA-3 is employed part time. The board members of RESA-3 also voted in the last two years to dissolve their Educational Technology Training Center (ETTC) and to turn those duties over to the RESA. The ETTC usually functions to integrate technology and teaching, either separately or in conjunction with the RESA. Of the three RESAs in this study, this is the only RESA that had its staff formally involved in professional learning on how to lead and establish PLCs. The staff trained at Adlai Stephenson High School in Illinois, which has been acclaimed for its PLC success.

The researcher never actually drove to RESA-3 simply because the study participant chose to meet in various locations within the RESA district. The participant mentioned during one of the preludes to an interview that often she and her colleagues work from home and telecommute simply because the drive in to the RESA building is so lengthy. The drive to the various meeting points consisted of vast amounts of farm land, with little or no cell phone coverage. Frequently, there were log trucks entering the road, and the stretches of road were single-lane, older roads. The demographic data found in Table 9 reveals that this RESA has a higher level of poverty among its member systems than RESA-1 or RESA-2.

Table 9

Demographics of Member School Systems of RESA-3 based on US Census Data 2010

System	Median Income	Percent of Population		
		Over 65	School-Aged Population	Below Poverty Level
A	$66,333	10.5%	20.1%	7.1%
B	$37,882	11.6%	17.2%	23.3%
C	$37,149	15.2%	20.1%	16.6%
D	$36,399	18.2%	14.8%	26.3%
E	$35,414	14.1%	19.8%	19.5%
F	$33,155	12%	20.1%	25.7%
G	$31,043	18.7%	16.3%	25.7%
H	$30,205	14.1%	18.3%	24.2%
I	$29,268	15%	18.4%	26.9%
J	$28,022	19.5%	16.0%	25.5%
K	$27,686	15.5%	19.2%	19.1%
L	$22,188	20.4%	13.6%	34.4%

One of the comments the participant from RESA-3 mentioned early on was that she was not from this area originally. She had explained that she married someone from the area, and that most of the population, once they received a degree, left, because there was no industry to keep them in the area. The percent of high school graduates and those with bachelor degrees can be found below in Table 10.

Table 10

Education Levels of Member School Systems Populations of RESA-3 based on US Census Data 2010

System	Percent of Bachelor Degrees	Percent of High School Graduates
A	33.8%	89.9%
B	20.3%	82.3%
C	10.5%	72.5%
D	9.7%	77.4%
E	11.5%	70.1%
F	9.1%	75.1%
G	9.7%	72.4%
H	8.7%	72.6%
I	15.5%	71.8%
J	12.8%	70.6%
K	8.1%	68.9%
L	4.7%	69.6%

For fiscal year 2011, there were only 60 people employed by RESA-3 according to the Georgia State audit site (http://www.open.ga.gov/sta/search.aud). RESAs are often the fiscal agent for psycho-educational centers that teach students identified with severe behavioral issues from member systems. This RESA is unique since two of its member systems actually are large enough to run their own psycho educational facility for students with behavior disorders, so the psycho educational facility run by this RESA is relatively small. While there are various titles,

such as staff development specialist mentioned on the audit site, Rosie (pseudonym) is one of three people listed as a school improvement specialist. Rosie responded to the initial survey that she worked with establishing PLCs on a regular basis, and that she interacted with existing PLCs also on a regular basis. Of the three participants, Rosie self-reported the highest amount of work with PLCs.

Summary of the Three RESAs

It is evident from the demographics of the three RESAs studied that there is no typical RESA in the state of Georgia. RESA-1 is smaller in the number of member systems, RESA-2 has a higher socio-economic foundation, and RESA-3, while similar in member system size to RESA-2, has a higher rate of poverty. The support roles the RESAs enact and how the roles are carried out will be impacted by the views, needs, and values of the member systems.

School Improvement Specialists

The researcher checked to see if there was a common job description for school improvement specialists. There is not a RESA-defined common role since each RESA is governed by its member systems. Currently, the federal government provides Title One funding for a school improvement specialist to spend time onsite in designated schools and there is a memorandum of agreement of the services that will be performed. These services include assurance that school improvement planning and monitoring of the school improvement plan takes place. The school improvement specialist or a designee of the RESA will spend one day per week in each of the assigned schools and can be assigned up to four different schools depending on the amount of funds received.

Three Different School Improvement Specialists

While each of the participants had the words "school improvement" in their title, the approaches to their roles were dissimilar. Alice's position, from RESA-1, did not receive any funding from Title One. Gandolph's role was partially funded by Title One, but his RESA met the mandates of the memorandum of agreement with the department of education strategically, by ensuring at least one RESA person was in the designated school on the assigned day. Gandolph explained the person depended on the need of the school. Rosie was federally funded to work onsite in two different schools, two days per week. The memorandum of agreement with the state department did not specify how the role of the onsite school improvement specialist should be performed.

Alice, RESA-1 (least interaction level with PLCs). Alice was a warm person, she smiled and laughed easily and was very concerned that she may not be able to provide much insight to my study. Alice had a strong southern drawl, but she did not mince her words. Alice was also pragmatic. When first contacted, Alice took the initiative to sketch out the meeting times for all interviews, explaining that her calendar fills quickly. Alice was a Caucasian in her mid- to late fifties. She was semi-retired; she had worked more than 30 years in education and retired to a 49% position. The state of Georgia allows a retired educator to receive his or her retirement pension and work without penalty up to 49% of a full-time position. Yet, Alice was still performing many of the roles she had when she was full-time, just in a reduced-time capacity.

During our first meeting, Alice stated that she was an elementary school principal with a specialist's degree in education prior to coming to RESA-1. It was obvious that she was

passionate about that role; she smiled as she spoke about the experience and her voice became more animated. She divulged that her school came off "the list" under her leadership:

> The school where I was principal was on all of the low performing schools lists that there were out there. You know there were federal low performing schools lists, there were state low performing school lists and our school was the only one [elementary] in our district and [it] was always at the top of the list in the state. We had 86% of students on free and reduced price lunches. Forty-six percent of my students were Hispanic, 62% were minorities and within three years we got off of all, you know, the needs improvement lists. (Interview, January 5, 2012)

Alice disclosed afterwards that she felt her success in the role of principal allowed her to garner credibility among fellow principals when she took the RESA role.

Alice's experience included her work as a high school English teacher, a media specialist, an assistant principal and then principal of an elementary school. Alice stated that when the job at RESA became available, she was interested simply because she had such an interest in school improvement. Again, Alice was impassioned when she described what her goal for her job at RESA was, "I think it would be to convince teachers that their attitude needs to be that these kids can [be successful] but I've got to do what I need to do to make it happen." Alice reiterated this message during that interview when she pointed out that she felt high school teachers need to understand they "are a student's last hope."

On the continuum of involvement with PLCs of the participants for this study, Alice's time working with PLCs was the least amount. Her response to the initial survey indicated she did not work with establishing PLCs, and when asked, she referenced back to the time when she was a principal as the time when she interacted the most with PLCs. Alice reflected, "When I

was a principal we got a grant and we were an ATLAS (Authentic Teaching, Learning and Assessment for All Students, a comprehensive school reform) school. Have you ever heard of ATLAS? Well. One of the first places I had ever heard of Professional Learning Communities was through that [grant]." Alice went on to explain how she set up her school to meet by subject areas and to study trends or ideas as a whole faculty. She pointed out that when she came to RESA-1, no one really had PLCs in place.

It was obvious Alice enjoys her job. During our initial interview, Alice reflected back over her career, and again reflected back to her time as principal, when she stated, "I always thought I wanted to end my career as a high school principal, and I could've done that but I chose not to do that because I really liked this [RESA position] once I got into it." Alice joined RESA-1 in January, 2003 and retired five years later in 2008. She has worked within a 49% timeframe for four years now.

Gandolph, RESA-2 (Some interaction with both establishing and existing PLCs). Gandolph was an extremely animated, energetic Caucasian male in his late fifties to early sixties. He had no southern drawl, and instead spoke at a quicker pace than his southern colleagues. Gandolph grew up in a northern state. When contacted regarding this research project, he immediately agreed to help and offered the best days of the week according to his schedule, for us to meet. He made the researcher feel as if she were a member of his team, and that any support needed would be provided. Indeed, anytime he was asked for documents or time, he gave them freely. Gandolph held a PhD degree in education and mentioned early on that he understood the pressure the researcher was under.

Before coming to RESA-2, Gandolph was a high school English teacher, soccer coach, assistant principal, and principal. Gandolph relished his time as a high school principal and it

was a career goal for him. He explained, "I always wanted to be a high school principal. I never wanted to be a superintendent because you have to deal with things that I wasn't interested in dealing with." One reason for his attachment to the role of high school principal became apparent when he declared, "I like that age group." Gandolph believed he would retire as a principal and had actually taken a high school in the RESA-2 area since it was a nice place to retire.

Gandolph laid out his plan for retirement from his principal role when he acknowledged, "So anyway, I was eligible to retire the following year, and had intended to do so when I got the ninth grade academy up and running and that sort of thing." Yet, Gandolph's plan for retiring as a high school principal suddenly changed one day when he noticed the RESA-2 job opening on a bulletin board. Gandolph shared:

> I called [the director] and said, "I just saw this on the bulletin board, just read it, it's ideal for me, but it's two days away from the expiration so if you already [know who you want to hire] I don't want to come through that and upset the people here. So if you already know who you want, would you please tell me that so I won't even apply?" He said, "Not only do I not know who it is, we are weak in high school. It's hard to find high school people at RESA. I get lots of elementary people." He said, "I don't have high school people and I would be very, very interested in talking to you." So I said, "Ok let me get back with you." (Interview, January 9, 2012)

Gandolph applied and became a RESA school improvement specialist in 2003.

Gandolph stayed in education longer than he had planned because he was energized by his new role at RESA. When asked what attracted him to the RESA role, Gandolph responded,

"I saw this as an opportunity to teach teachers, not new teachers, which is really what a principal does." Gandolph provided more detail about his role when he elaborated, "So when I saw this, it was working with teachers in evaluation. It was working with teachers in school improvement, in standards-based classrooms, in all of those things and data." Gandolph only recently retired to a 62% position, which he intimated he chose to do to save money as budget issues encroached upon RESA-2.

In addition to working with new teachers, Gandolph emphasized an important role of a RESA is to provide data to teachers and school leaders for their use in school improvement. He later explained how his experience in high school helped to develop the growth model for teachers that his RESA created. Gandolph felt the growth model data was critical work for the member school systems.

On the continuum of involvement with PLCs of participants for this study, Gandolph took the middle position. He had responded that he works some with establishing PLCs and with existing PLCs. Gandolph mentioned that he wished that PLCs had been defined when he was a principal. When he portrayed his interaction with PLCs, it was through his work with RESA. Gandolph had several experiences with PLCs that he described during our interviews. All of his experience with PLCs is what he learned through his role at RESA-2.

Gandolph works 62% of a 236 day schedule. He retired last year but has returned to RESA-2 in a different role than his prior role. Previously his role was leadership and data, now he handles the English Language Arts content requests from schools, including support for the new Common Core curriculum. He is also assigned to a Title One school, but has explained that he shares that role with others in the office since RESA-2 tailors the weekly support of the school to its needs. Gandolph's new role requires that he attends multiple state-provided

trainings, on required support of the Title One School as well as the new curriculum. Gandolph provided PLC interaction data from the perspective of his former position in RESA as well as his new role.

Rosie, RESA-3 (highest level of involvement with establishing or existing PLCs). Rosie was one of those remarkable individuals that immediately allowed the people around her to feel at ease. She offered to meet the researcher for the first time at a restaurant, to keep the researcher from driving long distances. Rosie was a Caucasian in her late forties. When she spoke, she frequently questioned, "you know what I mean?" not out of habit but rather out of concern for the listener. Unlike the other two participants, Rosie was not retired and in fact, was only in year 24 of her education career. She initially began her professional career not as a teacher but rather as a scientist working in the quality control division for a large company in Atlanta. Her affable nature, southern drawl, and short stature, may lead one to underestimate her depth.

Another key difference between Rosie and the other participants was that Rosie had no administrative experience. Rosie was a middle school teacher in her fifteenth year, when she was offered a position with RESA-3. She did have some leadership training as a teacher prior to coming to RESA-3, when she had participated in school improvement team training. In addition to her teaching degree, Rosie also had a master's degree in educational technology. Technology was an obvious concern to Rosie and she mentioned the need for RESA exploration of technology often.

Rosie viewed the role of RESA as multifaceted. Rosie revealed one role she fulfilled as a RESA school improvement specialist as well as her role in the school improvement work assigned by the state department when she stated, "I'm a 'here's the latest, greatest research if

you want to try this', I'm kind of the mediator between the state department and all their requirements, with the reality of putting those requirements into action." Throughout her discussion of how and what she viewed as her role, Rosie continuously mentioned that building relationships was essential to her work.

Another role Rosie felt the RESA organization should embrace was to take a more district-level approach to school improvement. She asserted:

> One of the things I see coming down the pike for RESA is, you know, there are districts that are in needs improvement- and we are seeing, I don't know if ya'll see that at your RESA- but we are seeing schools who are really making improvement, but they get pulled back because of what's going on at the district level. (Interview, January 20, 2012)

Rosie explained that the central office personnel in districts were often as new to their roles as some of the principals, and that they needed guidance and professional learning as well.

On the continuum of involvement with PLCs of the participants, Rosie's involvement with PLCs, and working to establish PLCs was the highest. Rosie discussed one of her PLCs in which the school really changed over time. She explained:

> I work really heavy with PLCs at for example, Rourke Middle school and we learned how the protocols [worked] and how to work as a PLC. And, as they worked with it, they kind of got the idea of the PLC. Well then they started [to change], they evolved into more task-oriented PLCs where they would take issues that were not working very well in the school and tackling those issues. (Interview, January 20, 2012)

Notable in this passage is that Rosie does not seem to take a lead role, but rather, she described the PLC as a part of the team in a school.

Rosie explained she had many roles. Her content area was science, which meant she responded to school requests for science content assistance. She also spent at least two days a week in two different Title One schools that were identified in need of support per the memorandum of agreement with the state department. In addition to her Title One role, she also mentored a limited number of teachers in the Georgia Teacher Academy for Preparation and Pedagogy, an alternative pathway for teacher certification that all RESAs offer. She also taught some technology classes since RESA-3 no longer has an Educational Technology Training Center.

Chapter Summary

This chapter provides an overview of the settings and participants for this study. Each RESA was distinctive which, as discussed in chapter one, mirrors the makeup of ESAs across the country. Stephens and Keane (2005) simply stated: "Service agencies come in many shapes and forms" (p. xv). The uniqueness of these three RESAs influenced how each RESA approached their resources and how the personnel interacted with schools.

In addition to the description of the various RESAs involved in this study, this chapter also introduced the three study participants. Each participant viewed his or her role distinctively, and possessed an idiosyncratic job. Their range of interaction with PLCs or with working toward establishing PLCs was varied and will be explained further in the next chapter, which analyzes the data that the three study participants provided during their interviews or through their documents.

CHAPTER 5

FINDINGS

Chapter Five presents analysis from the interview and document data. The following research questions were addressed:

1. In what ways do Georgia Regional Educational Service Agency (RESA) personnel support the establishment of professional learning communities?
2. In what ways do Georgia RESA personnel support existing professional learning communities?
3. What are the attributes of innovation that characterize RESA personnel's perspectives related to adoption of professional learning communities?

The purpose of this study was to investigate and describe how Educational Service Agency (ESA) personnel contribute to the development and support of professional learning communities (PLCs) for school improvement purposes.

The design of this study was qualitative using interviews and documents collected from personnel from three Georgia Regional Educational Service Agencies (RESAs). Multiple interviews were conducted over a period of four months with each participant. The interviews were transcribed verbatim and generated a total of 251 transcribed pages. Data from interviews were analyzed using the constant comparative method. A spreadsheet tool for sorting coded data was set-up by the researcher to organize data, codes, and themes. To triangulate the data, documents were collected from each participant and analyzed for additional evidence related to the research questions.

There were three participants from each of the different RESAs in this study. RESA-1 is small and rural, situated in a relatively high retirement area. Alice is from RESA-1, and she had the least interaction with school-based PLCs. RESA-2 is a larger RESA, and had the highest median household incomes within its member systems. Gandolph, from RESA-2, had some interaction and experience with PLCs. RESA-3 is larger with most of its member school systems having higher levels of poverty. Rosie, from RESA- 3, had the most interaction with PLCs. Demographic data are provided since each RESA sets its own membership fees, and therefore impacts funding. In-depth details regarding the RESAs or participants can be found in Chapter Four.

Chapter Five is organized into three sections which parallel the research questions. The first section explains the themes that emerged regarding how RESA personnel supported the establishment of PLCs in schools. The second section describes the ways in which RESA personnel interacted with existing PLCs in schools. The third section clarifies the perspectives of RESA personnel regarding the attributes of PLCs. An added feature of the third section was the examination of attributes of the innovation framework grounded in diffusion research (Rogers, 2003).

Themes

As interview data were coded and categorized, specific themes emerged. The themes are described in this section as they connected to the research questions. A goal of this research was for the reader to hear the voices of the participants as they described their interactions and their roles when working with PLCs, as well as their perspectives regarding the innovation of PLCs. With this in mind, quotes from the interviews are provided to amplify what the participants

discussed. Since this study had participants who had varying degrees of interaction with PLCs, there are multiple or divergent perspectives across areas inherent in the research question.

Documents used by the RESA specialists with PLCs, end-of-course evaluation surveys, and recommendations from the RESA onsite visits were used to amplify or to contradict findings from the interviews. The RESA onsite visit is the peer evaluation process that RESAs carry out for self-improvement every four years. When these other sources presented data for a given question, the data were addressed in the analysis of the specific themes.

Supporting the Establishment of Professional Learning Communities

Three themes emerged during interviews that connected with the first research question. As the participants talked about how they supported the establishment of PLCs, the first two themes that emerged pertained to what RESA personnel did before they met with the PLC members. The first theme focused on assisting with the development of organizational structures and the second theme dealt with conceptualizing the PLCs with building-level leaders. The third theme encompassed the support RESA personnel provided onsite to schools during the initial implementation of PLCs.

Organizational structure of PLCs. Organizational structures were defined as structures put into place that determined how a PLC would be set up. Foundational organizational structures used to set up PLCs included: time, reporting of outcomes, and protocols. The roles that RESA personnel carried out in relation to these organizational structures are discussed in this section.

One major impediment schools faced was limited amounts of time for their school improvement efforts. One of the foundational roles that RESA personnel fulfill was supporting principals and other building-level administrators as they found ways to schedule PLCs so that

their time was used efficiently. Gandolph provided details of a conversation regarding how to begin a PLC with a principal and assistant principal. He stated, "First thing we [principal, assistant principal, and myself] talked about - the structure - who would meet, when they would meet and that sort of thing." Yet, the conversation was not restricted to simply the time element. Gandolph knew it was imperative for the principal to first establish why he wanted PLCs. The purpose of the PLC would inform when to have the PLC. He told the principal and assistant principal, "it was important that it be during the day, not after school because by after school, your brain is dead and you nod your head a lot, but you don't participate as much as you should." Gandolph was guiding the principal to think purposefully about when the PLC would meet by providing the principal with his reasoning for meeting during the school-day.

Rosie provided an example of when she talked through scheduling with a principal. She asked the principal: "Do you already have worked into the daily schedule a time when these teachers can sit down together, not necessarily in content alike, but in teams where they're available?" When the principal identified that she already had the teachers in an appropriate configuration, Rosie enabled her to understand how she could then initiate a PLC structure during that time that would allow for more collaboration. Rosie reasoned that "schedule a time" was a first step to establishing PLCs.

A critical, initial step for consultants who are developing organizational structures for PLCs with building-level leadership is ensuring that schools do not become prisoners of time. Schools are limited in their improvement efforts simply by time constraints. As supported by the quotes above, the role of the RESA personnel extends beyond merely scheduling the time. RESA personnel guide leaders to utilize their scheduled time strategically.

RESA personnel also assist with the development of organizational structures by working with principals to determine ways to support the goal of tangible outcomes for the PLCs. Rosie made reference to this when she outlined "the schedule, and then the products to produce" as beginning steps to setting up PLCs with principals. Rosie initiated the establishment of PLCs with the expectation that artifacts will be used and included in the data of the PLC. Rosie described:

> One of the things that I do to start that PLC movement is when I, we are in the summer, looking at their school improvement plan with a leadership team, I make them do performance checks. And part of the performance checks is going out and making smaller groups of teachers to come back and bring an artifact to measure the progress of a professional learning activity or some formative data that they are doing or a common assessment that they might be doing. (Interview, February 23, 2012)

A recurring topic with Rosie was the need for principals to understand that PLCs were outcome-based. In the above quote, the results from "a common assessment" or "formative assessment" were outcomes.

Rosie was passionate about the need for a systematic collection of data, "let's be consistent with our data so that we kind of get the same consistency for whatever artifact we are going to get." In a later interview, Rosie stated the PLC "would collaborate for a product; they would adjust as needed, and be in a continuous cycle of plan, do, check, act." Her quote is a direct reference to the continuous improvement cycle which includes plan what action will be taken and what artifacts will be gathered, do the action, check the effectiveness of the action by gathering data, and act upon the outcomes of the evidence. RESAs have adopted the continuous improvement cycle for their own data gathering on initiatives they have in place.

During limited time segments, another role that RESA personnel carry out is guiding principals and other building-level leaders to choose organizational structures such as protocols to enhance collaboration. In this interview passage, Rosie exposed the leadership team to protocols after they have looked at data together. Rosie outlined her steps:

> I say "Well there's already some set protocols that research has done. Now we can tweak that" [those protocols] and then as [they learn about those] there's, "Ok now we got to set protocols so that we're consistent." Then what I do with that is then I go and work with the school improvement team however they want to call it – the SILT (School Improvement Leadership Team) Team, the data team, whatever they want it to be. And we work together to establish a beginning set of protocols, and then they take it back to the group [the PLCs] because they [the school improvement team members] are already used to doing this [using protocols]. (Interview, February 23, 2012)

Rosie later provided an example of an agenda from a PLC that indicated the entire meeting would be completed in 17 minutes. When questioned regarding the time, she answered that the team would "take more time at a separate meeting to refine their work" to finish their collaboration. Rosie introduced protocols to groups to make certain they all used the same process and focused their collaboration in a limited amount of time.

Rosie was the only participant who mentioned outcomes and protocols, but evidence supporting their use by another RESA was found in documents. Gandolph from RESA-2 provided documents from one of his colleagues that had been working with vertical teams, which are multiple grade levels teamed together, over a period of time. The documents indicated the RESA-2 improvement specialist supplied protocols for the vertical teams to use while working and furthermore the consultant provided outcomes from the meeting to the principal. The

protocols included ideas on ways to provide constructive, critical feedback which further supported collaboration.

Conceptualizing PLCs and how they work. The second theme that emerged from the interview data was the various ways RESA personnel supported the establishment of PLCs. From this theme, two sub-themes emerged. The first sub-theme was assisting building-level leaders with conceptualizing what they wanted the PLCs to do. The second sub-theme was conceptualizing the role of the principal within the PLC.

Conceptualizing the goal of the PLCs was considered critical to PLCs by both Gandolph and Rosie. Rosie pointed out that if building-level leaders did not take the time to conceptualize what they really wanted for the PLC to do, the PLC would simply be going through the motions. Rosie was discouraged that it was "becoming the norm that they're having collaborative teams, but the purpose isn't clearly defined. And so you [building-level administrators, RESA personnel] have to go back and kind of refine and set, like, the expectations." Rosie believed there were lots of collaborative meetings taking place, but knew that without purpose, teachers were likely to respond "want to collaboratively meet for what?" when asked to work as a PLC. This statement indicated that simply collaborating did not enhance school improvement efforts and, in fact, may have diminished future school improvement efforts. Rosie reiterated that defining the purpose is paramount when she postulated that "implementation" and "products to produce" were the purposes of PLCs. Mentoring the principal to ensure that goals were clear was a critical role of RESA personnel.

Both Rosie and Gandolph explained how they went about conceptualizing the goals of the PLCs with the principals. Rosie used questioning to guide the thoughts of the principal. Rosie explained:

> Ok, and then I said, "So you're concerned about the common core." I said, "So we have them in groups now, now what it is that you're really concerned about? What is it that you want them to start doing?" And she said, "Well, the second thing we've got to do is understand the common core." I said, "Great." I said, "How are you going to do that?" (Interview, February 23, 2012)

This principal working with Rosie clearly had a vision of the needs of her faculty, but through Rosie's questioning, she began to narrow her focus and articulated what she wanted the PLCs to do.

Gandolph faced a different challenge as he worked with schools. Every school has its own culture so PLCs will not always work the same in every school. As he worked to help principals determine what the function of PLCs was, he found that often principals had read a popular book and wanted to simply adopt the process described in the book. He stated, "So I help them [principals] conceptualize what it would it look like in their building and how would it be different and really try to validate that 'you don't have to do it exactly the way he did it'." Gandolph summed up his experience with conceptualizing PLCs when he said, "And the whole thing is to help the leaders find a fit for their school, or develop a fit for their school, not impose something." A role RESA personnel fulfill is guiding principals to tailor PLCs to fit the unique needs of their own schools.

Another component of conceptualizing the PLC that RESA personnel perform is assisting the principal in establishing his or her role in the PLC. Gandolph believed strongly that principals needed to guide their staff, rather than lead. He explained: "I tried to dissuade APs and principals from leading them [the PLCs], because you want it to rise up rather than come down, but they [APs and principals] gotta be part of it." He presented a compelling argument for

his reasoning: "If you get the principal's perspective first, you just dictated the perspective." PLCs have collaboration as their focus therefore the idea that the perspective might be dictated by the principal is antithetical. Gandolph thought it was important that principals listen during the PLC. Further evidence of the significance of listening was provided when he discussed how the principal interacted with a PLC that he supported. Gandolph claimed, "The good thing with the principal at Good Elementary and her assistant was that they didn't see themselves as running PLCs whenever they would sit in. They were observing."

Both Rosie and Gandolph were of the opinion that it was important for principals to take active roles in the PLCs, and that principals were present and listening. Rosie offered that principals should take the time to let teachers know "I can't do this on my own. I need your input, I need your help." Gandolph urged principals to consider their roles and the impact they could make. Gandolph elaborated:

> But I don't mind sitting with them [principals] and saying, "It depends on what you want out of it. If you really want them [the teachers] to talk seriously, and you to understand what their concerns are, you have to be in the room. Not just in and out of the room – in the room, participating. That says this is important to us as a school, it is important to me as a leader, it's important to you as a teacher leader, it's important to you as a follower." (Interview, February 20, 2012)

Later in the interview Gandolph revealed that he tried to convince principals to be there by letting them know his past experiences. He asserted, "I've done these before. They are much more effective if you are at the table." Gandolph was passionate about the involvement of the principal.

Rosie also discussed the role of the principal with a PLC. She expected principals to be actively involved by "watching the process and talking about the collaborative piece to give them [the PLC members] feedback on how well and efficiently they're working" or providing "more detailed data or more information" for the PLC to study. Both participants discussed their beliefs that principals take active roles in the PLCs. It follows then that another role RESA personnel performs is to coach the principal into discovering his or her function within the PLC and urge principals to actively attend.

RESA support provided during initial implementation. There were two ways that the RESA participants responded regarding the onsite support they provided to new PLCs. One way was to provide feedback to the principal, so that he or she would know what to expect when working with PLCs. The other way was to actually initiate the PLC and then let the PLC become its own entity.

The RESA standards of service call for RESAs to build the knowledge and skill-set of schools to carry out their own school improvement efforts. Therefore, the goal of RESA specialists was to turn the initiative over to the principal as soon as possible. Rosie repeatedly stressed that her job was to "let them do it" and "to let them do the work." This was evident again when, after Gandolph and a principal had determined the scheduling and the topics the PLC would explore, Gandolph explained his role with the PLC: "And then I waited a couple of times [PLC sessions] and then came and watched one [PLC] and just sat at the back. And took notes, and then met with him [the principal] afterwards." Here, it is clear that Gandolph is not a facilitator, but rather an observer whose intent was to provide feedback and allow the PLC to function on its own. This is further amplified when Gandolph stated, "[I have] built a capacity for him to do it [monitor the PLC] and haven't been back." Providing feedback to the principal

on how the PLCs are working and guiding the principal to monitor the PLCs independently were important steps for ensuring PLCs become established in schools.

The second way that RESA school improvement specialists provided onsite support to new PLCs was to serve as a starter catalyst. Rosie explained that she initiated work with the school improvement team that caused the PLCs to begin. Rosie was deliberately ensuring that the PLCs had something to discuss. Rosie expounded: "it's just giving them [the teachers] experience, kind of making a decision about something and going in and getting that artifact, bringing it back to share with the group and sending it on to somebody else." In this quote, it was clear that Rosie provided purpose for the teachers to experience a collaboration which would later evolve into a PLC with protocols.

Further confirmation that RESAs often commence the PLCs for the school was provided by Gandolph when he described his work in the beginning of a two year cycle working with an elementary PLC. "[I was] providing a task for them to go to their classroom and do. [The teachers] would do it [the task] and we would come back and talk about" how well the task worked at each grade level. The RESA personnel provide the school with practice as a PLC, with the goal being that the school would take over and lead their own PLCs.

Summary of Supporting the Establishment of Professional Learning Communities

In this section, three different themes emerged that described the ways that RESA personnel support the establishment of PLCs. The first theme was RESA personnel worked with building-level leaders to determine organizational structures to support PLCs. These organizational structures included strategically scheduling time for PLCs to meet, determining how PLCs reported their outcomes, and setting communication protocols to enhance effective use of time and collaboration. Without these organizational structures, PLCs would not exist or

they would be ineffective. While principals can often determine these structures on their own, typically they address so many day-to-day issues that having a RESA consultant guide their thinking process allows for a more purposeful implementation.

Conceptualizing PLCs was the second way that RESA personnel supported the establishment of PLCs. This support encompassed determining goals as well as the role of the principal within the PLC. RESA personnel are positioned well for this mentorship role of principals. While principals often rely on central office personnel for guidance, often the suggestions from central office personnel are perceived as dictates since the central office personnel outrank the principals. RESA personnel are perceived as true support not associated with school system hierarchy.

The third support offered to schools as they began PLCs is onsite support. One form of onsite support was to provide feedback to the principal on how the PLC was functioning so that the principal could monitor the ongoing implementation. Modeling was another form of onsite support so that the school actually experienced a PLC. In either situation where onsite support was provided, the ultimate goal was for the school to carry out the PLC process without additional support from the RESA.

Supporting Established Professional Learning Communities

There were four approaches identified to support established PLCs in schools by the RESA school improvement specialists. The first two, providing data or research, took place through direct interaction with the PLC. The third approach to support PLCs was providing activities to enhance content knowledge or pedagogical skills of the teachers. Providing activities may or may not involve direct interaction with the PLC. Finally, the fourth approach

was providing regional conferences to stimulate the content knowledge and discussions of PLCs, which was a more indirect approach.

Providing data. When Gandolph first arrived at RESA-2, he determined the data the RESA provided to its constituents was limited in nature. Gandolph thought the RESA needed to focus more on data, he stated, "And so, I kept saying: 'Look we need to be concentrating on data. What kind of data can we give these people?'" Gandolph was frustrated with the limited high school data as well, which is obvious when he exclaimed, "You can't do anything with the high school graduation test! There is no identity to [it]." He concluded the RESA was poised to provide a deeper analysis beyond simply providing test scores, "you can take the CRCT (Criterion-Referenced Competency Test) from 8th graders and then take those same people as 9th graders and look at EOCT (End-of-Course- Test) scores in 9th [grade] literature or 9th grade math and you can find a correlation." This quote reveals the type of data that RESA-2 began to develop, which was the correlations between tests and student data from year-to-year.

RESA-2 trained a technology specialist extensively on statistical software and then worked to develop a growth model for its member constituents. The growth model analysis would help the schools contemplate their next steps for improvement and provided more than simply how the students performed on the assessment. Providing PLCs with data on the growth the students achieved in the various specific domains of the state assessment, as well as from year to year, was a service RESA-2 offered to PLCs to initiate conversations regarding improvement.

There were other ways that RESAs offered data support which did not entail student achievement information. For example, Rosie described working with a PLC that developed its own walk-through data collection tool. The walk-through checklist had instructional

components to look for in a classroom that the PLC deemed important. Rosie stated that the PLC wanted "to get an outside view of what's going on in the school to see if what they're seeing is actually happening." Rosie's role was to collect data on the tool and provide it to the PLCs for the members to discuss. She elaborated:

> They [the school] are doing peer observations where they are assessing the effectiveness of PLCs, and the work they have been doing in PLCs with artifacts that we find in the observations. So they make the walk through form as a PLC and they tweak it or do whatever they need to do. And now I'm coming in as a member to evaluate. I give them the data, and walk out. I'm done. They go from there. (Interview, February 23, 2012)

The data that RESA provided was not limited to solely student test score data. Given they do not have day-to-day interactions with the staff, RESA personnel collected unbiased process data using tools the PLCs created.

Locating and disseminating research. In some instances, PLCs that are ongoing in schools just need current research that the members do not have time to find. Rosie described what took place after she successfully supported the implementation of a PLC. She explained, "Sometimes they [PLC members] want more research or something and I end up being more of a gopher, going for this to bring it back to them." Gandolph explained how he sometimes just "gave ten or 15 minutes of up-to-date information" and then turned it over to the PLC by saying, "What do you think you ought to be doing then?" Clearly the roles of the RESA personnel were simply to supply research.

Sometimes the research provided by Gandolph was merely researching what was taking place within the RESA area. Recently, a principal requested data on scheduling, specifically block scheduling which entails a four period day, and half year subjects, versus non-block,

traditional scheduling configurations. Gandolph explained how RESA-2 responded to this request, "We'd have somebody go in and give them the data. 'Here's our systems that are on block, here's what their scores look like, here are non block systems, here's our 6th period day systems, here's our 7 period day systems.'" The goal of providing the research was to empower the PLC to make its own decisions. Gandolph continued to explain how his RESA provided research, "We were in that role that we provide data or provide information for them, then get out of the way and let them have the conversation." Providing and disseminating research did not involve teaching a session, rather the role simply entailed gathering and organizing the research in a way that the PLC could easily use it to make a decision. Time was necessary to organize the research so that a group could look at it in a limited amount of time and discuss implications. RESA school improvement specialists performed the task of not only locating the research, but also facilitating the dissemination of the research so that PLCs were able to act upon the research in the manner they chose.

Gandolph recognized the importance of building the knowledge and skill set of the team to locate its own research when he explained how he began to turn the process of finding research over to the PLC. He explained:

> And I was almost there [with the PLC] to facilitate the conversation and to provide resources if they ran out of resources, rather than it's my job to bring this to you, teach it to you, get you started. By the second year, they were really functioning themselves, and I was their assistant. I was their resource. I was their "oh, well, how do we find NAEP (National Assessment for Education Progress) scores? How do we get some examples from NAEP that already have teacher commentary?" "Oh well, you go over here and you

do this and you do this." "Ooohh, okay great." And then they would analyze it from there. (Interview, March 15, 2012)

Limited time is an ongoing challenge for school-based personnel. This passage provides evidence that RESA personnel trained PLC members to locate research quickly. Efficient research skills allowed the PLCs to use their time effectively and also to work independently.

Providing activities. The RESA specialists also mentioned that from time to time they would provide activities for content learning, pedagogical skill enhancement, or guiding questions for the PLC to use. This year, there is a new curriculum being introduced to the State of Georgia teachers. The RESA school improvement specialists viewed PLCs as a vehicle for study of the new curriculum, although they approached it in different ways.

Gandolph described a recent PLC that he facilitated whose goal was to enhance teacher understandings of the writing demands of the new curriculum. First, he provided them with "samples and exemplars of writing prompts" he found that aligned with the Common Core Georgia Performance Standards. Then, to build conversations and consensus, PLC members, "looked at a sample, and then they looked at the rubric." Finally, the PLC "read the samples and graded them right then in the room together." Gandolph saw this as a way to prepare teachers for what was ahead, so that when students began writing in the coming year, the teachers would have had experience with the writing. While the activities were generated by RESA, the PLCs were still functioning independently since they made decisions at their school level regarding assessment, next steps for implementation, and learning about the new curriculum.

RESA-3, where Rosie works, took a different approach to providing activities to the PLCs to learn about the new common core curriculum being adopted in the State of Georgia. Rosie saw the PLCs as an opportunity to provide member systems with regional professional

learning: “we use the PLCs to implement the CCGPS because there are not enough of us to go around.” The specialists at her RESA wrote learning modules on the new curriculum for the schools to follow and rather than the RESA personnel going to the individual schools, the schools sent teacher leaders in for one-day training sessions. Rosie stated: “We set up modules where they can self-break it down a little bit more once they get the overview.” The intent was that school-based PLCs could choose what they wanted to do and the pace they wanted to take.

A review of the documents provided by Rosie indicated that there were multiple dates planned for teacher leaders to attend training on the new Common Core Georgia Performance Standards (CCGPS) that the teachers would then redeliver in their schools. Rosie indicated that the activities were suited for PLCs and their timeframes and that in most cases, the PLCs could engage in the modules “until the end of the school year.” RESAs were the logical choice for developing the activities, since teacher leaders and building-level leaders simply did not have the time.

Providing regional conferences. Rosie believed that regional conferences were an important aspect of support for PLCs, since they can add to an existing knowledge base about a topic. Rosie explained why RESA-3 decided to host a recent conference when they noticed: “weaknesses region wide. And if we keep seeing that bubbling up as far as the professional learning communities, or there are topics that bubble up, then we try to address that. ” Recently, the staff at RESA-3 realized there was a need for science and social studies teachers to understand Lexile scores. Lexiles are a measurement of the difficulty of a book or a reader’s ability. Although Rosie thought this was a “mundane” topic, she and her colleagues concluded it was important enough to address since it was an identified weakness.

RESAs participated in an onsite peer review process every four years which are guided by a rubric aligned to the RESA standards for service. To be fully operational a RESA would need to analyze data regionally and respond accordingly. Offering a regional conference in response to system needs would align well with the RESA standards. Rosie continued and explained the response of her RESA to the identified need for lexile training like this:

> So we had [name of consulting group] to come in and do a down and dirty training. They did a train-the-trainer model for us on science and social studies and we told them we are gearing this specifically for – it's not just about lexiles – it's about lexiles and how you can use it in non English language arts classes. So even our training is being more specific and targeted in certain areas based on what we find out regionally. That's the nice thing about RESAs; we work in so many different areas with so many different levels of PLCs. We can say, "Ooohhh, this is cropping up. This is getting to be a problem." (Interview, February 23, 2012)

RESAs are designed to serve more than just one school system, and therefore well positioned to cost effectively support conferences. Teachers and building-level leaders can use information from regional conferences with their PLCs.

Summary of Supporting Existing Professional Learning Communities

There were four support mechanisms identified that RESAs perform to support existing school-based PLCs: providing data, locating and disseminating research, developing activities for PLCs, and sponsoring regional conferences. The data RESA provided was more than just test scores, which were easily found on the state website. RESA provided further analysis of the state test scores for the PLCs to consider and act upon. Another aspect of data support that RESA offered was gathering other, non-test data. This researcher once had a principal who said

that an observation of a teacher may be partially determined prior to the observation based on the previous interactions of that teacher and the principal (Personal communication, J. Goodwin, 1990's). RESA personnel enhanced data collection for PLCs by providing objective data.

Locating and disseminating research for PLCs was a second category of support offered by RESAs. This service facilitated the understanding of the research by PLC members and freed up time for the PLC to consider next steps. RESA personnel were well positioned to locate and provide research since they were not encumbered with day-to-day management of school issues.

The third identified approach to support was to provide activities for PLCs to complete. The activities were designed to enhance the content knowledge and skill set of members of the PLC while simultaneously allowing autonomy for the PLC. Groups were free to request or choose the activities they decided they needed most, and they progressed at their own pace. Providing learning activities for the PLCs encompassed direct interaction with PLCs or indirect interaction when designed modules were provided through teacher leader training.

The final identified support for school-based PLCs was that RESAs provided regional conferences based on identified needs. The regional conferences had the potential to enhance the knowledge-base of the PLC. Teacher and building-level leaders attended the conferences and used their new knowledge accordingly as they worked with PLCs. RESAs provided this service in a cost-effective manner on as-needed basis.

The Attributes of PLCs Related to Decisions of Adoption

The perceived attributes of innovations identified in diffusion research guided the analysis of the third research question. The five attributes most often identified in diffusion studies are: relative advantage, compatibility, complexity, trialability, and observability (Rogers, 2003). This study used the first four attributes identified by Rogers (2003), but did not address

the last one, observability. Rogers (2003) postulated, "Observability is the degree to which the results of an innovation are visible to others" (Rogers, 2003, p. 258). Findings from this study revealed that the observable results of the innovation of PLCs were a relative advantage so they were categorized as such. This is concurrent with earlier diffusion studies, in which Rogers (2003) contends that the attributes are interrelated. Data were coded using these four attributes. The data from each attribute is addressed separately. In addition to Rosie and Gandolph, Alice, the participant who responded she had minimal interaction with PLCs, provided data for this question.

Relative advantage. The perspectives of the RESA consultants regarding the relative advantages of professional learning communities included the effectiveness of the PLCs for school improvement, improved instruction by classroom teachers, and the positive changes to school cultures that PLCs produced. Rogers (2003) declared that of the studies linking adoption to the perceived attributes, relative advantage had the highest correlation. While the RESA specialists identified multiple relative advantages, they also acknowledged a disadvantage of working with PLCs. The relative disadvantage appeared when the specialists questioned the use of RESA time for small groups.

The RESA school improvement specialists concluded on multiple occasions that the use of PLCs was a much more effective tool to use for school improvement than other strategies. Gandolph stressed from the beginning that he deduced, "PLCs have more flexibility so I can do them a lot differently and I can gauge the participants better than I can in a workshop." Gandolph asserted working with PLCs in small groups over the day in an elementary was more effective than the large, faculty meeting type workshop he had offered in the past. Gandolph elaborated:

> So it [the PLC format] was much more effective because it was longer term, and it was shorter, smaller groups so I could really see what was going on inside of the teacher's heads better. And that's really when I didn't jump ship from faculty meeting PLCs, but really said "this is more effective. I can spend an hour after school with sixty or I can spend all day with sixty and have them ten at a time. And ten at a time gives me better results." (Interview, March 15, 2012)

This excerpt showed that the relative advantage of a small PLC was the preference over whole-faculty after school meetings. The effectiveness in this episode was that the RESA specialist responded on a more individual basis to the adult learning needs of the teachers.

Another aspect of effectiveness of PLCs was defined in terms of their actual accomplishments. Rosie presented an example of a successful high school PLC that "strategically planned" how they could serve "the kids who were most in need of remediation." She spoke admiringly when she stated, "They literally re-crafted the schedule for those juniors in January and February and March to address the needs of those kids. And they formed a whole other period." Rosie's perception was that the new class period supported the students' learning and she recognized their academic success, when she exclaimed, "by George, they made AYP (adequate yearly progress)!" In this case, the PLC made organizational decisions that directly impacted the instruction the students received. Later in the interview, Rosie proclaimed, "The teachers did it!" This quote underscores her passion for the work of the PLC, and their success in supporting the students. The success of PLCs, particularly when student achievement improved, was considered a relative advantage to working with PLCs by the RESA specialists.

The improvement of instruction was cited as a direct outcome of the work of PLCs. Rosie spoke about an example of a school that was in its third year organized as a PLC. Rosie

had worked with the school to move to the structure of PLCs, and now her only role was to collect data for the school. Rosie noted "instruction has gone up" when discussing the data collected. Rosie explained specifically what happened to the instruction and why she believed it happened when she said, "Co-teaching is amazing. That [co-teaching] was totally not functioning at all, and it is a direct result of the PLCs because after they got used to doing these PLCs, they'd say, 'what is it that you're looking for?'" Rosie's statement highlighted her belief that the PLCs influenced and facilitated the positive change in instruction. This statement also provided further evidence that the improvement of instruction was recognized as a relative advantage of working with PLCs.

PLCs were also recognized by the RESA school improvement specialists as having a positive impact on the school culture. Rosie determined that school cultures became more data driven while both Gandolph and Rosie discerned that discussions were more focused on curriculum and instruction. Data-driven instruction and focused discussions were considered to be promising changes in culture.

Rosie expressed how seeing the shift to a more data-driven culture convinced her that she should try to support PLCs in other schools. She divulged:

> And one of the big things they did was making data driven decisions using PLCs and that was a biggie. And so I started thinking of other schools that did not make AYP (adequate yearly progress), and they were just barely in needs improvement, what can I give them that when I leave they could still use and incorporate in their day to day work? And it was the PLCs. It was a professional learning community. (Interview, February 23, 2012)

The fact that Rosie made the decision to start thinking of offering PLCs as a way to support other schools that were identified as needing improvement substantiated that Rosie believed the shift

to data-driven processes was vital. Rosie attributed the shift to data-driven instruction directly to the PLCs. Her statement underscored her belief that using PLCs to implement school improvement initiatives has a high relative advantage.

Gandolph also saw a change in culture in the school, but it was how the teachers worked. Gandolph interpreted changes occurring in a PLC. He noted, "They were talking more. They were collaborating, not just on how horrible it was to have Suzie and Johnny in their classes, but really about the curriculum changes that came around with GPS (Georgia Performance Standards)." Gandolph saw that teachers were talking more about instructional issues and less about behavior issues, which had dominated the culture in the past. He attributed this positive change to the PLCs.

Rosie also determined the PLCs focused discussion more on instructional issues. Rosie reflected on how a school that had lost their Hope scholarship funds due to school board issues consciously focused on instruction: "As a group, they decided that there was nothing they could do about the Hope thing, so they decided to let that go. Now this is a decision they made, and to me, that's a professional learning community." Later in the interview, Rosie described the instructional decisions they embraced. Rosie's statement regarding the PLC's decision revealed that she viewed the PLC as the strategy that focused the teachers' conversations.

The RESA school improvement specialists viewed the PLCs as a way to improve school culture for various reasons. Moving to more data-driven decisions versus following status quo and having focused discussions on curriculum, assessment, or instruction were considered relative advantages of implementing PLCs. These were reasons that could influence RESA personnel to adopt PLCs as a strategy for school improvement.

While the RESA specialists identified relative advantages to working with PLCs for school improvement efforts, they also identified the disadvantage of working with small groups. In one case, Rosie described working through a new project with a principal and pointed out that working with the PLCs was an inefficient use of time. Rosie extolled:

> And I'm like "So you want me to repeat the same training over and over again?" And she goes, "Yeah!" And I said, "Well how effective is that going to be?" And she said, "Yeah if you think, if I think about it, you know a simple two hour training will take two whole days to complete." I said, "Is that the best use of your time?" And she goes, "Maybe not." And so we kind of sit there and said "OK if they need the training, what's a more efficient way to get the training?" Because there's been such an emphasis on PLCs, principals forget that a sit and get sometimes is just as effective as doing, as wasting your time in that long of a period. (Interview, February 23, 2012)

In this case, Rosie described training on the new Common Core curriculum. She did not describe how the PLC interacted with the training. One can see that while Rosie believed PLCs were effective, in this instance, Rosie chose efficiency of time over effectiveness of training. Gandolph stated it more succinctly: "Because we have 110 buildings and 10 consultants, there's no way we can be in all 110 of them."

Compatibility of beliefs, experiences, and needs with PLCs. Rogers (2003) described compatibility as "the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters" (Rogers, 2003, p. 240). When exploring the perspectives of RESA personnel regarding the compatibility of using PLC structures for school improvement, four themes emerged. The first theme, influence of the state department, strengthened the beliefs of the specialists that PLCs were a viable school

improvement effort. The second theme included the values that the school improvement specialists already possessed, and the RESA personnel's perspectives of the needs in the schools. Both the values and perspectives were compatible and likely to cause RESA personnel to adopt PLCs. The third theme revealed influences on RESA work from stakeholder requests that undermined their ability to work within the PLC structure. The fourth theme highlighted the various roles that RESAs perform with limited staff, rendering their workload incompatible with supporting PLCs.

The support and influence of the state department of education of Georgia has positively influenced the consultants' beliefs regarding the use of PLCs for school improvement efforts. The state department had actively worked on training building-level leaders to implement PLCs. Alice recalled a time six years ago, before budget cuts to the state department, when a state consultant provided training on PLCs to the member systems of RESA-1. Alice stated: "[person from state department] used to do some training on professional learning communities and she did those here. She had like a series of three or four sessions that cohorts went through. And she really did a good job training our folks." Unfortunately, Alice did not participate fully in the trainings due to competing work-related duties. The fact that Alice acknowledged the consultant "did a good job" signifies that Alice noticed the impact of the work in the schools. Alice recognized the work of the state department was significant and although she had limited time working with PLCs as a RESA consultant, her recognition offers evidence that she believed PLCs were a viable method to use for school improvement.

Rosie commented on how the work of the State Department validated her beliefs in PLCs and changed her work. She explained:

> They call them data teams, but essentially it's a professional learning community. And plus see we already had that previous training with Eaker and DuFour even before the state department came. So that's a positive – the positive is they [the DOE] put the seal of approval on professional learning communities. It doesn't have to be, you know the traditional RESA consultant coming and training you to do something and then they bless you, spit on you three times for luck and you go off and you implement. So that kinda gave permission to look at other ways of doing true professional learning. (Interview, February 23, 2012)

Rosie was unique since she had prior training on PLCs. Neither of the other participants in the study had any prior training on PLCs. It was apparent from her comments that the state department work supported her belief in PLCs, and allowed her to begin to look at alternatives to traditional workshops. The efforts of the state department to establish PLCs in schools strengthened the RESA school improvement specialists' compatibility of beliefs in PLCs.

The second theme included the values the RESA personnel already possessed. There were data to support that RESA personnel valued the basic tenets of PLCs. On numerous occasions the specialists verbalized their commitment to team work and collaboration. During interviews, Rosie referenced our time together as collaboration and discussed ways that RESAs could "increase collaboration across the organization." Gandolph reflected back to when he was an assistant principal many years ago in a high school, and said "it was all about team." The administrative team in which he was a member consisted of seven people, and there were 3,200 students. He stated, "We acted as a PLC before Dufour and Eaker ever wrote their book. We didn't call it a PLC, but it was a great learning atmosphere at that school." Rosie's desire to increase collaboration across RESAs and Gandolph's appreciation for his past experience with

teamwork provide insight into their work values. Collaboration and teamwork, which are hallmarks of PLCs, were firmly entrenched within the belief systems of these RESA specialists so moving toward using PLC structures for school improvement was compatible with their beliefs.

The specialists also identified empowerment of teachers and acknowledgement of teachers' ideas as needs that PLCs fulfilled in schools. The RESA specialists deemed these as valuable attributes to the schools that adopted the PLC structure. During one interview, Rosie identified two models of teacher professional learning that she thought were highly effective: coaching and PLCs. Rosie explained what PLCs could do for the teachers in the schools when she stated, "I like the PLC approach where you empower." Rosie believed empowerment of teachers caused them to "take ownership of their own kids. They learn that between us we can get the job done." Rosie assumed empowerment increased the effectiveness of the school improvement strategy because teachers collaborated more. Empowering teachers was compatible with her beliefs and Rosie also viewed this as a need of schools.

Gandolph reiterated the theme of teacher empowerment, but more from a leadership stance when he explained a phenomenon he noted while working with PLCs. Gandolph stated that the PLCs: "opened the principal and the other leaders' eyes to how many teacher leaders they actually had." He thought the traditional mode of school improvement stifled some of the natural leaders that were in the building. Gandolph explained the positive change of PLCs, "The teachers had been quiet, but now given a voice, had an opinion and were able to express that opinion and therefore were more involved in their curriculum than ever before because someone had listened to their voice." Gandolph believed that PLCs offered great potential for the schools, through allowing all voices to be heard.

The RESA personnel also recognized some incompatibilities. The third theme of the attribute of compatibility was the influence of stakeholder requests, which included a need for the RESA personnel to use a variety of strategies to set up their work each year and the past experiences of the teachers in the RESA areas. Both of these influences provided evidence that RESA personnel would be less likely to choose PLCs.

There were a number of factors identified that influenced how the RESA specialists' work was set up each year. Often these influences did not render PLCs as strategies employed for improvement. For example, Alice clarified how the consultants in RESA-1 negotiated the scope of their work when she stated, "our board of control (representatives from member systems) tells us what to do. Whatever they tell us they want us to do in their district that's what we do." When asked how Alice decided on the model of teacher professional learning that she might use for the requests, she stated "It's more about their schedule." Ultimately, Alice felt compelled to carry out the requests of the school systems in the manner that they requested, she stated, "I think the role of RESA is to provide whatever support our districts need." So, if the work request did not include a PLC model or the school system schedules did not fit, the PLC model was not chosen.

In a separate example of how the RESA tries to be responsive to needs, Gandolph discussed a time when he worked with a group on a cultural aspect as opposed to instruction at the request of the principal. He recalled:

> The principal called and said one time, "I need some help on cultural issues." And I said "ok, what kind of cultural issues?" She goes, "well, religious issues. What you shouldn't do from a religious perspective in your classroom." And I said, "Okay, what's going on?" And she said, "We have two or three new Jewish families in our community and

> we've always been very Protestant based. And I have a lot of teachers that bring their faith into their classroom. And we have to relearn that we can't say some of the things that we used to say because what used to be okay is now seen as perhaps proselytizing." So we did a whole thing on that one. (Interview, February 20, 2012)

As described, an ethics issue was the predominant focus of Gandolph's one session with the faculty. If the scope of the work requested by the districts was incompatible with PLCs, then the specialists would be limited in their support of PLCs.

At times, school system personnel do not understand that RESAs can interact with PLCs, so they may not ask for this type of support from RESAs. Alice facilitated a book study which was a request from one of her systems. She described, "I have a PowerPoint and I do a presentation. I show video clips of Ruby Payne and people who work for Ruby Payne." As described, her sessions are not PLCs, but rather workshops. Due to the after-school scheduling of these learning sessions, Alice felt hesitant to provide interaction, she explained, "So you pick your poison. You either want to have interaction time or you get out earlier." Alice disclosed that this request alone engaged 55 of her afternoons, repeating the same training in multiple schools in one district. Alice's example showed how requests that come from systems sometimes take significant amounts of time and yet, they do not involve working with PLCs but rather in the format the district deems most appropriate. In this case, Alice viewed the format as incompatible with PLCs.

Past experiences of educators were found to be incompatible with PLCs when teacher and stakeholder perceptions regarding professional learning were explored during the interviews. The specialists perceived that the expectation of their constituents was that attending a conference was professional learning, versus working in the school as a PLC. Alice noted this

early on, when she referenced one of the data pieces on the Georgia Assessment of Performance on School Standards (GAPSS). Alice pointed out, "teachers complete the certified staff survey [and] they typically score themselves low on professional learning if they don't go to leave the school and pay to go to a conference."

Gandolph presented a viewpoint of stakeholders that also did not recognize PLCs as authentic professional learning. Gandolph believed that superintendents interpreted PLCs as a process not as an opportunity to learn. He postulated, "They see PLCs as a means to an end, as a way to engender conversation." Gandolph reasoned the superintendents saw PLCs as a way to implement "programs such as thinking maps." The superintendents believed programs were professional learning. Member perceptions of professional learning influenced the work of the RESA personnel. If teachers and other stakeholders did not recognize PLCs as compatible with their beliefs regarding professional learning, RESA personnel may feel pressure to organize their work in more traditional structures.

Finally, the fourth and last theme that emerged regarding the attribute of compatibility, clearly documented that there are a number of competing work duties that prohibit the specialists from working with PLCs. RESA school improvement specialists were less likely to adopt PLCs because their schedules have been impacted by two major changes in recent years. The first change was the budget restrictions that decreased the RESA staff numbers. The second change was the added responsibility of the Georgia Assessment of Performance on School Standards (GAPSS) that increased the RESA personnel's workload significantly.

Rosie explored the multiple roles that she had inherited due to the budget restrictions, "I do GAPSS, I do TAPP (Teacher Alternative Preparation Program), and I've got the technology piece from ETTC's (Educational Technology Training Center) that's left over." RESA-2 had

opted to close the Educational Technology Training Center due to cuts in state funding. This decision generated a new role for Rosie, "a new law with E-rate that you have to do those cyber-safety classes." Rosie also works with content-related "Science issues." In addition to these roles, Rosie is also assigned to two Title One schools two full days per week so she also works with "school improvement issues." As one can see, Rosie has many roles and several of the roles are dissimilar in nature. The divergent roles and time needed to fulfill them were incompatible with providing support to PLCs.

When asked about his current work, Gandolph explained how much of his time is spent with duties competing with PLCs due to the new curriculum and his school improvement role. Gandolph detailed:

> Well, more leadership kinds of things. More meetings – I go to probably six days of DOE stuff because I am the designated CCGPS ELA (Common Core Georgia Performance Standards curriculum English, Language Arts) person. I've got a meeting this coming Monday by webinar. Had one in Abernathy last semester - because of that I had to go to the two meetings with the LDC (literacy design collaborative). I've been to eight days of DOE school improvement training. (Interview, March 15, 2012)

The state department of education also received funding cuts, so as Gandolph's comment above revealed, they rely more heavily on RESA personnel to carry out the school improvement work on their behalf.

In addition to the curriculum and school improvement roles, there are a number of other roles that RESA personnel perform. In this excerpt, Gandolph recited his activities from his January calendar:

> I provided training on GTEP (Georgia Teacher Evaluation program) day three, and attended two days of school improvement training in Red City. I'm an external evaluator for two twenty-first century grants so once a month I have to go to those sites and see all them. We do a leader identification process here – some of our systems – we have about five systems that are doing it. And they create a cadre of teacher leaders who go through a year long process of learning what it's like to be a leader with the new work and so I was on a seminar panel with them answering questions one time. Still do some training – I went to Burns County and did some thinking maps training for their twenty first century grant people. (Interview March 15, 2012)

Clearly, Gandolph's calendar is filled with other duties that continue to need to be carried out. Providing teacher evaluation training is essential for schools and using RESA specialists for evaluation of grants is cost-effective for member systems. Yet, these duties compete with providing support to PLCs which is time-intensive.

Another area of work that RESAs have embraced within the last six years is conducting the Georgia Assessment of Performance on School Standards (GAPSS), which is an intensive assessment of individual schools. The GAPSS review process is facilitated by RESA personnel and the team consists of educators from surrounding school systems, but not the participating school system. As a RESA specialist, this researcher has conducted many of the GAPSS reviews and estimates the total number of hours to organize a team, prepare the schedules, conduct the two day review, and then prepare the ensuing report takes approximately 35 hours, with secretarial support. Table 11 presents quotes from the RESA specialists which provide evidence that the GAPSS process has become a major component of their workload. Alice's quote in particular explained how GAPSS are a recurring source of work for RESAs, not just a

temporary assignment. Both Rosie and Gandolph's quotes exemplified the magnitude of the work. The GAPSS process has created yet another role for the RESAs to carry out.

Table 11

Impact of the GAPSS on the RESA consultants' work

RESA Specialist	**Quote regarding GAPSS**
Alice	I did a lot of GAPSS reviews. As a matter of fact, three of our school districts are using the GAPSS process as part of their system SACS (Southern Accreditation of Colleges and Schools) accreditation to show that all schools in their district have a continuous school improvement model. So, three of our districts do that so every three to five years. We redo those GAPSS in those systems so, and I think our RESA does more GAPSS than anybody else in the state. I mean we are just RESAing the GAPSS constantly this year.
Rosie	We didn't do as many this past year, we did twelve GAPSS.
Gandolph	We've done fifteen to twenty GAPSS a year since. So we do a lot of them.

In recent years, the RESAs have experienced budget cuts much like the rest of the State of Georgia. Yet, RESAs are still carrying out the same duties and have even taken on additional duties. Throughout the interviews and in many of the quotes, the effect of the budget was often present. All three of the consultants cited reduced capacity for service from budget cuts. When asked about the best model for professional learning, Alice assumed it was modeling in the classrooms, but her statement revealed the frustration at the limited staff numbers: "Because we have only four people on our staff, certified people, and one of those is me and I'm part time, we can't do the ideal model." Rosie explained how the budget cuts impacted her ability to work

with PLCs and how the staff of the RESA had been reduced: "biggest problem with RESA PLCs is we got too many things, too many hats. We used to have ten consultants, now when you're down to four, there's no way you can keep all those plates spinning." Gandolph alluded that his retirement to a 49% position was to help the organization as "they were dropping the money" or losing funding. Essentially, RESAs supporting PLCs was not compatible with the limited staff they now have and the increased work demands. So, even though working with PLCs is compatible with the beliefs and values of the specialists, it is not compatible with their need to provide services and respond to requests from their member systems.

Complexity of PLCs. According to Rogers (2003), the more complex an innovation is, the less likely it will be adopted for use. There were three salient themes of complexity associated with using PLCs for school improvement identified by the RESA school improvement specialists. The first was the complexity of collaboration. The RESA specialists noted that collaboration was difficult to establish and each theorized why. The second theme was the active engagement of principals with PLCs, when principals were not present, PLCs faltered. The complexity in this theme arose from maintaining a working relationship with the principal while trying to encourage him or her to participate with their PLCs. Finally, the last theme that emerged was the various challenges to PLCs, which included schools taking on too many initiatives and multiple definitions of PLCs.

One of the issues regarding complexity of collaboration is that there is a difference between congeniality and collegiality. Congeniality means that groups are agreeable to each other, and subsequently ideas may not be freely expressed. Collegiality indicates that a group is working toward a common purpose and the likelihood of expressing opinions is high. All of the school improvement specialists discussed their theories as to why true collegial collaboration is

difficult to establish. Table 12 presents their quotes. The school improvement specialists believed that for various reasons, ranging from generational differences, to a culture of isolation at the school, to lack of confidence, teachers did not want to collaborate, thus making PLCs difficult to facilitate.

How the collaboration issues presented themselves within the PLCs varied. Sometimes, the teachers just wanted to be told what to do instead of discussing issues and arriving at consensus. Gandolph experienced this on more than one occasion and explained:

> Some people just want you to tell them what to do. They don't want to have to talk about and discuss and discover for themselves what they should do. They just want you to tell them. And that's a valid viewpoint, but it's a restricted viewpoint. And that's what you have to get them to understand. "Yes, I could tell you go in and do this, this and this. And it might work, but it might not. Because your kids are different from other kids, and your school is different from other schools so we need you to help us make sure this works for your school." (Interview, February 20, 2012)

While a compliant staff, that follows directions without questions may be appreciated by some leaders, others recognize the need for thought-provocative collaboration in order to meet the unique needs of the students of the school.

Table 12

Quotes from Interviews Regarding Complexity of Collaboration

RESA Specialist	**Quote regarding Collaboration**
Alice	Getting them [the teachers] to do it. We're just in the process of getting them to collaborate because they are so used to going in their room and shutting their door and doing their own thing. (Interview, February 21, 2012)
Rosie	One interesting thing that I am finding that through all of this that we're doing, we're having problems with collaboration. The teachers, they cooperate, but they don't necessarily collaborate. This is mine and this is yours. There's still that "no, no, you don't go there" kind of thing. (Interview, January 20, 2012)
Gandolph	We've still got a lot of twenty plus year teachers that liked isolationism, and we've gotta get them included in with this new generation that don't even understand isolationism. Never understood 'well, I'll just close my door and do it my way anyway,' but they're gonna have to talk to each other and that can be difficult. There are generational differences but even more sometimes in the same generation you'll still get some isolationists who say 'No, I don't mind talking to kids, I don't want to talk to adults." Or 'I'm not feeling comfortable enough with my own practice that I'm willing to talk to adults.' (Interview, March 15, 2012)

Another issue that impeded collaboration was having groups of negative people in the PLC. Gandolph suggested that the multiple changes in curriculum over these last few years has provided impetus to a negative mindset, "We got GPS (Georgia Performance Standards) then, all the sudden comes CCGPS and reinforced that 10% that kept saying 'that's just another fad

that we don't need to pay attention to this.' This gave them the platform they needed." Gandolph perceived that combating the arguments of negativity were more difficult given the recent changes in education that were taking place.

Rosie explained how she tried to guide principals to deal with the naysayer group in a PLC. She suggested principals have "a little come-to-Jesus meeting with everybody and say 'look ya'll, we need to sit here and get all this moaning and groaning out of the way because you can't change it.'" Yet, Rosie recognized that for principals, "having that talk is hard to do." Negative people in the PLCs inhibited the collaboration of a PLC. Rosie declared, "those naysayers slow that momentum." Whether the RESA specialist encountered the negative group or the principal confronted the negative group, ultimately they increased the complexity of working with PLCs.

Having principals interact with PLCs was considered critical to the success of the PLCs. Getting principals to participate proved to be a daunting task. One problem associated with principals not following through is that RESA consultants have no line of authority in a school. Gandolph stated: "in our RESA we don't give mandates. We suggest." He goes on to explain how he suggested to a principal that his presence in the PLC was necessary, "If you're not at the table, they won't be effective." Gandolph was left to hope that the principal would heed his advice. Ultimately, Gandolph had no way to insist on the principal working with the PLC, he acknowledged: "we don't say, 'If you don't participate, I won't come.' We don't do that." When a principal chooses not to participate with his staff, the RESA consultant has no avenue for follow-up.

When a principal chose not to participate, the implementation of the school improvement initiative was perceived as ineffective. Gandolph experienced disappointment when he worked

with a school for two years in an after-school PLC setting, when the principal did not attend. He divulged:

> That was closer to the DuFour's model, but it wasn't very effective and the reason it wasn't very effective was there were no administrators from either school there. And we [my colleague and I] kept telling them "the teachers are not going to take this seriously if you don't take this seriously. And yes I know you're busy, I've been in your chair, but do you want this to become practice? Or do you want this to be something that they're putting on once a month so you can mark down on your checklist, 'yeah, we did it.' If you don't participate with them, you're going to lose the effectiveness." And they said "Oh, yeah, we'll do it" and then they never showed up. So we did it for two years, and teachers learned a lot, and talked a lot with each other about what it looked like, but we didn't see much implementation in the classroom. (Interview, February 20, 2012)

As evidenced above, the PLC becomes an exercise in futility when principals do not participate. RESA personnel must be strategic and savvy in helping a principal understand the importance of his or her role, suggesting, but not mandating. Due to the political aspect of working with the principal, the complexity of working with PLCs is increased.

Gandolph summed up the human aspect of complexity when he discussed the importance of relationships. He believed the relationship between the teachers and between the administration and teachers directly influenced the PLC. The following exchange between the researcher and Gandolph illustrated the essential problem around complexity.

> I: Sure, sure. Ok, so that kind of adds to the complexity of the whole thing, doesn't it?
>
> G: Only if you include people. If you don't have any people in it, it can be pretty simple.
>
> I: Sure, sure, but we deal with people so –

G: Damn people that make it hard. They insist on not being alike.

(Interview, March 15, 2012)

In addition to the human aspects of PLCs increasing the complexity, organizational issues also increased complexity. One problem that the specialists identified was that often the schools took on too many initiatives at once. Alice described how she interpreted teachers probably felt in regards to their workload: "the biggest issue is time and 'Oh my God, here's one more thing.' I mean, that's huge. That is huge for teachers because they are so tired and they are so overworked." Each time the school chooses another initiative to take on, Alice felt the teachers became immune to the idea of school improvement and began to think "it's just one more thing." Alice believed that too many initiatives caused teachers to shut down and decreased their willingness to participate.

Gandolph further elaborated how taking on too many initiatives can be problematic for a PLC. Gandolph discerned that elementary schools tended to be guilty of this more often then other schools. He clarified, "Typically what my challenge with an elementary would be is to restrict it enough to where they would spend enough time on one thing. They tend to want to do everything." He further explained his annoyance with elementary schools taking on too many initiatives when he stated, "Elementary schools – well 'we want to do differentiated instruction and we want to do looking at the work and we want to do this and we want to do that.' Which superman works at your school?" Schools that move too quickly and take on too many initiatives may not be successful in their improvement efforts. They may blame the structure of the PLCs as the problem versus identifying that their goals were too ambitious. Multiple initiatives add to the complexity of PLCs.

Another challenge for the RESA personnel was the existence of multiple definitions of PLCs. The School Keys, which is a rubric document describing school processes created by the Georgia Department of Education does not provide clarity to the expectations of a PLC. There are eight areas defined in the School Keys: Curriculum, Instruction, Assessment, Leadership, Professional Learning, School, Family, and Community, Planning and Organization, and School Culture. Gandolph had a concern with the Professional Learning rubric found in the school keys. He noted, "Most of the others [school key areas] are not negative, but the PL (professional learning) it gets to 'you didn't do this,' and then it gets into this diatribe about how stupid you are because you're not doing it." So, Gandolph does not find this particular section helpful. He continued and lamented, "the descriptors are bad"; ultimately, he determined that the descriptors of the Professional Learning rubric "describe NOT improvement." See Appendix G for a copy of the Professional Leaning strand of the School Keys.

Further evidence of a lack of clarity was provided when Gandolph discussed his interaction with Department of Education consultants on state-run GAPSS teams. The state department consultants did not appear to use the Professional Learning descriptors in the same way as other portions of the rubric, Gandolph described, "they said basically, forget the descriptors, think about in this one [the professional learning strand], what are the key words? What's one key word in these descriptors and do they do that? Don't concentrate on all of these things." Lack of clear direction from the state adds to the complexity of supporting PLCs. This leaves the RESA personnel in the position of finding a definition in research, and as stated in the literature review for this study: Many definitions exist of what constitutes a PLC, most of which are contextually bound (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006; Stoll & Louis, 2007).

Examples of the multiple working definitions at the RESAs included regional consortiums with guest speakers, groups working on monitoring the school improvement plan, or whole faculties studying a book. Alice explained how her RESA supported the regional consortiums for media specialists, administrators, and counselors, which she designated as PLCs. Alice delineated:

> We send out all the announcements for all that we do the registration for, that we provide the location and I used to contact all the guest speakers. I used to be responsible for that, but we built capacity and now they are leading their own sessions. So the state department will come. When we started this, I was the one that got it started and I would lead them and I would get the guest speakers and all that, but I don't do that anymore. I just make sure they've got a leader for the year, and then we do the scheduling and registration. (Interview, February 21, 2012)

Of particular note in the passage above is the presence of guest speakers. A review of the documents from these consortiums revealed that collaboration time was provided for the media specialists, and that administrators often presented what they were doing in their schools. Absent from the documents was any reference to outcomes or the school improvement plan.

A second definition of a PLC emerged from Alice when she explained a school-based PLC. Alice stressed that RESA-1 has had to work to "change the mindset" of what professional learning is. Alice attributed this to a policy change: "you used to have staff development money and you didn't count it [as] staff development unless you left your school and went somewhere. Or, paid somebody to come in to do a session." Her example of a school-based PLC was: "when you get together as a third grade group and you're working to improve the math scores, that's professional learning and that's what a professional learning community is." In this quote, a

PLC is led by teachers, school-based, and focused on a student achievement issue. The idea of paying for a guest speaker is incongruent with a PLC in this latter definition.

Further evidence that PLCs have multiple definitions was provided by Rosie when she also described a regional meeting as a PLC: "in RESA, we have a PLC where the curriculum directors come from all over our systems and they collaborate on regional issues, we're part of that." Much like Alice, Rosie also sees non-school-based meetings as PLCs. A review of the documents provided indicated there were no outcomes reported as a result of this group meeting, only minutes taken.

Gandolph responded to the question of how his RESA defines a PLC and provided multiple definitions of PLCs. Gandolph reflected:

> It depends. PLCs right now cover a whole breadth of things. DuFour says it was a faculty and the faculty studied together, talked together, collaborated together to understand certain things. And it could be a book study, and then you implement those things. It could be a conversation and then you implement those things. It could be collaboration on the vision and mission and what it is that we are going to do, and we all come to a consensus and then we go do those things. PLCs have evolved to me – any group of teachers who are studying and implementing changes in their practice for the good of education. (Interview, January 9, 2012)

Gandolph ambiguously defined PLCs as "communities of people who are learning together to do something in a professional setting." With numerous definitions of PLCs, there might also be numerous expectations. Some of the definitions provided would inherently include outcomes or are tied to the school improvement plans. Yet, some of the definitions appear to be merely meetings or collaborations. Multiple definitions of PLCs, which was evidenced in this study, as

well as the research reviewed in Chapter Two, increase the perception of complexity of the innovation of PLCs, thus making it less likely that a RESA will adopt PLCs to support school improvement efforts.

Trialability of PLCs. According to Rgoers (2003) **"**Trialabilty is the degree to which an innovation may be experimented with on a limited basis" (p. 258). The context for trialability is within the RESA. Being able to try PLCs for themselves has proven to be extremely difficult for the RESA school improvement personnel. Among the challenges encountered with trialability were a lack of formal training, a lack of time which is related to limited staff, and a lack of organizational support.

Rosie, who reported working most with PLCs in schools, both establishing new PLCs and supporting existing ones, was the only participant in the study who reported receiving formal training on PLCs. Several years ago her entire RESA team attended a workshop at Adlai Stevenson High School, in Illinois, where they learned how PLCs changed culture. Adlai Stevenson High was the school where one of the leading authors of a popular book on PLCs, Richard DuFour, was principal. Rosie provided an overview of their training when she reflected:

> Well, the first thing we did before we even went there is we did a book study as a PLC. We read through *Whatever it Takes* and *PLCs at Work* and all that. We actually read those books to listen and get the foundational piece on what they did. And the way they did it. I think the piece that everybody misses is the buy-in from the people that are doing it. The leaders and the adults in the building, that's the change that's got to happen, not the kids…the kids will come along. But getting that change is the hardest thing for them to do. And the one thing I heard that they did was he [DuFour] didn't wait for everybody to have that paradigm shift; he just had a critical mass. Twenty percent, he started with

> that 20% and they really followed and started changing that culture. And when that 20% happened, everything else snowballed. And that's the hardest part. He said the hardest part was to get it started and then to maintain it. (Interview, January 20, 2012)

Rosie explained how the training manifested itself in her day-to-day work in schools, "schools that don't have a functioning leadership team. I tell them, 'You pick your strongest leaders and then you give them an option to opt out, because if they don't want to be there, we don't want them there.'" In addition to using the training in her own work, Rosie also verified that she and her colleagues at RESA-3 had a shared understanding of the expectations of a PLC.

Providing formal training enhanced trialabilty. The RESA-3 team members could ask questions of the trainers and the teachers who had implemented in the past, experiment within their own training, and they were provided with general guidelines to follow. Rosie was the only consultant in this study who referenced protocols as guidance for PLCs to establish collaboration. In the documents she submitted from PLCs, a number of protocols were outlined for use with PLCs.

Rosie's formal training is in stark contrast to the lack of training that Gandolph and Alice received. When asked what challenges she might foresee when setting up a PLC, Alice responded: "I don't see any challenges." Alice's lack of training is apparent in this statement since she is unable to determine possible obstacles or misunderstandings. When pressed further and asked about collaboration, Alice replied, "I would kind of model what that looks like. And you know, have them during the meetings that I was leading, have them do some things to show them what it looks like." Alice would essentially learn as she was working with the teacher groups. When asked about PLC training Gandolph answered: "what we tend to do is learn by doing, and we tag along. So if – I've done two or three –so I might go out and do another one

and take a consultant with me." The modeling sessions with colleagues then allowed the newly trained person trialability with actual participants, as Gandolph explained: "And then the next time that person would be free to go out and try it on their own." So, these two RESA consultants were limited to on-the-job training which inhibited their ability to experiment.

All three of the RESA specialists stated that they did have some form of a PLC taking place with their colleagues, but that it was not as effective as it could be simply because they had limited time. Budget cuts that began in fiscal year 2010 have reduced staff numbers, therefore limiting time. Alice explained how her RESA worked as a PLC when she stated, "We send out a needs assessment for the districts. We compile it, we prioritize it, and we get together periodically to say 'okay, how are we addressing this? Are we meeting this need?'" Yet, later she expressed dismay at the frequency of the PLC, "well, it should take place every month, but our calendars don't allow for that because we're so busy. So we do it about every three months." Alice's quote provides evidence that while the RESA was meeting as a PLC, it was unable to do so adequately since the consultants' schedules were filled with service provided to schools. PLCs are generally considered outcome-based, and a three month lapse between meetings may not suffice for follow-up.

Rosie provided another perspective in which she wondered if perhaps there were too many PLCs and therefore the work may not be effective. Due to tightening budgets, the remaining members of the staff had to cover positions that were cut. Rosie observed:

> I'm really concerned now that I've got too many PLCs going on, if that makes sense. I'm over in one side, with the DOE collaborating on some issues with school improvement, and then I come on over here with our school improvement group talking about our personal Needs Improvement schools. Then, I'm over here talking about the curriculum

> issues because I'm in science and that content literacy is going to be an issue for us. Then I'm over here talking about the site visit and RESA and how we get the word out that we're important with the legislature and all that. Then we've got you know, it's just, it's too many things going on. So, I think one of the things with PLCs in RESAs is again, when do you stop and say enough is enough? And when do you let some things go in order to focus on other things? (Interview, January 20, 2012)

While Rosie appreciates the structure of the PLCs, she is also feeling frustrated at the number of PLCs in which she is engaged.

Gandolph explained that his RESA talked about working as a PLC when he reflected, "the last time we really talked was several years back about setting up one day a month specifically for us to act as a PLC either in a book study or a series of demonstrations of new strategies." The intent was to "keep us on top of our game, and to share with each other." Then budget cuts began to lower the staff numbers and rendered the idea of a PLC unlikely. Gandolph explained, "When we had twenty five consultants, we could take two days a month off and still provide services to our systems. When it got cut to under ten [this was no longer possible]" At that point, the priority became providing service to schools instead of their own PLC. So, while RESAs are trying to enact their own PLCs, they are doing so with limited success due to inadequate staffing.

In addition to a lack of time to work together as a PLC, the RESA personnel also experienced a lack of organizational support. Alice revealed at one point in the interview that if she were in charge she would ensure the RESA PLC would take place on a monthly basis. Since RESA-2 never really fully implemented the PLCs they had discussed, Gandolph's director was unaware of the potential of them. Gandolph understood his director's position, but provided

further evidence of a lack of organizational support when he acknowledged: "You really had to have the executive director say, 'we will all meet on this day – here it is for each of the months, and this is what the purpose of them was.' And we never got to that point." So, while the RESAs did try PLCs, they did so with limited success due to lack of organizational support, or lack of time.

Limited trialability with the innovation of PLCs within the RESA organization lessens the probability that PLCs will be adopted as a strategy for school improvement by RESAs. Gandolph summed it up when he declared: "I see PLCs as the vehicle for change. Or at least as one vehicle for change, one very important methodology for change. And if we can't do it then why should we be exporting it to schools?"

Summary of the Perceived Attributes of PLCs by RESA Specialists

The RESA school improvement specialists held divergent perspectives regarding PLCs. Table 13 summarizes how the perspectives manifested in the data and whether or not they increased or decreased the likelihood of adoption. It is important to note here that while formal training is identified as a positive factor, only one of the participants reported receiving formal training in PLCs. Also, although the lack of organizational support was identified, it was only noted in two of the RESAs.

The numerical count of increased likelihood of adoption will not necessarily equate to PLCs being adopted as a strategy for school improvement. While the findings are not clear cut, there were numerous instances cited that the increased workload due to reduced staff numbers and GAPSS simply make working with PLCs incompatible due to the time-intensive nature. This would indicate that in this study, the compatibility with work needs outweighed the relative advantage perceived by the participants.

Table 13

Perspectives of RESA personnel on the Attributes of PLCs

Perception	**Theme**	**Increased Likelihood of Adoption**	**Decreased Likelihood of Adoption**
Relative Advantage	Effectiveness of PLC structure for school improvement	x	
	Improved instruction by classroom teachers	x	
	Positive changes to school cultures	x	
	Time necessary for consultants to work with PLCs		x
Compatibility	Influence of the state department	x	
	Existing values of the school improvement specialists and needs of the schools	x	
	Influences on RESA work from stakeholders e.g., requests that don't ask for PLC support		x
	Limited staff and increased workload		x
Complexity	Complexity of collaboration		x
	Disengagement of principals with PLCs		x
	Challenges to PLCs		x
Trialability	Formal training	x	
	No time for our own PLCs		x
	Lack of organizational support		x

Chapter Summary

This chapter provided the findings for each of the three research questions. The themes from each question were presented with supporting quotes from interviews or support from documentation. The first research question sought to determine the ways that RESA personnel established school-based PLCs. The support offered included RESA personnel providing

support through guiding principals as they determined organizational structures, as well as conceptualizing goals and roles within the PLCs, and providing onsite support such as feedback. The second question sought to determine how RESAs supported existing PLCs. There were four support methods identified which included: providing data, locating and disseminating research, designing learning activities for PLCs, and sponsoring regional conferences.

The third research question sought to determine the perspectives of PLCs by RESA staff and used the diffusion of innovations framework of perceived attributes to analyze the findings. There were divergent perspectives. PLCs were perceived to have relative advantage, and were compatible with the beliefs of the school improvement specialists. But, PLCs were found to be incompatible with the current workload and they possessed a number of complexities that causes interaction with them to be difficult. RESA specialists had limited trialability with their own PLCs, which would decrease the likelihood of adoption.

CHAPTER 6

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Professional learning of teachers is in a state of constant change due to its need to adapt to the dramatically shifting external environments and expectations. To become better informed about the impact of these changes, this study sought to understand how one agency that provides professional learning for in-service teachers was implementing a new method for delivery of instruction that incorporated site-based peer collaboration.

Specifically, the purpose of this study was to investigate and describe how Educational Service Agency (ESA) personnel contribute to the development and support of PLCs for school improvement purposes. Chapter Six presents the conclusions and implications based on the findings from this study. The following research questions were addressed:

1. In what ways do Georgia Regional Educational Service Agency (RESA) personnel support the establishment of professional learning communities?
2. In what ways do Georgia RESA personnel support existing professional learning communities (PLCs)?
3. What are the attributes of innovation that characterize RESA personnel's perspectives related to adoption of professional learning communities?

Chapter Six is organized into four sections. The first section summarizes the findings of the study organized by the research questions. The second section describes the conclusions drawn from these findings. The third section examines implications of this study. The fourth section discusses possibilities for future study.

Summary of Findings

The design of this study was qualitative with a purposeful sampling of three school improvement specialists. Data were collected via face-to-face interviews and documents from three Georgia RESAs. Four rounds of interviews with school improvement specialists actively working with PLCs were conducted over a period of four months. Data from interviews and documents were analyzed using the constant comparative method.

This study identified three different approaches that RESA personnel used when supporting newly forming PLCs. One approach was to guide the principal to develop organizational structures to support PLCs prior to the implementation. A second approach was to facilitate the conceptualization of the PLCs with school leaders. Finally, the third approach was to actually provide onsite support with PLC members. The onsite support could be either providing feedback to the principal regarding the actions of the PLC or actually modeling what the PLC would be like with a group of leaders at the school.

There were four assistance mechanisms found in this study that RESAs performed to support existing school-based PLCs: providing data for school-decision-making, disseminating research results upon request, designing learning activities for PLCs, and sponsoring regional conferences. RESA personnel provided two different types of data to PLCs. One type of data was state student achievement data. At times, RESAs conducted an analysis of state student data and then provided the analyzed data to the PLC for consideration. Another type of data provided for the PLC was day-to-day school processes, such as instructional observation data, which was collected by RESA personnel. In both cases, the decisions regarding next steps were left in the control of the PLCs.

Locating research was the second form of assistance given to existing PLCs. The PLC would request research and RESA personnel would provide the research in a concise manner. Locating research and facilitating its dissemination allowed the PLC members to spend time considering the research rather than spending limited time in an effort to locate quality research. The third form of assistance provided was RESA personnel created activities for the PLC members that enhanced their learning. For example, when the new state curriculum became a focus, RESAs provided schools with activities for PLC members designed to assist in learning the new curriculum. Finally, the fourth category of assistance provided by RESAs to support existing PLCs was sponsorship of regional conferences. These conferences offered individual PLC members opportunities to extend their knowledge base and consequently the knowledge base of the entire PLC.

This study also ascertained the ways in which RESA personnel viewed working with PLCs. The assessment of RESA personnel perspectives was informed by Rogers' (2003) attributes of innovation theoretical model. Those attributes are: relative advantage, compatibility, complexity, observability, and trialability (Rogers, 2003). This study found that the observable outcomes of PLCs were deemed to be relative advantages and were therefore classified as such. The personnel perceived PLCs as having a high relative advantage. The PLCs were also found to be compatible with the RESA personnel's existing beliefs regarding school improvement. However, PLCs were incompatible with the existing workload of RESA personnel. The RESA personnel also believed that PLCs were highly complex entities.

There were several factors surrounding the trialability of PLCs that would influence RESA personnel on their decisions whether to adopt PLCs or not. Two of the three participants had no formal training on how to work with PLCs. A lack of formal training decreased their

likelihood to adopt PLCs. This study also found that RESA personnel did not participate in PLCs at their own organization. Non-participation in PLCs further diminished the possibility that RESA personnel would adopt PLCs as a school improvement method.

Conclusions

There were four major conclusions suggested from the findings of this study. Each conclusion will be introduced and discussed separately.

Conclusion One: RESA personnel facilitate the organization and conceptualization of PLCs when schools begin the process of forming PLCs.

This study found that RESA personnel facilitated the organization and conceptualization of PLCs when schools begin the process of forming PLCs. RESA personnel realized that scheduling of the PLC was integral to its success, and they assisted principals in finding ways that the PLC could meet on a regular basis. RESA personnel identified ways they helped the principals conceptualize goals of the PLC. Finally, RESA personnel also helped principals to determine their roles with the PLC.

Finding ways to ensure that PLCs were scheduled on a regular basis was a role that the RESA personnel embraced. Establishing time for teachers to meet is a critical step in establishing PLCs (Collinson & Cook, 2003; Drago-Severson & Pinto, 2006; Hord, 1998). As they worked with principals, the RESA specialists supported establishing collaboration to take place during the school day.

Guiding principals in moving from focusing efforts on individual teachers to focusing on learning for their organization was a significant role for the RESA personnel. The understanding that learning for the organization was more strategic than learning for an individual teacher was congruent with current literature on organizational learning (Al-Alawi, Al-Marzooqi, &

Mohammed, 2007; Collinson, Cook, & Conley, 2006). Cook and Brown (1999) contended that "we have inherited a cultural predilection for privileging the individual over the group" (p. 3). One aspect of shifting from individual learning to organizational learning meant that individual learning would be intentionally disseminated at the organizational level (Al-Alawi, Al-Marzooqi, & Mohammed, 2007; Collinson, Cook, & Conley, 2006). This study found that RESA personnel assisted principals in conceptualizing organizational learning goals which translated to school improvement goals for the PLCs. The RESA personnel were instrumental in helping principals understand the importance of the shift from individual learning to organizational learning.

Based on the literature review for this study, there were four roles for the principal to consider when working with PLCs. The first role encompassed the relationships that the principal established with the teachers. The literature was consistent: the principal must establish a culture of support and shared leadership (Drago-Severson, 2007; Hord, 1998; Griffith, 2003; Williams, 2006). Hord (1998) further explained shared leadership when she asserted that the principal "accepts a collegial relationship with teachers, shares power and decision-making" (p. 5). There was evidence throughout this study that the RESA personnel encouraged principals to be present, but not leading the PLCs. Yet, this study found that often principals were not collaborating with the PLCs and therefore the goals of the PLCs faltered. This finding would be congruent with current research, which supports the success of PLCs is greatest when principals are collaborative and supportive (Griffith, 2003; Hord, 1998; Williams, 2006).

A second role of principals working with PLCs was to focus the school's efforts. Wiley (2001) postulated that simply creating professional communities was not enough for school improvement to take place, in addition, the leadership of the school had to be transformational. Wiley (2001) defined transformational leaders as those that "facilitate development of shared

values and beliefs about the school's mission, support actions focused on instructional development" (p. 25). The RESA personnel believed that the principal simply had to be present for the PLC to be successful. During interviews, RESA personnel only reported that they encouraged principals to be present at the PLCs, and suggested they not lead the PLCs.

The third role identified for principals to accomplish when working with PLCs was developing leadership roles for their teachers. Teachers must take a leadership role with PLCs in order to facilitate collaboration (Drago-Severson, 2007; Hord, 1998; McLaughlin & Talbert, 2007). The roles of teacher leaders encompassed both setting the stage for ongoing collaborative dialogue about practice and relationship building (Hipp & Huffman, 2007; Johnson, 2003; Little & Horn, 2007; York-Barr & Duke, 2004). Teacher leaders tend to be teachers who have excellent professional teaching skills, a well-developed philosophy of education, and were in a point during their lives that allowed them to give time to leadership activities (York-Barr & Duke, 2004). In this study, the RESA personnel discussed school leadership teams, and the importance of teachers leading the PLCs, but they never referenced any specific training to develop teacher leaders. During interviews, the RESA school improvement specialists provided no evidence that they helped the principal to identify teacher leaders or what their roles would be with the PLCs.

Using artifacts such as student work samples or observational checklists to focus conversations is the fourth role for principals to reflect upon when working with PLCs. Halverson (2007) argued that different artifacts produce varying levels of impact with PLCs and principals should be aware of these levels of impact and plan accordingly. Principals must think strategically and plan in advance for the intended outcomes (Halverson, 2007). In this research

study, only the RESA participant who had been formally trained on working with PLCs mentioned the use of artifacts as evidence of outcomes.

Conclusion Two: RESA personnel generally provide idiosyncratic and episodic support for PLCs with little or no accountability procedures in effect.

RESA personnel designed and delivered support to PLCs based on the specific PLC's needs in a number of ways. Assistance ranged from idiosyncratic support on long-term projects, such as facilitating year-long studies of differentiation instruction to episodic support involving the collection of data or research for the PLCs. The RESA personnel designed activities for PLCs to use as learning activities and also supported regional conferences to support the learning needs of the PLCs.

Long-term professional learning connected to practice is essential for continuing education of teachers (Garet, Porter, Desimone, Birman, & Yoon, 2001; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). In this study, the RESA personnel provided evidence of long-term interaction with a limited number of professional learning communities. RESA-supported PLCs were either at schools that were identified as low-performing, or where principals had taken the initiative to contact the RESA. The support was provided over the course of one to two years on a monthly basis. The RESAs were not staffed well enough to support all schools.

Absent in the data was whether the RESA personnel were able to determine whether the PLCs accomplished their goals. The RESA personnel discussed setting up PLCs and facilitating PLCs, but they were unable to provide data of the success of the PLCs. In one instance, the RESA specialist believed that absence of the principal caused the PLC to not reach its goals. In another example, the RESA specialist believed the PLC goals were successful simply because

the principal was present. Neither example provided insight to the goal of the PLC and its impact on teacher practice. So, while there was evidence of long-term interaction with a limited number of PLCs, conspicuously absent was the lack of an evaluation plan so that the RESA personnel could determine whether or not the long-term support was effective.

Episodic support for PLCs took place across multiple schools within the RESA regions, on a much larger scale than the long-term support. Generally, a PLC requested support and prescribed how it would take place. In addition to requested support, the RESAs also designed modules that a PLC could use or work through collaboratively. The intent of the modules was to provide new content knowledge to PLC members, and the distribution of the modules was intended to reach across the region. Responding to periodic requests on a school-by-school basis allowed for RESA personnel to provide service to many members.

Another form of interacting with PLCs was providing regional conferences which RESA personnel assumed could enhance the knowledge base of the PLC. The literature on external agency support to schools indicated that simply providing learning events did not translate to changes in practice or professional learning (Fullan, 2005). In addition, the research on professional learning suggested that professional learning would benefit from accountability mechanisms (Opfer, Henry, & Mashburn, 2008). The participants believed the regional conferences made a difference for PLCs but evidence of impact was absent. This study found that there were little or no accountability procedures in place on the part of the RESAs.

Conclusion Three: RESA personnel were unable to provide sufficient support to remove the communication barriers within PLCs.

Throughout the interviews, it was increasingly clear that the RESA personnel believed that true collegial collaboration was missing in the PLCs. In some cases, the RESA specialists

observed that the collaborative purpose of the PLC was missing and at times, they believed the teachers in the PLCs were not as willing to share their knowledge. The research on PLCs was clear that meaningful collaboration was essential for the PLC to make an impact on student achievement (Grossman, Wineberg, & Woolworth, 2001; Mason, 2003; Scribner, Cockrell, Cockrell, & Valentine, 1999; Strahan, 2003). At one point, Rosie, a participant in the study, explained that examining student work was not taking place, and she declared that "we're just not there yet." Grossman, Wineberg, and Woolworth (2001) asserted a true professional community arises when teachers "recognize the interrelationship of teacher and student learning and are able to use their own learning as a resource to delve more deeply into issues of student learning, curriculum, and teaching" (p. 989). Without genuine collegial collaboration, the PLCs were implemented but not actually meaningful.

The literature review for this study suggested that when individual teacher leaders were trained to facilitate conversations, meaningful collaboration was enhanced (Andrews & Lewis, 2007; Hipp & Huffman, 2007; Hord, 1998). The RESA participant who received formal training to work with PLCs was the only participant in the study who suggested using protocols to enhance conversations within the PLC. When referencing protocols, the trained participant explained how the entire PLC should use the protocols, yet the participant never focused on individual teacher leader training. There was no evidence in this study of RESA personnel explicitly training teacher leaders for the development of conversations.

Using data to focus the conversations of PLCs was considered integral to positively impacting student achievement (Mason, 2003; Strahan, 2003). When data were used to focus conversations, it was done to answer specific questions that attached the data to student learning and subsequently to teaching (Mason, 2003; Mokhtari, Thoma, & Edwards, 2009). This study

found that RESA personnel provided data to PLCs, but there was no evidence that PLCs subsequently created an action plan for their goals based on the data. Simply providing analyzed or collected data for the PLC did not ensure that the PLC would focus its conversations. The RESA personnel had not explicitly trained teacher leaders to lead data-based discussions.

Conclusion Four: Due to its relative advantage, RESA personnel are willing to adopt PLCs as a method of professional learning, but PLCs are incompatible with the existing workload of RESA personnel. RESA personnel were also limited in their trialability of PLCs.

Perspectives of RESA personnel toward PLCs were analyzed using the attributes of an innovation theoretical model proposed in diffusion theory (Rogers, 2003). The RESA personnel considered the PLCs to have a high relative advantage since they believed that PLCs were effective for school improvement. Other reasons for the PLCs to have a high relative advantage included improved instruction and positive changes to the school culture, both of which the ESA personnel had witnessed and attributed to the success of PLCs. Yet, the PLCs were incompatible with the competing work demands experienced by the RESA personnel. The specialists believed there was great complexity in establishing meaningful collaboration. There was little or no trialability with PLCs, and this diminished the possibility of ESA personnel choosing to continue to work with PLCs.

The attributes of an innovation in diffusion theory (relative advantage, compatibility, observability, trailability, and complexity) are all factors in adoption (Rogers, 2003; Sahin & Thompson, 2006). The observable outcomes of the PLCs were: a shift to a more positive culture and improved instruction. Due to the value placed on the outcomes by the participants, this

study classified the observable outcomes as relative advantages. Classifying the outcomes as advantages, PLCs proved to have a high relative advantage.

Rogers (2003) declared that relative advantage was one of the "strongest predictors of an innovation's rate of adoption" (p. 233). In this study, RESA personnel only outlined one disadvantage to working with PLCs, which was the amount of time necessary to work with PLCs since interaction meant working with smaller numbers of teachers. Yet, this study noted a reported decline in interactions with PLCs. The decline was due to growing budget restraints which caused the RESA personnel to take on more roles and responsibilities. A review of the state budget indicated that beginning in fiscal year 2011, the RESA funding allotments from the state decreased by over 50%. See appendix I for a recent history of the state funding of RESAs. Ultimately, the increased job duties that accompanied the austerity reductions rendered PLCs incompatible with existing work responsibilities. So, in this study, the determining factor of non- adoption was a lack of compatibility with existing demands.

The increased demands on their time also caused the work of the ESA personnel to be fragmented and unfocused. The RESA personnel reported working on divergent tasks such as curriculum support for a specialized field as well as support for teachers earning their teaching certificate in an alternate pathway. The personnel also reported working on a newly developed role, leading the Georgia Assessment of Performance on School Standards at a time when budget constraints were reducing staff numbers. This shift to providing a vast quantity of services to member systems limited the use of the model of PLCs for school improvement. In the past, ESAs have been focused on serving efficiently versus effectively (Baldwin, Carmody, &Talbott, 2010; Stephens & Keane, 2005). The findings of this study concur with the existing research which is the goal of ESA personnel was to provide efficient service to member systems.

Efficient service in this context meant that many schools would be influenced by school improvement initiatives. Working with PLCs was not compatible with the RESA personnel's workload or their organizational goals to serve member systems.

Levine (1980) presented four stages to implementation of an innovation: 1) recognizing a need for change, 2) planning for the change, 3) implementing the innovation, and 4) institutionalizing the innovation. The RESAs are now at the stage of institutionalizing the innovation of PLCs. Levine (1980) argued that for an innovation to be implemented, its goals, norms and values had to be congruent with that of the host organization. Obviously the time demands of PLCs were incompatible with the values of the RESA school improvement specialists which were influenced by the need to serve as many member schools as possible and to fulfill multiple roles.

This study also found there was little or no trialability of PLCs for the RESA personnel. Limited trialability would lessen the likelihood that PLCs would be adopted (Rogers, 2003). Only one participant in the study reported receiving formal training for PLCs. The participant with formal training was the only one who mentioned the use of protocols to enhance collaboration and the use of artifacts to ensure outcomes. Trialability would have enabled the RESA personnel to experiment with PLCs prior to implementation.

In addition to a lack of training, the RESA personnel reported limited engagement with their own PLCs within RESA. The RESA personnel did not participate in their PLC due to their workload and the lack of organizational support. RESA directors from the three participating RESAs did not ensure the time requirements necessary for regular collaboration were allotted. By not engaging in PLCs, trialability was reduced. The limited trialability decreased the possibility of RESA personnel adopting PLCs.

Implications

There were three distinct issues identified in Chapter One that ESAs face as they work to transition their practice to supporting PLCs. First, there is little or no research to guide their efforts as they transition as an organization. Second, the existing literature on PLCs does not clearly identify the roles that external support agents take with PLCs. Finally, a theoretical framework was needed to guide the analysis of ESA work in order to identify existing training needs.

This study on how RESA personnel support PLCs and the perspectives they have towards PLCs contributes a deeper understanding of how to support PLCs in schools for both school leaders and ESA personnel in general. The conclusions of this study have implications for theory and research, as well as practice and policy for both school-based educators and ESA personnel.

There are organizational practices to consider as adoption of an innovation takes place. There are training needs for both ESA personnel and professional learning that ESAs should provide for school-based leaders. In addition, this research extends the knowledge-base regarding how external agencies support schools, and raises an awareness of ESAs and the roles they perform within education.

Implications for Theory and Research

This research study used the diffusion theoretical framework of attributes of an innovation to determine perspectives of adopters of an innovation. Rogers (2003) postulated that only about one percent of all diffusion studies concentrated on the attributes of an innovation. This study expands use of the attributes and does so through a qualitative methodology. One of the criticisms of diffusion studies has been that there is an over reliance on quantitative surveys

(Rogers, 2003). Using a qualitative stance, this researcher was able to pinpoint specific views regarding the innovation, such as the incompatibility of the time demands of PLCs with the existing workload of the participants. This study has shown that use of the attributes of an innovation framework in a qualitative study broadened understanding of ESA personnel perspectives regarding PLCs. The attributes of an innovation framework can and should be used in qualitative studies in order to determine perspectives in place of surveys that are dependent on a priori knowledge.

This study contributed to the research tradition by using diffusion theory in education focused on a process rather than an innovation. When Rogers (2003) outlined the nine major research traditions for diffusion theory, he estimated that only eight percent of studies were in education. The literature review for this study found that in recent years, the use of diffusion theory in education was most widely used to describe the adoption or non-adoption of technology. For example, Ely (1990) used diffusion research as well as ideas generated from several school leaders to devise his list of conditions needed for technological change. This study on ESAs used an aspect of diffusion theory to understand the perspectives of ESA school improvement specialists toward an innovation that was intangible, a process, rather than a technology.

Use of the diffusion theory allowed the researcher to stratify perspectives during the analysis and look for deeper meanings. While the theory aided in the analysis, additional insight was needed to form the conclusions, so both Guskey (2000) and Levine (1980) were used to explain what was taking place. There are many processes that practitioners in schools follow in education. Frequently only outcomes are examined. Since the processes are carried out by

people, use of diffusion theory to analyze their perspectives would enhance understanding of the processes and provide insight into how to better support processes set up for improvement.

Finally, a third contribution of this study was that it added to the scant existing research on ESAs. Very little is known regarding what role ESAs perform in relation to schools and even less is known regarding how they carry out their role. A goal of this study was that a description of how ESAs work with PLCs would be developed. The participants provided numerous examples of their work with PLCs. This study extended the knowledge base of how ESAs interact with schools, negotiate their role, and carry out their work. This study found evidence that ESA personnel continue to strive toward efficiency of services by sponsoring large-scale, ESA-wide events which is congruent with existing research (Baldwin, Carmody, & Talbott, 2010; Stephens & Keane, 2005). In contrast, the absence of accountability practices indicates that ESAs, while striving for vast service offerings, appear to do so at the expense of effectiveness.

Implications for Practice and Policy

This study makes several contributions for both practice and policy for ESAs. In terms of practice, this study highlighted the need for ESA personnel to fully define and understand the role of the principal with PLCs. The literature review for this study established four roles for principals to consider when working with PLCs: establish a culture of support and shared leadership, (Drago-Severson, 2007; Griffith, 2003; Hord, 1998; Williams, 2006), identify and support teacher leaders, (Drago-Severson, 2007; Hord, 1998; McLaughlin & Talbert, 2007), focus the school on goals, (Mason, 2003; Wiley, 2001) and use artifacts strategically (Halverson, 2007). The evidence of this study indicated that while ESA personnel guided principals to use PLCs for professional learning and to be present for the meetings, there was a gap between

research and practice. The principal's work could be enhanced if training on leading transformation was provided. Transformative leadership would include how to interact with PLCs, how to identify and develop teacher leaders, and how to use artifacts to guide the work of the PLC. ESAs should develop training specifically for principals on the roles identified in research studies in order to strengthen existing support for PLCs.

In addition to training for principals on PLCs, this study suggests training is needed for teacher leaders. There was evidence offered in this study that the PLCs encountered communication barriers. Teacher leaders hold great potential for breaking communication barriers when they receive proper training (Andrews & Lewis, 2007; Hipp & Huffman, 2007; Hord, 1998). Numerous research studies indicated that PLCs held great potential for success when teacher collaboration existed (Borko, 2004; Louis & Marks, 1998; Mason, 2003; Strahan, 2003). Without teacher leaders, the ESA personnel encountered great difficulty establishing authentic collaboration. By providing training and guidance for teacher leaders over time, the ESA personnel could work toward institutionalization versus merely implementing PLCs. York-Barr and Duke (2004) identified three themes for teacher leader development: "continuing to learn about and demonstrate advanced curricular, instructional, and assessment practices; understanding the school culture and how to initiate and support change in schools; and developing the knowledge and skills necessary to support the development of colleagues" (p. 282). Given the research indicating the importance of developing teacher leaders for enhanced communication, an essential step in providing support to setting up PLCs would be to identify teacher leaders, their roles, and provide training for them.

A third implication of this study was that it underscored the need for training of ESA specialists on PLCs. Only one of the specialists, the one that had received formal training,

referenced the need for protocols and artifacts to be used with the PLCs. Through proper training, the ESA personnel could expand their support for PLCs, and include a greater emphasis on principal and teacher leader training. Training would lessen the complexity of collaboration factor for ESA specialists, provide the specialists with tools to overcome the collaboration barrier, and increase trialability opportunities. Formal training on PLCs would have also enabled the ESA personnel to have a common definition and a stronger understanding of the goals of PLCs. ESA personnel must be trained in order to understand the roles of all entities involved with PLCs, and to utilize PLCs to better carry out school improvement efforts.

In addition to initial training for ESA personnel, this study uncovered the need for ongoing training of ESA specialists. Evidence presented in this study indicated that there was a lack of organizational support for ongoing PLCs at the ESA level and that the ESAs were under-funded and therefore unable to provide their own ongoing professional learning. Participation in their own PLCs would increase trailability experiences and enable ESA personnel to understand how PLCs change practice. ESA personnel should participate in their own PLCs to expand their own knowledge base on the ever-changing issues that arise in professional learning of teachers, as well as to sharpen their own facilitation skills.

Another implication for of this study is relevant to ESA organizations when they implement any new innovation. The ESA must spend time to plan accordingly and consider all aspects of the new innovation. Levine (1980) argued that the second stage of implementing a new innovation was to plan for its implementation. The fact that there was little or no training provided to the RESA specialists indicated there was little planning in place to support this innovation. Evidence in this study suggests that support for PLCs has dwindled due to competing demands and the complexities associated with PLCs. Had the ESAs planned long-

term for implementation, then perhaps they would have considered how to plan for institutionalization. A continued focus on the goals of supporting PLCs and ongoing training would support institutionalization (Levine, 1980).

The findings of this study also illuminated the need for ESAs to consider methods for evaluating the effectiveness of their services. The RESA consultants all suggested that the presence of the principal made the PLC successful, but they did not connect school improvement goals to PLCs. ESA personnel should outline the school improvement goals of the PLC and then determine what constitutes evidence of success. Guskey (2000) argued that evaluation data should be planned prior to implementation of the professional learning. By planning for evaluation, ESA personnel would focus better on goals and strengthen their support efforts. Ultimately, ESA personnel should be working toward effectiveness of services versus efficiency, or serving many schools, and implementing accountability practices would be a critical step toward this transformation.

Finally, there is also a policy implication for educators and legislators. Limited budgets caused increased workloads of staff members to the point that they are unable to adequately support PLCs. At this point the RESAs have taken on more responsibility, such as the Georgia Assessment of Performance on School Standards, yet the staff member number sizes at the RESA are shrinking. The increased roles of ESA personnel with diminished staff numbers have caused fragmented support for schools. Increasing staff numbers at RESA sites would enable the RESAs to better support the schools.

Another reason to increase funding for RESAs is to provide professional learning to teachers in a more cost-efficient manner. It is more effective for teachers to participate in job-embedded learning (Garet, Porter, Desimone, Birman, & Yoon, 2001) so therefore, it follows

that professional learning would also be more cost efficient. PLCs reduce the need to have teachers leave the building for high-cost conferences. Funding stakeholders should look at ways to increase staff member numbers at RESAs to increase the number of quality learning opportunities for teachers.

In summary, one of the problems identified in Chapter One was that there was very little research to guide ESAs as they transformed their practice to support PLCs. This research provided insight to specific ESA personnel training needs, and to training that should be developed by ESAs as they continue to work with PLCs. In addition, this research illuminated suggested practices such as planning for long-term institutionalization of an innovation. Simply implementing a new innovation does not guarantee that it will be implemented with fidelity.

Future Research

The findings of this study suggest areas for future research. First, this study selected three diverse RESAs from Georgia in an attempt to understand the phenomena in different contexts. Expanding this research beyond Georgia ESAs is an area of study to consider. Georgia ESAs are a limited group and the Georgia ESAs have newly acquired budget constraints that other ESAs may not be undergoing. In addition, the Georgia ESAs have adopted a set of standards calling for the support of PLCs. To truly understand ESAs and how they interact with PLCs, it would be important to consider multiple contexts. Numerous perspectives would increase the understanding of the support offered and provide additional approaches to offering support. Future studies of ESA work with PLCs might also benefit from including the perspectives from stakeholders such as principals and teachers. A broader analysis would occur when the perspectives of many are included.

This study did not collect any observational data. In order to produce rich descriptions of the work of ESAs, it would be important to collect observational data. ESAs are greatly understudied, and providing readers with detailed anecdotes of the roles they perform in school improvement would enhance public understanding. Observational data would augment the findings and provide better insight.

One finding of this study was that there appeared to be a lack of accountability practices in place for the Georgia ESAs. This outcome was determined due to a lack of evidence, although this study was not focused on the issue of accountability. Another area of future study to be explored is the accountability practices of ESAs. Studying the accountability practices could lead to an enhancement and better understanding of how to evaluate professional learning of teachers, which is an ever-changing, expanding field.

The inconsistency of principal support for PLCs was evident throughout the analysis of this research. A study that addresses how ESAs support principals in their leadership roles from the perspective of a principal would possibly illuminate support needs of principals and ESA school improvement specialists. In addition, a study may provide insight on how to collaborate with principals to ensure that ESA personnel and principals work toward the same goal. ESAs need research to guide their work.

Another finding from this study was that support for PLCs from the Georgia RESAs is dwindling. According to Levine (1980), organizations go through several iterations of terminating an innovation. The need for the innovation resurfaces, and each time, the organization does not shift its boundary to fully institutionalize the innovation (Levine, 1980). Studying how ESAs interact with PLCs over a long-term may provide greater insight into what support is necessary for an innovation to be institutionalized.

Finally, in Chapter Two it was evident that there was very little research on ESAs in general. The current studies were situated in simply the numbers of schools served or the types of professional learning provided. Robust, detailed studies on how and what ESAs do may contribute to greater clarity of purposes and organizational goals. In addition, research will create public awareness of ESAs.

Chapter Summary

This chapter presented a summary of the research study, discussion of the conclusions, implications for theory and practice, and recommendations for future research. There were four conclusions found in the data: 1) ESA personnel facilitate the organization and conceptualization of PLCs when schools begin the process of forming PLCs, 2) ESA personnel generally provide idiosyncratic and episodic support for PLCs with little or no accountability practices, 3) ESA personnel were unable to provide support to remove the communication barriers within PLCs, and 4) due to its relative advantage, ESA personnel are willing to adopt PLCs as a method of professional learning, but PLCs are incompatible with the existing workload of ESA personnel and ESA personnel were limited in their trialability of PLCs.

ESAs perform a number of vital services in education ranging from ongoing professional learning of teachers to pathways for alternative teacher certification. ESA personnel were willing to support PLCs, and were doing so on a limited basis. Yet, based on this study, ESA personnel are not likely to increase their efforts to broadly supporting PLCs due to a lack of training, trialability, time, and organizational support. If PLCs are to be supported as an innovation by ESAs, these conditions will need to be significantly changed and accountability practices will need to be implemented.

While ESAs ensure quantity of services to member school systems, it is not enough. There needs to be a shift from quantity of services to effectiveness of services. ESA personnel

must work to shift their perspectives on their roles from simply implementation to institutionalization of school improvement innovations and to a new level of commitment for training for ESA personnel. These types of changes call for increased funding in order to continue the level of services they have provided in the past and to improve their work. ESAs should strive to earn a reputation of quality through outcome-based measures in order to demonstrate their cost-effectiveness.

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APPENDIX A

Georgia Regional Educational Service Agency by the Numbers

RESA	Number of School Improvement Specialists	Number of Systems served	Number of Schools served
Central Savannah River Area	7	12	127
Chatahoochee/Flint	7	15	101
Coastal Plains	10	12	73
First District	8	18	186
Griffin	6	8	138
Heart of Georgia	5.5	10	39
Metro	10	17	753
Middle Georgia	7.75	7	107
North Georgia	3	7	97
Northeast Georgia	6	13	114
Northwest Georgia	7.5	16	168
Oconee	6	7	28
Okefenokee	6	8	48
Pioneer	7.6	14	108
Southwest Georgia	19	15	86
West Georgia	4.5	8	99

APPENDIX B

Participant Selection Survey

Dear RESA Colleague,

Within the next few months, I will begin my dissertation study which explores how RESAs interact with school or system-based professional learning communities (PLCs). So that I can learn more about what is happening in your RESA with respect to PLCs, I am interested in finding colleagues who are willing to assist me in my study through participating in interviews, an observation, and sharing of documents.

If you are willing to be considered as a study participant please complete this survey no later than **Dec. 1, 2011.** I will contact you if you are chosen for the study. There are no right or wrong answers on this-survey. Individual responses will remain confidential and only aggregate data will be reported.

The survey link is: http://www.surveymonkey.com/s/QTDZCRY

Thank you in advance for your help. Should you have questions, please contact me.

Sincerely,

Martie Hutchens
Elementary Math Support
Northeast Georgia RESA

Your Name:

Your Job Title:

Your RESA:

1. Thinking about your work in a typical month, what **major categories** constitute your work? Could you provide a rough estimate of the percent of time you devote to each category? (Not all lines may be needed to complete this table- examples of major categories might include GAPSS analysis, or Assessment Facilitation.)

Category of Work	**Percent of Time**
TOTAL	**100%**

Questions 2 and 3 request that you describe your interactions with school-based or system-based PLCs. Select the option that best describes your current interactions.

2. I work with **establishing** school school-based or system-based PLCs…

Never
Very Little (1-3 times per year)
Some (3-5 times per year)
Frequently (More than 5 times per year)
On a regular basis (On a monthly or more often basis)

3. I work with **existing** school school-based or system-based PLCs…

Never
Very Little (1-3 times per year)
Some (3-5 times per year)
Frequently (More than 5 times per year)
On a regular basis (On a monthly or more often basis)

APPENDIX C

Interview One Protocol

Introduce myself to the participant and have the participant select a place for us to conduct the interview. Explain that my purpose for today's interview is to better understand how they are working with PLCs, as well as their experiences and opinions regarding this innovation. There are no right or wrong answers. Ask for permission to audiotape the interview and explain that I will stop the tape if they indicate they would like for me to do so. Explain also that all answers are confidential, and reported with no identifiers attached. Also, explain that the interview will take no more than 90 minutes. Begin the interview by letting the participant know I will be asking some demographic type questions and then I will move into questions regarding models of professional learning and move to their experiences with PLCs. Ask if they have any questions before we begin.

Demographic Questions

1. Tell me about yourself.

2. Tell me about your background in education.

3. What do you see as the goal for education?

4. How do you see your work supporting this goal?

5. What do you see as the role of RESA?

Perceptions of Professional Learning

1. There are different models of educator professional learning, such as workshops during the summer, after school classes, PLCs…which models have you worked with? In what ways and to what extent do these models impact teacher and student learning?

2. How do you define PLCs? What's the purpose of their work?

3. How does this RESA define PLCs?

4. What's your personal experience with PLCs?

5. To what extent does your RESA function as a PLC?

6. What steps has your RESA taken to enable you to support PLCs? What additional support does your RESA need to provide?

7. How congruent was this support to your beliefs regarding PLCs?

8. Describe a time you have observed a PLC in action. In what capacity were you there?

Support for New PLCs

9. What has this RESA offered in the past to school leaders who want to establish school-based PLCs?

10. If a school leader approached you regarding establishing a PLC in his or her school, what course of action might you take?

11. Within the past three years, describe an experience you had working with establishing a new PLC.

12. During that experience, how did you plan your work?

13. What challenges did you encounter as you worked with establishing the PLC?

14. What changes did you note in the school as a result to a move to a PLC structure?

15. Describe what you are currently doing in terms of working with establishing a new PLC.

Support for Existing PLCs

16. What challenges do you encounter when working with a school or system-based PLC?

17. Where do you find support to overcome these challenges?

18. In what ways does this RESA support established school-based PLCs?

19. In what ways does this RESA support leaders in established school-based PLCs?

20. If a principal approached you to ask about working with an established PLC, what steps might you take?

21. Describe a time you had working with an established PLC.

22. During that experience, how did you plan your work?

23. Using that example, what advantages are there to using PLCs as a vehicle for school improvement?

24. Describe your current efforts with existing PLCs.

APPENDIX D
Interview Questions for Subsequent Interviews
Interview 2 Protocol for Alice

- Past experience as a principal
- Influence of the State dept.
- You've had experience with a range of models of teacher education, and believe that modeling and peer coaching are some of the strongest models for teacher education
- When you think about PLCs- they always center on the school improvement plan

1. When thinking about a PLC- does it always monitor the school improvement plan?

2. During our last session, you mentioned the work you are currently doing with the Ruby Payne book study. Could you describe your work from last year? What teacher education models did you use and why?

3. How does this RESA evaluate its professional learning offerings? (Could I obtain a copy of any blank evaluation forms?)

4. What challenges does this RESA face as it works toward establishing new PLCs?

5. What challenges does this RESA face as it works toward supporting existing PLCs?

6. At our last session, you mentioned that peer coaching and modeling are the best teacher education models. Why do you find these so alluring?

7. What do you think of PLCs- in terms of their strengths and weaknesses?

8. Thinking about your own work here at RESA…what do you think has made the greatest difference to schools?

9. How has this RESA changed since you began working here?

*** What courses have been offered here at this RESA in the last 3 years? Would that be something I could easily get access to?

Interview 3 Protocol for Alice

1. Could we walk through the documents you're providing and have you explain a bit about each one?
2. How did the RESA visit impact your work? What changes regarding PLCs did you begin to think about?

Interview 2- Gandolph

Member check:

- Prior experience- loved your high school principal role
- View our RESA role as one where we can explicate data, teach teachers
- Feel technology is a turning point for RESAs and education in gender
- Value team work, and "form follows function" in terms of your decisions on which educator model to use
- At this point, you spoke heavily about the DuFour model of a PLC- an entire school working together with the goal of improving education for students- but you felt like this original model had morphed into different definitions, quite varied

1. The last time we talked, you mentioned some existing ideas in schools regarding PLCs…how does this RESA define PLCs? (Do the standards impact this definition at all?)

2. What's your personal experience with PLCs?

3. To what extent does your RESA function as a PLC?

4. What steps has your RESA taken to enable you to support PLCs? What additional support does your RESA need to provide?

5. How congruent was this support to your beliefs regarding PLCs?

6. Describe a time you have observed a PLC in action. In what capacity were you there?

Support for New PLCs

7. What has this RESA offered in the past to school leaders who want to establish school-based PLCs?

8. If a school leader approached you regarding establishing a PLC in his or her school, what course of action might you take?

9. Within the past three years, describe an experience you had working with establishing a new PLC.

10. During that experience, how did you plan your work?

11. What challenges did you encounter as you worked with establishing the PLC? What challenges does this RESA face as it works toward establishing new PLCs?

12. What changes did you note in the school as a result to a move to a PLC structure?

13. Describe what you are currently doing in terms of working with establishing a new PLC.

Support for Existing PLCs

14. What challenges do you encounter when working with a school or system-based PLC? What challenges does this RESA face as it works toward establishing new PLCs?

15. Where do you find support to overcome these challenges?

16. In what ways does this RESA support established school-based PLCs?

17. In what ways does this RESA support leaders in established school-based PLCs?

18. If a principal approached you to ask about working with an established PLC, what steps might you take?

19. Describe a time you had working with an established PLC.

20. During that experience, how did you plan your work?

21. Using that example, what advantages are there to using PLCs as a vehicle for school improvement?

22. Describe your current efforts with existing PLCs.

***New questions that are emerging: What is the role of the state department in this RESA? What about stakeholder perceptions…what do they want to see the role of this RESA as?

Interview 3 Protocol for Gandolph

Member check: You spoke about the positive effect of the school keys and the DOE. You told me about working with a couple of different PLCs and how that went- and some of the challenges you faced. You spoke about the importance of principals guiding as opposed to mandating. You also spoke about a bit of a need for a true PLC to be established here at RESA and since it was not done formally, your department did so informally.

1. What do you see as important to our role here at RESA?

2. How do PLCs fit into our work at RESA?

3. The last time we talked you mentioned some successful elementary PLCs that you had worked with. What was their goal? How did you feel about that goal?

4. How do RESAs interact with PLCs?

5. What do you see as the role of PLCs with this new rollout?

6. Suppose you were a principal again…and you wanted to ensure that all teachers are using Marzano's strategies. How would you go about training your teachers?

7. What value do teachers receive from meeting as a PLC?

8. The last time we spoke, you told me how you guided principals. What work do you do with teacher leaders to establish PLCs?

9. What do you look for in an effective PLC? (I really need to know how you would define that.)

10. You are 49% now and last time you mentioned you don't have time for PLCs. Talk about that for just a moment. If not you, then who?

Interview 4 Protocol for Gandolph

The last time we were together, you mentioned how you had at one time, when there were more people here at this RESA, the beginnings of a PLC. You managed though to have some informal PLCs going in SI. You talked about how important this is for our own growth.

You also talked about the new work of leadership, and how collaboration and how to facilitate is- essentially a PLC mode is central to that work. You moved back to several times where you talked about the complexity of establishing collaboration.

1. How is going with *specific school where a PLC was begun a couple years ago*?

2. How about *specific school where Gandolph had mentioned some interest in PLCs*?

3. Why do you think the principal in *specific school where Gandolph had talked about previously* chose to do an after school workshop as opposed to a PLC? (*workshop because of how you described it)

4. Could we walk through some of the documents you're providing. Try to explain them to me as if I am not a RESA colleague, and also why you feel these might be helpful for me to understand your work.

Interview 2 Protocol for Rosie

- Your job has really morphed- you have lots of different roles
- You loved the training your RESA did at Adlai Stephenson HS

- You feel like technology is really making an impact on education
- You feel PLCs are complex- it's hard to get the ball rolling in a school and to foster really collegial collaboration
- You described a time you worked with a school that began a PLC- and your role was to teach collaboration

Support for New PLCs

1. What has this RESA offered in the past to school leaders who want to establish school-based PLCs?

2. The last time we spoke, you mentioned that you were often a counselor for principals. If a school leader approached you regarding establishing a PLC in his or her school, what course of action might you take?

3. Within the past three years, describe an experience you had working with establishing a new PLC.

4. During that experience, how did you plan your work?

5. What challenges did you encounter as you worked with establishing the PLC? (Last time you mentioned establishing collaboration was tough.)

6. What changes did you note in the school as a result to a move to a PLC structure?

7. Describe what you are currently doing in terms of working with establishing a new PLC.

Support for Existing PLCs

8. What challenges do you encounter when working with a school or system-based PLC?

9. Where do you find support to overcome these challenges?

10. In what ways does this RESA support established school-based PLCs?

11. In what ways does this RESA support leaders in established school-based PLCs?

12. If a principal approached you to ask about working with an established PLC, what steps might you take?

13. Describe a time you had working with an established PLC.

14. During that experience, how did you plan your work?

15. Using that example, what advantages are there to using PLCs as a vehicle for school improvement?

16. Describe your current efforts with existing PLCs.

Ask about the influence of the state department and how teacher/stakeholder perceptions shape their work.

Rosie
Interview 3

Member check: You mentioned there are collaborative teams meeting nowadays, but sometimes the purpose is not clearly defined. You mentioned how you would begin PLCs with school improvement teams and then eventually introduce protocols. You spoke about the importance of principals getting input. (In fact, may I get a copy of a survey you may have used?) You also spoke about the importance of establishing relationships and keeping them going. You talked about the change in culture at schools as a result of involvement with PLCs.

1. What do you see as important to our role here at RESA?

2. How do PLCs fit into our work at RESA?

3. The last time we talked you mentioned the importance of bringing back an artifact- as part of a performance check. Is that integral to PLCs?

4. How do RESAs interact with PLCs?

5. What do you see as the role of PLCs with this new rollout?

6. Suppose you were a principal …and you wanted to ensure that all teachers are using Marzano's strategies. How would you go about training your teachers?

7. What value do teachers receive from meeting as a PLC?

8. The last time we spoke, you told me how you guided school improvement teams. What kind of quality control is there to ensure that PLCs are effective?

9. What do you look for in an effective PLC? (I really need to know how you would define that.)

10. You mentioned last time a 5 step protocol that you teach School Improvement Leadership Teams SILT teams. Can you explain those 5 steps to me?

11. What is the role of a principal or other administrators with PLCs?

12. What about your RESA- you told me at the first interview that you function as a PLC. Can you describe one of those in detail?

Rosie Fourth Interview

1. As you prepare for an upcoming RESA standards visit, what discoveries have you made regarding your practices with PLCs?

2. . Could we walk through some of the documents you're providing. Try to explain them to me as if I am not a RESA colleague, and also why you feel these might be helpful for me to understand your work.

APPENDIX E

Timeline for Data Collection and Analysis

Month	Research Activities	Data Sources
May and June, 2011	• Submit prospectus to dissertation committee and defend • Submit IRB proposal	
November, 2011	• Send selection survey to possible participants • Select participants for study	• Participant A- Little or no interaction with PLCs • Participant B- High level of interaction with establishing PLCs • Participant C- High level of interaction with existing PLCs
January 2012	• First interviews with participants A, B, and C • Transcribe interviews • Search for emerging themes • Develop questions for subsequent interviews • Conduct member checks from prior interview during each interview	• Audiotapes of interviews • Transcribed notes and analysis • Member check outcomes
February 2012	• Second interviews with participants A, B, and C • Transcribe interviews • Search for emerging themes • Develop questions for subsequent interviews • Conduct member checks from prior interview during each interview	• Audiotapes of interviews • Transcribed notes and analysis • Member check outcomes
March 2012	• Third interviews with participants B, and C • Transcribe interviews • Search for emerging themes	• Audiotapes of interviews • Transcribed notes and analysis

	• Develop questions for subsequent interviews • Conduct member checks from prior interview during each interview	• Member check outcomes
April 2012	• Fourth interviews with participants B, and C • Third Interview with participant A • Transcribe interviews • Search for emerging themes • Develop questions for subsequent interviews • Conduct member checks from prior interview during each interview	• Audiotapes of interviews • Transcribed notes and analysis • Member check outcomes
April 2012	• Begin document analysis • Themes noted • Connections to interview themes • Conduct member check after third interview	• Documents and notes regarding documents • Member check outcomes
June, July 2012	• Telephone call member checks with participants B and C	• Member check outcomes
August 2012	• Telephone member check with participant A	• Member check outcomes

APPENDIX F

Documents that Study Participants were Invited to Share

Document	Who or how created	Possible data
End of course satisfaction survey	Educators participating in professional learning complete at the end of the professional learning	The types of questions on the survey indicate the types of courses or professional learning the RESA provides
Any documents that are used for course evaluation	Educators participating in professional learning complete at the end of the professional learning	The data indicate the types of courses or professional learning the RESA provides
RESA pulse check questions	Questionnaire sent to various RESA stakeholders mid-year for a comprehensive feedback on overall services offered	The types of questions asked indicates the types of services provided
Results of their most recent RESA standards for service visit- strand 2 (addresses PLCs)	A site visit uses the RESA standards for service as a guide to evaluate the RESA. There are specific standards that address PLCs	***Secondary source** Provides insight into how others perceive the work of the RESA in the PLC area
Documents used for strand 2 assessment during most recent RESA standards for service visit	Members of the RESA staff *Could include many different forms of documentation	Provides insight into the work of the RESA in the PLC area
Course offerings for the last 3 years	Usually available as an online sign up tool	The models of professional learning the RESA provides
Products from PLCs	Members of PLCs	The type of work PLCs are conducting
Schedules from PLCs- when they meet and topics	Leadership of PLCs	The type of work PLCs are conducting

APPENDIX G

Codes

1. Explaining experience prior to RESA: This is when the participant talks about experiences that are work or school-related prior to their job at RESA. For example in Gandolph's interview: *I graduated high school in 1969 and was going to be an aerospace engineer at the University of Maryland, was my first college. I graduated in Maryland and I had actually tried to get into the Naval Academy and got to the part where they give you a physical to see if the Congressman will appoint you.*

2. Proud Fact: Little tidbits about the participant's life that he or she is proud of, usually has to do with morals or values. Example: *...met my wife who is my wife now. We've been married 33 years, met her there.*

3. Conversation: Sidebars, interesting facts that are not necessarily part of previous work. Example: *Strangest interview I ever had in my life. He said it would be an hour. It went exactly an hour. I said two words.*

4. Reflection: When a participant takes a moment to reflect back on his or her past work; or when a participant shares thoughts about how his or her career could have been different.

5. Values Teamwork: References to positive teamwork experiences. Example: *we would have team meetings every Tuesday morning and we would discuss every aspect of what was going on in the school, and what we needed to do. It was a great learning opportunity.*

6. Implementing change takes time: When a participant references that plans need to be long-term or that change takes time.

7. Lack of Relevance: When a participant describes how teachers do not understand how the PLC fits with the goals of the school.

8. The Role of RESAs: Ideas on what RESA should be doing…Gandolph example: *And if you take that as the next step, well the next step would be teaching experienced veteran teachers and principals how to be better veteran teachers and better principals. And who in Georgia is poised to do that – RESAs ought to be.* OR whenever the role of RESA is expounded upon, such as RESAs have no authority in a school

9. How RESA uses Data- Examples of how RESA has used data with schools.

10. Goal of Education: Participant describes what education is or should be trying to do.

11. Technology: How technology is changing the face of education.

12. Experience with teacher education: Examples of models of teacher education that have been used by the person.

13. Defining PLCs: Describing what a PLC should be or is, Gandolph example: *DeFoors says it was a faculty and the faculty studied together, talked together, collaborated together to understand certain things. And it could be a book study, and then you implement those things. It could be a conversation and then you implement those things.*

14. How a PLC Functions: When a participant describes what an actual PLC does in a school or at their RESA. For example Rosie said: *I work really heavy with PLCs at, uhm, for example,*

Middle school and we learned how the protocols and how to work as a PLC. And, as they worked with it, they kind of got the idea the PLC- well then they started, they evolved into more task-oriented PLCs where they would take issues that were not working very well in the school and tackling those issues. That has even evolved now to where they want people for the outside to come in and evaluate certain areas of their school and their school improvement process.

15. Value of a PLC: Instances provided that indicate a PLC model is valued or not valued.

16. Value of a workshop: Instances provided that indicate a workshop model is valued.

17. Goal and process guide educator model decisions: Why a given model is chosen for teacher education.

18. Need for a skill set to work with a variety of teacher education models: When a participant explains that RESA personnel need a variety of tools to use.

19. Unable to determine if professional learning works- How professional learning is evaluated does not really tell the entire story.

20. Role of a principal: Role of a principal working with a PLC.

21. Experience as a principal: Examples of the work that a participant did when employed as a principal.

22. RESAs lack funding: Any instance where the participant mentions a funding or staffing issue.

23. PLC training: Examples of any formal training the participant had on PLCs.

24. State Department provided PLC Training: Participants referenced when the state department came to the RESA and provided training to principals about PLCs 6 years ago.

25. Teacher perceptions of professional learning: Alice explains that in the GAPSS, teachers seem to believe that if they don't leave for professional learning, then they haven't experienced it.

26. Importance of our own PLC: When participants discuss why they should have their own PLC.

27. Identifying support needs: When a participant identifies additional support needed for his or her own growth of understanding of PLCs and how to manage them.

28. Determining why support is not in place: Examples of why participants believe support is not happening at the RESA level.

29. Supporting existing PLCs: Examples of the support provided to schools.

30. Education is Changing: Participants describe how education is changing.

31. Complexity of Collaboration: Talking about the downside of collaboration- how difficult it is to initiate: Rosie: *Uhm, one interesting thing that I am finding that through all of this that we're having problems with is collaboration.*

32. Value of coaching model: Participant describes value seen in coaching model.

33. Describing interaction with PLC: When a participant describes when he or she has worked with a PLC or observed a PLC in action.

34. Establishing PLCs: Describing support provided to enact PLCs at schools or in systems.

35. Change within the RESA: Participant describes change in approaches to school improvement or professional learning that has taken place over a number of years.

36. Describing how education is changing: Participant talks about what or how education is changing and/or why.

37. Book Study: When a participant describes his or her role or facilitation of book studies.

38. Describing work with administrators: How the RESA person works with administrators or what role they take…Rosie: *One thing that I have to learn how to do, I am a very much a counselor for the administration.*

39. Member Check: Anytime that I check in for clarification on previous interviews, generally at the opening of the interview.

40. Training to use data: Examples of when the RESA personnel have participated in training to use data.

41. Challenges RESAs face when implementing PLCs: Any time a challenge is brought up that does not deal with collaboration issues.

42. Promoting PLCs: Examples of when the RESA might promote or has promoted moving to a PLC format.

43. Negotiating Work: How the scope of work of the RESA participant is determined.

44. Not Sharing Information: When a participant expresses frustration with teachers not wanting to share with each other.

45. Teaching principals to guide: Examples of when the RESA specialist is working with principals, teaching them to guide versus lead particularly with PLCs.

46. Scheduling PLCs: Describing how scheduling PLCs is a first step when establishing PLCs.

47. Schools wanting to take on too much: Describing one of the problems that RESA school improvement specialists frequently encounter: schools taking on too many initiatives.

48. Determining goals of PLCs: When a participant describes how the goals of the PLC are established.

49. Conceptualizing PLCs: RESA school improvement specialists explain the process of how they help principals [and others] to conceptualize how a PLC might look.

50. Naysayers are a challenge: A problem that school improvement often faces: trying to support a school when there are naysayers on the faculty.

51. No clear plan: Description of why a PLC fails in a school, they often do not have a clear plan.

52. Lacking experience with non-hierarchical management: Experience and training tended to set the principal as leader, which is how the RESA person was trained, but today's leadership values collaboration.

53. Lacking experience with setting up PLCs: Participant explains the pitfalls of setting up a PLC, since he does not have prior experience with the model.

54. Isolation within RESA role: Participant explains that there is just not time for collaboration among RESA personnel.

55. Just Tell Us: When a participant experiences a group of teachers that do not want to collaborate and seem to want to just be told what to do.

56. PLCs are a means to an end: Perception of stakeholders that PLCs are not necessarily professional learning but rather a way to accomplish goals.

57. Looking at student work is problematic: When a participant reflects that looking at student work has not been effective yet.

58. School keys are not describing PLCs: Participant explains that school keys, which are rubrics set forth by the Georgia Department of Education, do not define PLCs with clarity.

59. GAPSS: This is when a participant references facilitating the Georgia Assessment of Performance on School Standards (GAPSS) reviews as part of his or her work at RESA.

60. Supporting PLCs across the region: Participant describes PLC support provided to regional group.

61. Monitoring school improvement plans: Participant discusses how she works with schools so they will monitor their school improvement plans.

62. Leading professional learning: Example of when the participant is describing how he or she leads the professional learning as opposed to facilitating it.

63. Evaluating professional learning: Example of how a participant evaluates professional learning.

64. Getting Principals Involved: Ways that RESA school improvement specialists tried to get principals to interact with PLCs, often to no avail. Also, when participant is frustrated by lack of principal involvement.

65. Choosing the teacher education model: When a participant describes why he or she chose a certain model for teacher education.

66. Relevance of PLC: A participant describes a challenge to the PLC would be helping teachers see the relevance of the work.

67. Need for a reporting tool: A participant explains that PLCs need some sort of formal reporting tool for accountability.

68.Principal Understandings: Participant describes times when principals not understanding the difference between a PLC and a meeting, or the overall goal of establishing PLCs.

69. School-based for cost effectiveness: Participant explains that it is more cost-effective for schools if the RESA moves to a more school-based model.

70. State department requires PLCs: Participant explains how the state department has an expectation that PLCs are set up in schools.

71. Collaborating without purpose: Participant explains the difference between a PLC and a simple collaboration; a PLC has the expectation that there is an inherent purpose.

72. Lack of Time: When study-participants talk about a lack of time to carry out initiatives.

73. Leading Standards-based walk throughs: A participant describes how he or she facilitates understanding of the standards-based classroom by leading data gathering walk-walk through episodes in classrooms with teams of teachers.

74. Looking at artifacts: When participants discuss times that PLCs use artifacts.

75. Catalyst for a PLC: Ways participants describe initiating a PLC.

76. Need for consistency: The importance of consistency across the various PLCs.

77. Setting protocols: Use of protocols to guide the PLC.

78. Allowing the PLC to choose the protocols: Importance of allowing the PLC to choose their own tools.

79. Gathering research for established PLCs- Describing a role the RESA consultant performs with an established PLC.

80. Using data in a PLC- When a participant describes how the PLC uses data.

81. Providing guiding questions to an established PLC- Describing a role the RESA consultant performs with an established PLC.

82. Using protocols with established PLCs- When a participant discusses using a protocol with PLCs.

83. Beginning with the practical with a principal- How a consultant begins working with a principal to establish a PLC.

84. Questioning RESA use of time- When a participant discusses the best way for RESA time to be used.

85. Providing modules for PLCs- Describing a role the RESA consultant performs with an established PLC.

86. Guiding principal with questioning- When a participant describes using questioning in the process of setting up PLC with a principal.

87. Connecting to the school improvement plan- Participant describes how the PLC is connected to the SIP.

88. Building capacity with the leadership team- When a participant describes one step in building the capacity of the leadership team; by allowing the leadership team to take over the goal of setting up the PLC.

89. Providing an experience- When a participant describes a technique to establish PLCs…allowing the group to experience the PLC before announcing the intent.

90. Collecting data- Role of RESA with established PLCs- provide data on walk through form.

91. Districts assisting each other- Districts helping each other by collecting walk through data on each other.

92. Not allowing for teacher input- Participant suggests that a reason why PLCs may not work is because input is not allowed.

93. Providing feedback on how PLCs are doing- A participant describes a way he or she provides feedback on the PLC.

94. Better instruction as a result of moving to a PLC- A participant describes better instruction and directly links this to the PLC.

95. Changing culture to more data-driven - Descriptions of how PLCs are changing the culture of schools.

96. RESA chose model classrooms- Another example of how RESAs interact with PLCs, they chose the model classrooms for the PLCs.

97. Model classrooms for PLCs to visit- An activity PLCs might do is visit RESA-identified model classrooms within their building.

98. Building capacity of PLC- PLC no longer needs support once they learn what to do.

99. Providing conferences for regional weaknesses- Another way we may interact with PLCs- provide regional conferences where members can go to learn.

100. Content related PLCs- Providing content related material to PLCs (not happening in Science and Social Studies right now).

101. Nurturing PLCs- Participant describes how she nurtures and feels about a PLC.

102. Importance of relationships- Describing why the relationships within a PLC is crucial for collaboration.

103. PLCs change culture: Participant describes the changes made as a result of work in a PLC.

104. Not one size fits all- Participant describes how what works in one school is not a formula for success in another.

105. Work is school-specific- A change RESA is making is working in schools as opposed to region wide, goal of working at school sites.

106. District initiatives impede school improvement- A participant expresses a concern that district-wide initiatives sometimes impede school initiatives.

107. Role of policy- When a study-participant discusses how policies influence RESA work.

108. Promoting buy-in for PLCs- Getting stakeholders to choose PLCs as a way for PL to take place.

109. **New Work of Leadership-** Participant describes how leadership in a building is focused on implementing standards-based instruction and assessment.

110. Demonstrating, facilitating, leading a new PLC- When a participant explains the steps or approach to implementing a new PLC.

111. Teacher leaders emerge naturally- Participant describes that teacher leaders emerge naturally [no specific training needed].

112. No time to work with PLCs- Participant describes how other work takes the place of working with and developing PLCs.

113. Principals Not Present- Participant describes how it's important that principals actually participate in a PLC (values trialability).

114. Prior professional learning experience- This is when a participant discusses his or her own prior professional learning experiences.

115. Writing School Improvement Plans: When a participant mentions that RESA helps facilitate the writing of school improvement plans.

116. Partnering with the State Department: The participant describes the role RESA takes when working with the state department.

117. Standards-based Classroom Training- The participant describes training teachers on what a standards-based classroom looks like.

118. Common Core Georgia Performance Standards- When a participant references doing work to support the state curriculum.

119. Informal PLCs- Participant describes how informal PLCs take place within the RESA, because PLCs have not been supported by the director.

APPENDIX H

Data Maps by Research Question

Research Question One: In what ways do Georgia Regional Educational Service Agency (RESA) personnel support the establishment of professional learning communities?

Category	Conceptualizing PLCs (Before Implementation)	Organizational Structure (Before Implementation)	RESA Support Provided (During Initial Implementation)
Code	Conceptualizing PLCs	Beginning with the Practical with a Principal	Providing feedback
Code	Establishing PLCs	Scheduling PLCs	Catalyst for a PLC
Code	Teaching principals to guide	Need for a reporting tool	Allowing the PLCs to choose the protocols
Code	Role of principal	Setting protocols	
Code	Guiding principal with questioning		

Research Question Two: In what ways do Georgia RESA personnel support existing professional learning communities?

Category	Working with Established PLCs
Code from Interviews	How RESAs use Data
Code from Interviews	Gathering Research for an Established PLC
Code from Interviews	Looking at Artifacts
Code from Interviews	Providing modules
Code from Interviews	Providing guiding questions
Code from Interviews	Collecting Data
Code from Interviews	Content-related PLCs
Code from Interviews	Providing regional conferences of interest to PLCs
Code from Interviews	Looking at student work is problematic

Research Question Three: What are the attributes of innovation that characterize RESA personnel's perspectives related to adoption of professional learning communities?

Rogers' Perceived Attribute of Adoption	**Complexity**		
Category	**Complexity of Collaboration**	**Active Engagement of the Principal**	**Challenge to PLCs**
Code	Not Sharing Information	Principals Not Present	Schools taking on too much
Code	Just Tell Us	The Role of RESAs	Getting Principals Involved
Code	Collaborating without a purpose	Getting Principals Involved	Lack of Relevance
Code	Importance of relationships		Principal Understandings
Code	Naysayers are a challenge		Defining a PLC
Code	Complexity of Collaboration		Not one size fits all
Code			No Clear Plan
Code			School keys are not describing PLCs

Rogers' Perceived Attribute of Adoption	**Trialability**		
Category	**Challenge Facing the RESA**	**Organizational Support**	**No Standard Measures of Training**
Code	Isolation within the RESA Role	Importance of our own PLC	[Lack of] PLC training
Code	Lack of Time	Informal PLCs	Prior Professional Learning Experiences
Code	No Time to Work with PLCs	Identifying Support Needs	Lack of experience setting up PLC
Code	RESAs Lack of Funding	Determining why support is not taking place	*PLC Training- Formal training took place for one*

Research Question Three: What are the attributes of innovation that characterize RESA personnel's perspectives related to adoption of professional learning communities?

Rogers' Perceived Attribute of Adoption	**Compatibility**			
Category	**Influence of the State Department**	***Influences on Work***	**Values**	**Other Work Needed**
Code	State Dept. supports PLCs	*Role of RESA*	Values Teamwork	Leading Professional Learning (Alice)
Code	State Dept. provided PLC training	*Supporting PLCs across the Region*	Implementing Change takes time	Does not value PLCs (various codes)
Code	*Alice's examples of current work (various codes)*	*Negotiating Work*	PLCs Change Culture	Writing School Improvement plans
Code		*Teacher perceptions of professional learning*		Leading Standards-based walk throughs
Code		*PLCs are a Means to an End*		Book Study
Code				GAPSS
Code				Lack of time

Research Question Three: What are the attributes of innovation that characterize RESA personnel's perspectives related to adoption of professional learning communities?

Rogers' Perceived Attribute of Adoption	**Relative Advantage**
Category	**Implementation of Professional Learning**
Code	Better instruction as a result of moving to a PLC
Code	PLCs Change Culture
Code	Value of a PLC
Code	Promoting PLCs
Code	Teacher leaders emerge naturally
Code	Changing Culture to More Data Driven
Code	*No Time to Work with PLCs*
Code	*Lack of Time*
Code	*Questioning RESA Use of Time*

APPENDIX I

Funding Allotments from State Budget for Georgia RESAs

RESA State Grant **The Foundation for Support**	
FY 2010	$12,093,399
FY 2011	$6,029,301
FY 2012	$5,546,957
FY 2013	$5,546,957

Source: Georgia State Budgets

APPENDIX J

From: LaRie M Sylte
Sent: Thursday, August 18, 2011 10:35 PM
To: Lorilee R Sandmann
Cc: MARTIE MARIE HUTCHENS
Subject: IRB Approval- Sandmann

PROJECT NUMBER: 2012-10078-0
TITLE OF STUDY: The Interaction of Georgia Regional Educational Service Agency Personnel with Professional Learning Communities
PRINCIPAL INVESTIGATOR: Dr. Lorilee R. Sandmann

Dear Dr. Sandmann,

Please be informed that the University of Georgia Institutional Review Board (IRB) reviewed and initially approved your above-titled proposal through the exempt (administrative) review procedure authorized by 45 CFR 46.101(b)(2) - Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, /unless:/ (i). the information obtained is recorded in such a manner that human participants can be identified, directly or through identifiers linked to the participants; /and /(ii). any disclosure of the human participants' responses outside the research could reasonably place the participants at risk of criminal or civil liability or be damaging to the participants' financial standing, employability, or reputation.

Please note there may still be revisions requested via email during the final approval process. Final approval will be granted by the IRB Chairperson and sent via campus mail.

Please remember that no change in this research proposal can be initiated without prior review by the IRB. Any adverse events or unanticipated problems must be reported to the IRB immediately. The principal investigator is also responsible for maintaining all applicable protocol records (regardless of media type) for at least three (3) years after completion of the study (i.e., copy of approved protocol, raw data, amendments, correspondence, and other pertinent documents). You are requested to notify the Human Subjects Office if your study is completed or terminated.

Good luck with your study, and please feel free to contact us if you have any questions. Please use the IRB number and title in all communications regarding this study.

Sincerely,
LaRie Sylte
Human Subjects

Human Subjects Office (HSO)

612 Boyd GSRC ■ Athens, GA 30602-7411
Phone: 706-542-3199 ■ Fax: 706-542-3360 ■ irb@uga.edu
DHHS Assurance No.: FWA00003901

Institutional Review Board (IRB)

HUMAN RESEARCH APPLICATION

To submit:

http://www.ovpr.uga.edu/hso/how/application

IMPORTANT: ***Please respond to all the questions. Do not leave items blank; if not applicable, mark N/A. Please note that incomplete applications may result in delayed review. Click on the hyperlinks (text underlined in blue) to obtain additional information.***	***For Human Subjects Office Use Only*** **Project #:** **Date Received:** **Type of Review:** ☐**Exempt** ☐**Expedited** ☐**Full Board**

Section A: PROJECT INFORMATION

1. Study Title: The Interaction of Georgia Regional Educational Service Agency Personnel with Professional Learning Communities

2. Application Type: ☒ New Project ☐ Response to Initial Review (*All revisions must be in italics or different font color.*)

☐ 5-Year Renewal; Previous IRB number:

3. Principal Investigator: (*Must be UGA faculty or senior staff. See **Eligibility to Serve as PI**.*)

Name: Lorilee R. Sandmann **Title:** Dr.
Department Name: Adult Education
Mailing Address: 0413 River's Crossing 850 College Station Rd. Athens, GA 30602
Phone: **UGA E-mail** (Required): **sandmann@uga.edu**

4. Co-Principal Investigator: *(Required only if for thesis/dissertation or other student project.)*

Name: Martie Hutchens **Title:** Ms.
Department: Elementary Education
Mailing address:
Phone: **UGA E-mail** (Required): **martieh@uga.edu**

5. Anticipated Start Date: (*Must be at least 4 weeks after application is received.*) Aug.23, 2011

Section B: PROJECT FUNDING

1. Funding Status: ☐ Funded ☐ Pending ☒ No Funding

2. Funding Source: ☐ Internal Account #:
☐ External Funding Source: OSP Proposal or Award #:

3. Name of Proposal or Award PI (if different from PI of IRB protocol)**:**

4. Proposal or Award Title (if different from title of IRB protocol)**:**

Section C: STUDY PERSONNEL / RESEARCH TEAM

Including the PI, identify all personnel who will be engaged in the conduct of human research. ***Important Note:*** *All researchers listed below are required to complete the **CITI IRB Training** prior to submission of this application. This application will be returned to PI for resubmission if training requirement has not been satisfied. To add more names, bring cursor to outside of last row, and press "enter" key.*

Name	E-mail	*Institution
Martie Hutchens	martieh@uga.edu	University of Georgia, ESSE

Lorilee R. Sandmann	**sandmann@uga.edu**	**University of Georgia, LEAP**

Submit an **Individual Investigator Agreement for all study personnel affiliated with an institution that does not have an assurance with the Office for Human Research Protections or OHRP (typically, local schools, private doctors' clinics).*

Section D: PRINCIPAL INVESTIGATOR'S ASSURANCE

As the Principal Investigator, I have the ultimate responsibility for the conduct of the study and the protection of the rights and welfare of human participants. *By affixing my signature below,*

- I assure that all the information contained in this Human Research Application is true and all the activities described for this study accurately summarize the nature and extent of the proposed participation of human participants.
- If funded, I assure that this proposal accurately reflects all procedures involving human participants described in the grant application to the funding agency.
- I agree to comply with all UGA policies and procedures, as well as with all applicable federal, state, and local laws on the protection of human participants in research.
- I assure that all personnel listed on this project are qualified, appropriately trained, and will adhere to the provisions of the approved protocol.
- I will notify the IRB regarding any adverse events, unexpected problems or incidents that involve risks to participants or others, and any complaints.
- I am aware that no change(s) to the final approved protocol will be initiated without prior review and written approval from the IRB (except in an emergency, if necessary to safeguard the well-being of human participants and then notify the IRB as soon as possible afterwards).
- I understand that I am responsible for monitoring the expiration of this study, and complying with the requirements for an annual continuing review for expedited and full board studies.
- If human research activities will continue five years after the original IRB approval, I will submit a new IRB Application Form. (*Exceptions:* If the research is permanently closed to the enrollment of new participants, all participants have completed all research-related interventions, and the research will remain active only for long-term follow-up of participants; or if the remaining research activities are limited to analysis of individually-identifiable private information.)
- I understand that the IRB reserves the right to audit an ongoing study at any time.
- I understand that I am responsible for maintaining copies of all records related to this study in accordance with the IRB and sponsor guidelines.
- I assure that research will only begin after I have received notification of final IRB approval.

Signature of Principal Investigator _____ Date (mm/dd/yyyy): **07/18/2011**

Section E: CONFLICT OF INTEREST (COI)

1. Is there any real, potential, or perceived conflict of interest on the part of any study personnel *(e.g., financial or business interest, stock or stock options, proprietary interest, inventorship, consultant to sponsor)*? ☐ **Yes** ☒ **No**

2. If yes, please identify personnel and explain. *Important Note: Please review the* ***UGA Conflict of Interest Policy****. Final IRB approval cannot be granted until all potential conflict matters are addressed.*

Section F: LAY PROJECT SUMMARY

Briefly describe in simple, non-technical language a summary of the study, its specific aim(s)/objective(s), and its significance or importance. *Response should be limited to 250 words and easily understood by a layperson.* The goal of this study is to describe how a group of teacher-educators [Georgia Regional Educational Service Agency (RESA) personnel] work with professional learning communities in k-12 schools. (Professional learning communities are groups of teachers who study their instructional practices and outcomes.) There are two phases to this study. Phase one includes a short survey to identify participants. Phase two collects data of the interaction of RESA personnel with PLCs through interviewing three RESA personnel over the course of six to eight months, examining the documents the RESA personnel have used or created with PLCs, and observing RESA personnel once as they work with PLCs. The significance of this study is that it will provide insight into how teacher-educators in general can work toward organizational change as opposed to solely working with individual teachers and individual change.

Section G: HUMAN RESEARCH PARTICIPANTS

1. Provide a general description of the targeted participants *(e.g., healthy adults from the general population, children enrolled in an after-school program, adolescent females with scoliosis),* and indicate the estimated total number, targeted gender, and age. *To add a row, bring cursor to outside of last row, and press "enter" key.*

Targeted Population	Total Number	**Targeted Gender**	**Specify age or age range**
RESA school improvement specialists from 5 RESAs	**Approx. 25**	NA	**23-65 years old**
RESA school improvement specialists	**3**	**NA**	**23-65 years old**

2. Identify the inclusion and exclusion criteria. If two or more targeted populations, identify criteria for each.
   a. List inclusion criteria. Regional Educational Service Agency school improvement specialists who currently work in some capacity with professional learning communities
   b. List exclusion criteria.
3. If the research will exclude a particular gender or minority group, please provide justification.
4. Will participants receive any incentives for their participation (e.g., payments, gifts, compensation, reimbursement, services without charge, extra class credit)? ☐ **Yes** ☒ **No**
   a. If yes, please describe. For multiple sessions, include scheme to pro-rate incentives.
   b. If offering extra class credit, describe a comparable non-research alternative for receiving incentive.

Section H: RECRUITMENT AND ELIGIBILITY OF PARTICIPANTS

1. Describe how potential participants will be initially identified (e.g., public records, private records, etc.).
   Public Records: listing of school improvement specialists on RESA websites
2. **Describe when, where, and how participants will be initially contacted.** In late August, participants will receive an email asking for them to complete a survey. The survey will provide data on the amount of

interaction participants have with PLCs. Possible participants will be grouped according to their interaction levels with PLCs, and then 3 participants will be chosen randomly from these groupings.

3. Advertisements, flyers, and any other materials that will be used to recruit participants must be reviewed and approved before their use. Check all that apply below and submit the applicable recruitment material/s.

☐ **No Advertising** ☐ **Bulletin boards** ☒ **Electronic media (e.g., listserv, emails)** ☐ **Letters**

☐ **Print ads/flyers (e.g., newspaper)** ☐ **Radio/TV** ☐ **Phone call** ☐ **Other** *(please describe)*

4. Describe any follow-up recruitment procedures. A phone call asking about their interest and availability.
5. **Describe how eligibility based on the above inclusion/exclusion criteria will be determined** (e.g., self-report via a screening questionnaire, hospital records, school records, additional tests/exams, etc.)**. There are two phases of data collection for this study. In phase one:** A survey will be sent via email with informational letter (Survey and email attached). The survey will allow possible participants to self-select the group that describes their interaction with professional learning communities. Three groups will be formed: one with no interaction with PLCs, one with moderate interaction, and one with a great deal of interaction. From each of these groups of participants, one participant will be randomly chosen to participate in phase two of this study.

Phase Two of this study includes a in a more in-depth study of the interaction of RESA personnel with PLCs. Participants will be interviewed, provide documents, and possibly be observed.

Section I: RESEARCH, DESIGN, METHODS AND PROCEDURES

1. **Describe the research design and methods of data collection.** A survey will be sent initially through survey monkey to select three participants. After the three subjects are selected, a series of six interviews will be completed over the course of six to eight months; these interviews will be transcribed and coded, looking for trends and patterns in the data. Documents that the participants self-select and provide to the researcher will be analyzed, again looking for trends and patterns. Also, one observation of the RESA personnel will take place.
2. **If applicable, identify specific factors or variables and treatment conditions or groups (include control groups).** Three participants will be chosen: one will have a high-level of interaction with PLCs, another will have a medium level of interaction and the third will have a low level of interaction.
3. **Indicate the number of research participants that will be assigned to each condition or group, if applicable.** One per group
4. Describe in detail, and in sequence, all study procedures, tests, and any treatments/research interventions. Include any follow-up(s). ***Important Note:*** *If procedures are long and complicated, use a table, flowchart or diagram to outline the study procedures from beginning to end.* Each participant will be interviewed six times for approximately 90 minutes each time. Participants will be asked to share specific documents (list attached), and to self-select any others. Participants will be observed if they choose (not mandatory).
5. **Describe the proposed data analysis plan and, if applicable, any statistical methods for the study.** All interview data will be transcribed; then the data will be analyzed, the goal being to find trends or patterns emerging from the data. The documents will be analyzed in the same fashion- and they will be used to validate any findings form the interview data. The data collected during the observation will be focused on what the RESA personnel do and say during their interaction with the PLC. This handwritten data will also be transcribed and analyzed I the same way as the interview data.
6. **Anticipated duration of participation.**
   a. Number of visits or contacts: 7
   b. Length of each visit: 90 mins.
   c. Total duration of participation: 10.5 hours

Section J: DATA COLLECTION INSTRUMENTS

List and describe all the instruments (interview guides, questionnaires, surveys, etc.) to be used for this study. **Attach a copy of all instruments that are properly identified and with corresponding numbers written on them.** *To add a row, bring cursor to outside of last row, and press "enter" key.*

Number	Instrument	Brief Description	Identify group(s) that will complete
1	Informational letter	Letter used to introduce initial survey s	RESA personnel employed as school improvement specialists
2	Implied Consent Form	Letter explaining that completion and submission of the survey implies the participant is consenting to taking part in the study	RESA personnel employed as school improvement specialists
3	Consent Form for Phase Two of study	Form used to explain study and gain consent from participants	Three participants chosen for more in-depth study who are employed as RESA school improvement specialists
4	Survey	Initial survey used to choose participants	RESA personnel employed as school improvement specialists
5	Interview Protocol	Interview used for in-depth study	Three participants chosen for more in-depth study who are employed as RESA school improvement specialists

Section K: RISKS AND BENEFITS

1. Risks and/or discomforts

Describe any reasonably foreseeable psychological, social, legal, economic or physical risks and/or discomforts from all research procedures, and the corresponding measures to minimize these. ***Important Note:*** *If there is more than one study procedure, please identify the procedure followed by the responses for both (a) and (b).*

a. Risks and/or discomforts. Data may expose possible training needs of participants, participants may not be comfortable with the idea that their work will be scrutinized by others.

b. Measures to minimize the risks and discomforts to participants. All participant names will be held confidential. Report will only use pseudonyms for participants.

2. Benefits

a. Describe any potential direct benefits to study participants. If none, indicate so. ***Important Note:*** *Please do not include compensation/payment/extra credit in this section, as these are "incentives" and not "benefits" of participation in research; any incentives must be described in Section G.4.* The interviews may cause these practitioners to become more reflective of their work.

b. Describe the potential benefits to society or humankind**.** Drawing attention to what is currently being done in this field will initiate conversation on the topic of how teacher-educators can work effectively with PLCs.

3. Risk/Benefit Analysis

a. Indicate how the risks to the participants are reasonable in relation to anticipated benefits, if any, to participants and the importance of the knowledge that may reasonably be expected to result from the study *(i.e., How do the benefits of the study outweigh the risks, if not directly to the participants then to society or humankind?)***.** The risks in this study are minimal. The possibility for self-reflection and reflection

by this group of teacher-educators on how they are interacting with PLCs outweighs any possible, minimal risks.

4. Sensitive or Illegal Activities

a. Will study collect any information that if disclosed could potentially have adverse consequences for participants or damage their financial standing, employability, insurability, or reputation *(includes but not limited to sexual attitudes, preferences, or practices; HIV/AIDS or other sexually transmitted diseases; use of alcohol, drugs, or other addictive products; illegal conduct; an individual's psychological well-being or mental health; and genetic information)***?**

No

b. If yes, explain how the researchers will protect this information from any inadvertent disclosure.

5. Reportable Information

a. Is it reasonably foreseeable that the study will collect or be privy to information that State or Federal law requires to be reported to other officials (e.g., child or elder abuse) **or ethically might require action** (e.g., suicidal ideation, intent to hurt self or others)**?** No

b. If yes, please explain and include a discussion of the reporting requirements in the consent document(s).

Section L: DATA SECURITY AND FUTURE USE OF INFORMATION

1. Data Security

Check the box that applies.

☐ **Anonymous –** The data and/or specimens will not be labeled with any individually-identifiable information (e.g., name, SSN, medical record number, home address, telephone number, email address, etc.), or labeled with a code that the research team can link to individually-identifiable information.

☐ **Confidential –** The responses/information may potentially be linked/traced back to an individual participant, for example, by the researcher/s (like in face-to-face interviews, focus groups). **If necessary, provide additional pertinent information.**

☒ **Confidential – Indirect identifiers.** The data and/or specimens will be labeled with a code that the research team can link to individually-identifiable information. If the data and/or specimens will be coded, describe below how the key to the code will be securely maintained.

- ☐ **Paper records will be used.** The key to the code will be secured in a locked container (such as a file cabinet or drawer) in a locked room. The coded data and/or specimens will be maintained in a different location.
- ☒ **Computer/electronic files will be used.** The key to the code will be in an encrypted and/or password protected file. The coded data file will be maintained on a separate computer/server.
- ☐ **Other (please specify), or provide additional pertinent information.**

☐ **Confidential – Direct Identifiers. The data and/or specimens will be directly labeled with the individually-identifiable information.**

- ☐ **Paper records will be used.** The information will be secured in a locked container (such as a file cabinet or drawer) in a locked room.
- ☐ **Computer/electronic files will be used.** The information will be stored in an encrypted and/or password protected file.
- ☐ **Other (please specify), or provide additional pertinent information.**

If "Confidential" is marked, please answer all the following:

Explain why it is necessary to keep direct or indirect identifiers. Each participant will actually be considered a "case"- and will be reported as a case.

Identify who will have access to the individually-identifiable information and/or the key to the code. Researcher only

☐ **Public. Information will be individually-identifiable when published, presented, or made available to the public.**

2. Future Use of Information

If individually-identifiable information and/or codes will be retained after completion of data collection, describe how the information will be handled and stored to ensure confidentiality. ***Check all that apply.***

☒ **All data files will be stripped of individually-identifiable information and/or the key to the code destroyed.**

☐ **All specimens will be stripped of individually-identifiable information and/or the key to the code destroyed.**

☒ **Individually-identifiable information and/or codes linking the data or specimens to individual identifiers will be retained.** ***If this box is checked, describe:***

a. Retention period. **Three years**

b. Justification for retention. **This time is needed in order to provide the researcher with time for dissertation completion and any further analysis and writing for publication**

c. Procedure for removing or destroying the direct/indirect identifiers, if applicable.

☒ **Audio and/or video recordings (if applicable) will be transcribed/analyzed and then destroyed or modified to eliminate the possibility that study participants could be identified.**

☐ **Audio and/or video recordings (if applicable) will be retained.** ***If this box is checked, describe:***

a. Retention period.

b. Justification for retention.

☐ **Other (please specify), or provide additional pertinent information.**

Section M: CONSENT PROCESS

Important Note: *The IRB strongly recommends the use of consent templates that are available on the IRB website to ensure that all the elements of informed consent are included (per 45 CFR 116). If more than one consent document will be used, please name each accordingly.*

☒ **The PI is attaching a copy of all consent documents that participants will sign.**

☒ **The PI is requesting that the IRB waive requirement to document informed consent. A signed consent form may be waived if one of the following criteria is met,** ***check the box that applies.***

☐ **1. The only record linking the participant and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each participant will be asked whether the participant wants documentation linking the participant with the research, and the participant's wishes will govern; or**

☒ **2. The research presents no more than minimal risk of harm to participants and involves no procedures for which written consent is normally required outside of the research context.**

The consent script or cover letter that will be used in lieu of a consent form is attached. Yes

☒ **The PI is requesting that the IRB approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent set forth in 45 CFR 116, or waive the requirement to obtain informed consent. An informed consent may be waived if the IRB finds that all of the following have been met:**

1. **The research involves no more than minimal risk to the participants;**
2. **The waiver or alteration will not adversely affect the rights and welfare of the participants;**
3. **The research could not practicably be carried out without the waiver or alteration; and,**

4. **Whenever appropriate, the participants will be provided with additional pertinent information after participation.**

Provide justification for requesting a waiver. **The initial survey (phase one of project) will be conducted via emaill and poses no risk. Participants can choose not to participate, which would signify their lack of consent.**

Describe how, where, and when informed consent will be obtained from research participants (or permission from parent/s or guardian/s and assent from minor participants), if applicable. **In phase two of the project, the three participants that are chosen for a more in-depth study will complete a consent form, which is attached, before the intial interview.**

Section N: VULNERABLE AND/OR SPECIAL POPULATIONS

1. **Check if some or all of the targeted participants fall into the following groups.** ***Important Note:*** *Some targeted populations require compliance with additional Subparts and the completion of an Appendix or of specific section (see last column).*

Population Type	Required to Complete
☐ **Pregnant women, neonates, or fetuses**	Appendix for Subpart B
☐ **Prisoners**	Appendix for Subpart C
☐ **Minors**	
☐ **Mentally-disabled/cognitively-impaired/severe psychological disorders** ☐ **Physically-disabled** ☐ **Terminally ill** ☐ **Economically/educationally-disadvantaged**	
☐ **A specific group based on religion, race, ethnicity, immigration status, language, or sexual orientation**	
☐ **UGA Psychology Research Pool/Other UGA students/employees**	
☐ **Other** (please describe)	

2. **Explain justification for including the group(s) checked above in this particular study.**
3. Is there a working relationship between any researchers and the participants (e.g., PI's own students or employees)**?**
   Yes
   a. If yes, please describe. The principal investigator is also a RESA school improvement specialist; we are colleagues.
4. **Describe any additional safeguards to protect the rights and welfare of these participants and to minimize any possible coercion or undue influence.** *For example, amount of payment will be non-coercive for the financially disadvantaged, extra-careful evaluations of participants' understanding of the study, advocates to be involved in the consent process, or use flyers to recruit participants instead of directly approaching own staff or students.* All participants will be allowed to leave the project if they choose, and they make the decision to join the project or not join.

Section O: COLLABORATIVE PROJECT OR OUTSIDE PERFORMANCE SITE

Check <u>one of the two</u> boxes below:

☐ **This project does not involve any collaboration with non-UGA researchers or performance in non-UGA facilities.**

☒ **This project involves collaboration with non-UGA researchers or performance in non-UGA facilities** (e.g., local public school, participants' workplace, hospital)**.** ***<u>If this box is checked</u>, list <u>all</u> sites at which you will conduct this research.*** **Attach authorization/permission and/or current IRB approval.** *Checkboxes*

below are not clickable so place "X" before or over the box. To add a row, bring cursor to outside of last row, press "enter" key, and copy/paste the previous cells.

Name of Institution	**Location (County/State/Country**	**Authorization/permission letter and/or current IRB approval.**
		☐ Attached ☐ Pending
		☐ Attached ☐ **P**ending

IMPORTANT NOTE: **If none of the following applies to your research, this is the END of the application form.**

Section P: METHODS AND PROCEDURES THAT REQUIRE ADDITIONAL INFORMATION

Check all that apply. ***Important Note:*** *The items listed below are* ***NOT*** *an inclusive list of methods and procedures that may be used in research studies. Some procedures require the completion of an Appendix or of specific sections (see last column).*

Method/Procedure **Required to Complete**

☒ **Student research (For student's thesis/dissertation/others).....Section Q (below)**
☐ **Deception, concealment, or incomplete disclosure .....Section R (below)**
☐ **Internet research .....Section S (below)**
☐ **Blood sampling/collection.....Section T (below)**☐ **Clinical trial (Drugs, biologics, or devices)**
☐ **Genetic analyses** ☐ **Data/Tissue repository** ☐ **HIPAA (Protected health information)** ☐ **DXA/X-RAY** ☐ **MRI/EEG/ECG/NIRS/Ultrasound**☐ **Other (please describe)**

Section Q: STUDENT RESEARCH

Important Note: *The IRB recommends submission for IRB review only after the appropriate committee has conducted the necessary scientific review and approved the research proposal.*

1. This application is being submitted for: ☐ Undergraduate Honors Thesis Research ☒ Doctoral Dissertation Research ☐ Masters Thesis Research ☐ Other (please describe)

2. Has the student's thesis/dissertation committee approved this research? ☐ **Yes** ☒ **No**

Section R: **DECEPTION**, CONCEALMENT, OR INCOMPLETE DISCLOSURE

1. Describe the deception, concealment, or incomplete disclosure; explain why it is necessary, and how you will debrief the participants. ***Important Note:*** *The consent form should include the following statement: "In order to make this study a valid one, some information about (my participation or the study) will be withheld until completion of the study."*

2. Debriefing Form is attached. ☐ **Yes** ☐ **No;** If no, please explain.

Section S: INTERNET RESEARCH

If data will be collected, transmitted, and/or stored via the internet, the level of security should be appropriate to the level of risk. Indicate the measures that will be taken to ensure security of data transmitted over the internet. *Check all that apply.*

☐ A mechanism will be used to strip off the IP addresses for data submitted via e-mail.
☐ The data will be transmitted in encrypted format.
☒ Firewall technology will be used to protect the research computer from unauthorized access.
☒ Hardware storing the data will be accessible only to authorized users with log-in privileges.
☐ Other (please describe), or provide additional pertinent information.

Section T: BLOOD SAMPLING / COLLECTION

If blood will be collected for the purpose of this research, please respond to all the following:

1. **Route/method of collection** (e.g., by finger stick, heel stick, venipuncture)**:**
2. **Frequency of collection** (e.g., 2 times per week, for 3 weeks)**:**
3. **Volume of blood for each collection** (in milliliters)**:**
4. **Total volume to be collected** (in milliliters)**:**
5. **Are participants healthy, non-pregnant adults who weigh at least 110 pounds?** (Choose YES or NO)**a. If no, indicate if amount collected will exceed the lesser of 50 ml or 3 ml per kg in an 8-week period and if collection will occur more frequently than 2 times per week.**
6. **Will participants fast prior to blood collection(s)?** (Choose YES or NO)
   a. If yes, describe how informed consent will be obtained prior to fasting.