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A mixed methods study of collaborating teacher leadership in Professional Development Schools (PDSs)

Nedd James Johnson
Rowan University, johnso35@students.rowan.edu

**A MIXED METHODS STUDY OF COLLABORATING TEACHER
LEADERSHIP IN PROFESSIONAL DEVELOPMENT SCHOOLS (PDSs)**

by

Nedd J. Johnson

A Dissertation

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Dedications

Thanks and appreciation must first be given to God, for without Him nothing that we attempt in our personal and professional lives would be possible. This dissertation is dedicated to my family. Thank you to my mother and father, Queen and Neely Johnson Sr. for instilling the values of education and hard work into me at a very early age. A very special thank you is due to my father, Neely Johnson Sr. (June 19, 1932-April 22, 2016), who passed away during the final stages of this journey. I know that he is looking down from heaven with a big smile of encouragement to finish this race, as he did for me throughout all of my educational endeavors. Dad, this is in memorial tribute to you.

Thank you to my children, Nedd (Jay) Jr. and Crystal Denise for being my driving force as I started this journey to serve as an example and role model that education and learning are lifelong endeavors. Please know that you can do anything in life that you put your mind and energy towards. A special thank you to my wife Mary for all that you have done to keep things going while I was missing in action as I completed this educational dream. You have been tremendous throughout this entire process and I appreciate your love, faith and belief in me, even when I sometimes had doubts along the way. Thank you to my extended family and friends who understood my desire to complete this difficult work and gave me the space and support that I needed to navigate forward. Thank you all, and the next stage of my life now begins!

Abstract

Nedd J. Johnson
A MIXED METHODS STUDY OF COLLABORATING TEACHER LEADERSHIP
IN PROFESSIONAL DEVELOPMENT SCHOOLS (PDSs)
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Peter Rattigan, Ph.D.
Doctor of Education

Professional Development Schools (PDSs) provide teachers with multiple new opportunities for leadership. As teachers are encouraged to assume new roles outside of the classroom and beyond the school, it is important to examine the concept of teacher leadership in practice--specifically, how it is perceived by those most closely associated with it. This study identifies a shared understanding of teacher leadership from collaborating teachers, using a sequential explanatory mixed methods design in PDSs within a large, diverse southern New Jersey school district-university partnership. The two-phase study examines perceptions about teacher leaders through data collected from the *Teacher Leadership Inventory (TLI) (*Angelle & DeHart, 2010) (Appendix B), and individual in-depth interviews (Appendix C) with selected experienced PDS teachers.

Overall, the study participants report that there are specific links between their professional and leadership growth as a result of their participation in the school and university PDS partnership. Although several themes emerge from the findings, the teachers suggest that the reciprocal nature of the clinical practice internship component and the reciprocal professional and leadership growth for both the collaborating teachers and teacher candidates are primary factors for increasing leadership capacity. These findings provide added evidence and support for the PDS model to serve as the preferred standard model for teacher education preparation programs.

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Chapter 1

Introduction

Professional Development Schools (PDSs) are partnerships between K-12 schools and universities. The PDS concept was first posited by the Holmes Group (1986) in response to the government publication *A Nation at Risk* (1983) which was the result of the work of the National Commission on Excellence in Education. *A Nation at Risk* raised concerns about the lack of ongoing professional development for veteran teachers, the inconsistency in the training of new teachers, and the inconsistent degree of content knowledge that teachers possessed. The report also criticized universities for having a curriculum that was overly reliant on a focus on teaching methods over practical classroom experience. The report further suggested that classroom teachers would benefit from additional professional development opportunities.

Context

The challenges placed on K-12 schools by *A Nation at Risk* to improve and raise standards of student achievement required schools to examine their internal leadership and instructional capacity across four major areas. The first challenge focused on curricula content, which was described as "...homogenized, diluted, and diffused to the point that they no longer have a central purpose" (*A Nation at Risk*, 1983, p. 17). A second challenge focused on the setting of high standards and expectations for student learning. "In many other industrialized nations, courses in mathematics (other than arithmetic or general mathematics), biology, chemistry, physics, and geography start in grade 6 and are required of *all* students" (*A Nation at Risk*, 1983, p. 18). A third challenge focused on the use of time by American schools as compared to other nations. "In

England and other industrialized countries, it is not unusual for academic high school students to spend 8 hours a day at school, 220 days a year. In the United States, by contrast, the typical school day lasts 6 hours and the school year is 180 days" (*A Nation at Risk*, 1983, p. 20). A final challenge outlined by the Commission focused on teaching which "...found that not enough of the academically able students are being attracted to teaching; that teacher preparation programs need substantial improvement; that the profession working life of teachers is on the whole unacceptable; and that a serious shortage of teachers exists in key fields" (*A Nation at Risk*, 1983, p. 20).

This challenge and increased reflective examination of instructional and leadership capacity within schools could occur by empowering teachers to lead and sustain innovation and improvement of schools (Danielson, 2006; Harris, Lowery-Moore, & Farrow, 2008). Multiple authors recognize that leadership is a critical component of school improvement (Fullan & Steiglbauer, 1991; Hallinger & Heck, 1996; Harris & Muijs, 2005). Educational leadership research has targeted teachers who serve in various leadership roles to help schools improve (Marzano, 2007).

The Holmes Group (1986) crafted a unique response to the four major challenges outlined by *A Nation at Risk* through a model that would simultaneously reform both the K-12 and university levels. The Holmes Group (1986) suggested that "We cannot improve the quality of education in our schools without improving the quality of teachers in them" (p. 23). They proposed the teaching hospital as the functional model for education reform. The teaching hospital-medical school model has a long history of partnership collaboration. The professors of the medical school are typically practicing physicians at the hospital. These professors mentor the medical students as they prepare

for the medical profession. The medical school serves as a resource for the hospital while the patients drive the decision making. All stakeholders have roles as a result of the professional learning environment (Abdal-Haqq, 1989). This relationship suggests that the teaching hospital model provides a supportive atmosphere for the training of new doctors, but also provides an environment where veteran doctors become renewed in their profession by taking on various new leadership roles in the partnership. The Holmes Group (1986) proposed that "Professional Development Schools would provide an optimally balanced program of study and experience for the neophyte under the tutelage of teacher educators and teachers working in the vanguard of practice" (p. 57). Also, the PDS model would provide the added supportive benefit of teacher candidates working with more than one collaborating teacher or mentor.

Professional Development Schools: Reforming Teacher Preparation

As an extension of the medical school and teaching hospital analogy, Professional Development Schools are also collaborative learning environments that support the training of new teacher candidates, provide professional development to experienced collaborating teachers, and are dedicated to improving student learning through the process (Abdal-Haqq, 1989). As a response to the fourth major challenge outlined in *A Nation at Risk* (1983) concerning teaching, a group of 100 deans of schools of education formed the Holmes Group, with the goal of improving and reforming teacher education. Collectively, the deans wrote that teacher preparation lacked academic rigor and was disconnected from the actual work of teaching students. The report entitled *Tomorrow's Teachers,* identified five goals for improving teacher training and reinforcing excellent professional learning in the workplace: (1) make the education of teachers intellectually

sound; (2) recognize differences in knowledge, skill, and commitment among teachers; (3) create relevant and defensible standards for entry to the profession of teaching; (4) connect schools of education with schools; (5) make schools better places for practicing teachers to work and learn (The Holmes Group, 1986). Professional Development Schools are the resulting focus of goals four and five which place emphasis on the importance of connecting schools of education with district schools as a means to assist with the development of teacher learning and leadership capacity.

The National Association of Professional Development Schools (NAPDS, 2008) and the National Council for the Accreditation of Teacher Education (NCATE, 2004) reported that in the United States, Professional Development Schools have increased in popularity. The number is increasing since they first appeared as an impetus to the report issued by the Holmes Group in 1986, with more than 1,000 K-12 schools identifying themselves as PDSs. The Holmes Group report suggests that "Instead of our present sprawling and often scattered courses of study, we need to devise coherent programs that will support the advanced studies in pedagogy required for solid professional education" (The Holmes Group, 1986, p.17). This increased capacity and prevalence would suggest that there is an underlying belief in the effectiveness of the components of the PDS model. The ultimate goal of the PDS model is to recreate the teaching hospital-medical school model in the K-12 and university partnership setting. PDSs provide a supportive and practical place for the preparation of new teacher candidates, while also providing a renewed environment for experienced collaborating teachers to improve their practice and expand their leadership capacity.

Professional Development Schools: A Leadership Framework

The term *teacher leadership* is defined in multiple ways due to the ever evolving and expanding roles and responsibilities that teachers assume to improve schools and student achievement (Meredith, 2007; Riel & Becker, 2008; Silva, Gimbert, & Nolan, 2000). Historically, responsibilities given to teachers were limited to those directly related to the classroom. In part as a result of increasing demands on school administrators, schools are increasingly favoring a collaborative management approach where teachers are more engaged in the decision-making process on achieving specific instructional goals (Elmore, 2000). This study used Riel and Becker's (2008) definition of teacher leadership, which states, "teacher leadership is more precisely behavior reflecting a high level of engagement with the profession of teaching and with other teachers" (p. 398). When collaborating and other teachers take on tasks and roles that demonstrate expert knowledge of learning and teaching processes with increased responsibility, they are engaged in teacher instructional leadership. One common thread that runs within the various definitions of teacher leadership is the opportunity for teachers to impact instructional practices within and beyond classrooms. This leadership is accomplished by building relationships among members of the organization, breaking down barriers to collaboration, and sharing resources to improve instruction (Meredith, 2007; Urbanski & Nickolaou, 1997; York-Barr & Duke, 2004). The Professional Development School model provides a framework and environment for this type of teacher leadership to grow and flourish.

The *Teacher Leadership Exploratory Consortium* was established to promote discussion among stakeholders of the teaching profession regarding the critical leadership

roles that teachers play in assisting students and schools to succeed. An outcome of the

collaboration is the new *Teacher Leader Model Standards* (Council of Chief State School

Officers, 2011). Therefore, studying current roles of collaborative teacher leaders within

Professional Development School settings and their perceptions about the impact of

teacher leaders in schools is critical to the further development of the concept.

Among the characteristics of effective clinical practice and preparation that

matters the most is the teaching ability of the collaborating teacher or mentor teacher in

the classroom in which the teacher candidate learns to teach (Grossman, Ronfeldt, &

Cohen, 2012). Experienced collaborating teachers in Professional Development Schools

play a significant role in the university clinical practice process for building the teaching

capacity of teacher candidates. This role reflects the research that indicates that teacher

candidates universally agree that the clinical practice is the most important part of the

attainment of their degree and that the collaborating teacher plays an important role in

that degree attainment (Clarke, Triggs & Nielsen, 2013). Also, there is a new description

of the collaborating teacher as a teacher educator and leader which demands the

collaborating teacher be more fully engaged by working closely with the teacher

candidates, eliciting meaning out of practice, and assisting in the development of a full

teaching toolkit. Such new roles shift the focus from efficiency to efficacy, which builds

leadership capacity to create sustainable change within the school community (Angelle &

Schmid, 2007; Mangin, 2007; York-Barr & Duke, 2004).

Collaborating teacher leaders can have a strong influence on improving

instructional practices (Katzenmeyer & Moller, 2001; Wilmore, 2007; York-Barr &

Duke, 2004). They build strong relationships and collaboration with their colleagues,

which in turn allows for the promotion and examination of current instructional practices. They model strategies for helping students to set high goals for achieving academic excellence and meeting individual student needs (York-Barr & Duke, 2004). Teacher candidates benefit greatly from collaborating teacher leaders who provide guidance and expertise in the field that promotes further professional growth (Katzenmeyer & Moller, 2001; Mangin, 2007).

Purpose Statement

The Holmes Group (1986), NCATE (2004), and NAPDS (2008) have published guidelines that outline the principles and goals of the Professional Development School model. This study focuses on the goal of providing professional development and leadership opportunities to veteran collaborating teachers within PDSs. According to Abdal-Haqq (1989), the reciprocal development of veteran collaborating teachers and teacher candidates is an important contributor to the success of the PDS model. Professional development is not limited to just content knowledge and teaching methodology, but it also includes leadership development.

The development of teacher leadership in Professional Development Schools is an important component to the success of K-12 students (The Holmes Group, 1986). This process does not require the creation of additional hierarchical roles, but an expansion of the normal role of the teacher (Darling-Hammond, Bullmaster, & Cobb, 1995; Greenlee, 2007; Muijs & Harris, 2003; York-Barr & Duke, 2004). Through the creation of professional learning communities, teachers can embrace the idea of being lifelong learners, which is essential in developing increased leadership capacity. Teachers need to

be leaders and included in decision-making that affects students. Professional

Development Schools "would also offer talented persons who enter teaching, who love it

and want to improve it, a means of advancing without leaving the classroom, physically

or psychologically. Thus, the senior teachers (Career Professionals) in a Professional

Development School would be rewarded with the opportunity to be engaged in a variety

of ways in teaching, research, teacher education, and policy formation" (Holmes Group,

1986, p. 58). This inclusion contributes to the success of the students and provides a long-

term benefit to the school. Decision-making opportunities extended to collaborating

teacher leaders allows for improved instruction and professional growth (Barth, 1999;

Birky, Shelton, & Headley, 2006; Crowther, Kaagan, Ferguson, & Hann, 2003; Smylie &

Denny, 1990; Watkins, 2005).

The majority of research on collaborating teachers has primarily focused on the

role that they play in helping to support a teacher candidate's development. The focus has

concentrated on sharing knowledge of teaching and assisting the candidate to see and

develop effective teaching practices (Borko & Mayfield, 1995; Bowers, 1994; Clinard et

al., 1997; Glickman & Bey, 1990; Rajuan, Beijaard, & Verloop, 2007; Sanders,

Downson, & Sinclair, 2005). Other studies have reported on the benefits of collaborating

teachers learning innovative instructional strategies from their teacher candidate (Bowers,

1994; Burden, 1990; Landt, 2004) and engaging in deeper reflective practices as a matter

of working with the candidate (Clark, 2006; Landt, 2004). A small number of studies

have centered on the professional learning of collaborating teachers. These studies

revealed a lens of examination focused more on how they can be more successful in

practices that support the growth of the teacher candidate (Caruso, 1998; Gaffey, 1994;

Mitchell, Clarke, & Nutall, 2007). There are few studies that focus on how the role can support the professional growth and leadership skills of the collaborating teacher.

Darling-Hammond, Bullmaster, and Cobb (1995) reflected that teacher leadership is directly connected to teacher learning when providing teachers with opportunities to take initiative and collaborate in new ways that provide a springboard for innovation and improvement of practice. Given that teacher leadership and teacher learning are closely linked, then it stands to reason that the role of collaborating teachers can be broadened well beyond the traditional one-directional role of teacher candidate support, which can lead to a pathway towards teacher leadership for collaborating teachers. This study addressed this identified gap in the research through the examination of the abilities of collaborating teachers to not only support teacher candidates but to explore their role as teacher leaders and reflect on their practice and learning.

Clarke et al. (2013) further offer that traditionally the viewing and study of this relationship is through the teacher candidate lens and that more research from the collaborating teacher perspective is warranted. This research also questions how historically one person, who has such a tremendous effect on the success of future teachers, has been the focus of so little research. The evidence offered suggests that teacher education institutions have provided little, if any, consistent formal training for collaborating teachers. There is a new and emerging description of the collaborating teacher as a teacher leader. This focus demands that the collaborating teacher is more fully engaged by working more closely with the teacher candidate, eliciting and making meaning out of practice, and assisting in the development of a full teaching toolkit for the teacher candidate. This lack of formal training and voice for collaborating teachers exists

in the research as a missing link. This study further explored an alternative collaborating teacher preparation model that might fill this research void: Professional Development Schools (PDSs) as a framework for collaborating teacher leadership.

The purpose of this study is twofold. The first goal is to delve into the roles, responsibilities, activities and experiences of collaborating teachers. The second goal is to determine whether collaborating teachers believe that the roles, responsibilities and activities from the Professional Development Schools partnership between the Wiley Public School District and Rowan University provide opportunities for increased leadership capacity and, if so which are the major contributors to their leadership growth. Wiley is a pseudonym for a diverse school district in southern New Jersey where the study took place.

Problem Statement

This study explores and defines collaborating teacher leadership at the three selected Professional Development School locations within the Wiley Public School District and the Rowan University partnership. The study also examines whether, or the extent to which, the professional growth is reciprocal (collaborating teacher and teacher candidate) in a PDS. Two broad categories of inquiry guide this study. First, it describes what veteran collaborating teachers believe the term *teacher leadership* means. Second, it describes and provides a voice to the specific roles, responsibilities, activities and experiences within the PDS partnership that contribute to increased leadership capacity among experienced collaborating teachers as they work with teacher candidates. Data collected through the use of the *Teacher Leadership Inventory (TLI)* (Angelle & DeHart, 2010) (Appendix B), and collaborative teacher leader semi-structured interview questions

(Appendix C) are used to gain perspectives about contemporary teacher leadership within the Professional Development School sites.

Research Questions

This sequential explanatory mixed methods study explores three major research questions:

1. What results emerge from comparing the explanatory qualitative interview data about PDS collaborating teachers' leadership perceptions with quantitative outcome data measured on the *Teacher Leadership Inventory (TLI)* (Angelle & DeHart, 2010) survey instrument?

2. What are the perceptions of effective PDS collaborating teachers on the reciprocal nature of the clinical practice internship regarding the development of their teacher leadership qualities?

3. To what extent is the professional and leadership growth in a PDS reciprocal for the collaborating teachers and the teacher candidates, as perceived and reported by the collaborating teachers?

Significance of the Study

School improvement requires the collaborative work and leadership of all members of the school organization (Angelle, 2007; Fullan, 2003; Katzenmeyer & Moller, 2001; Mangin, 2007). Teacher leadership has attracted the attention of educators and others throughout the nation. This study provides an important contribution to the profession due to the need for a conversational space reflecting the continuous need for

collaborating teacher leadership and professional development as an expectation of educators and educational leaders throughout the country. This expectation sometimes comes merely as a matter of professional principle, and sometimes it is a requirement for periodic credential renewal. Beginning July 1, 2013, teachers in New Jersey must earn at least 20 hours of professional development each year, as required by *N.J.A.C.*6A:9C-3.4 (NJDOE, 2014). As a result, the Professional Development Schools could serve as an important mechanism for the delivery of the required professional development training hours for all instructional staff members.

Also, with the advent of AchieveNJ, teachers must consistently demonstrate that they are effective instructors through multiple observations of their practice as well as student growth. For this study, effective Professional Development School collaborating teacher leaders were identified as those classified as "effective" or "highly effective" on the teacher practice component of their prior performance evaluations (Danielson, 2006; NJDOE, 2014). The PDS model could fill this need by delivering professional development through the partnership between the university and the schools to meet the needs of each at a lower financial cost.

Definition of Key Terms

Clinical Practice. "The clinical practice experience is the culmination of coursework and previous field experiences. It is a course that teacher candidates must take to meet New Jersey certification requirements for teacher preparation. The course constitutes teaching in a school setting for one or more semesters under the supervision and guidance of both a university supervisor and a local school district classroom teacher" (Rowan University

College of Education MOA forms, 2014, p.1). The overall mission of this program is to provide prospective teachers with on-the-job classroom experience in preparation for employment as a classroom teacher. The Professional Development Schools clinical practice innovation borrows ideas from the medical profession where teacher candidate preparation moves into a K-12 school, with university faculty, teacher candidates, and practicing teachers all in the same building. The school becomes the equivalent of a teaching hospital, and teacher candidates could meet to learn about pedagogy and then walk down the hallway to observe and practice teaching under the supervision of classroom teachers and teacher supervisors (The Holmes Group, 1986).

Collaborating Teacher. Teacher advisor, the mentor teacher, cooperating teacher, partner teacher, supervising teacher, and evaluator are terms used to label teachers assigned to mentor teacher candidates in the field experience. Having searched through multiple resources such as ProQuest, Google Scholar, E-resources, relevant journals, and online resources, collaborating teacher was discovered to be the most frequent term used to describe the supervisory role over teacher candidates within the current field experience literature. Supervision commonly describes the activity of managing a teacher candidate's personal and professional development and self-awareness (Lofmark & Thorell-Ekstrand, 2004). This role calls for teaching, coaching, assessing, and purposefully reflecting to encourage and challenge the teacher candidate to heightened levels of understanding and knowledge (Davys & Beddoe, 2000). The collaborating teacher is the supervisor of the practicum and oversees the work of the teacher candidates by observing, recording, and often evaluating. Also, the collaborating teacher acts as a teacher educator or mentor for the teacher candidate (Clarke, 2007).

Professional Development. The current literature has shown a trend in expanding professional development to include activities which promote interpersonal well-being in addition to the traditional focus on improving teaching, discipline, and knowledge (Adams, 2006; Saroyan, 1996). This research study used Saroyan's (1996) definition of professional development which includes an increase in pedagogical knowledge supported by personal reflection to encourage risk-taking within the classroom to improve overall teaching effectiveness.

Professional Development School. A Professional Development School (PDS) is a collaboration between schools, colleges, or departments of education; P-12 schools; school districts; and union/professional associations. Within the PDS, the partnering institutions share responsibility for the following four goals or purposes: (a) maximizing student learning and achievement through the development and implementation of exemplary practice; (b) engaging in sustained inquiry on practice for the purpose of enhancing exemplary practice and student achievement; (c) engaging in meaningful, ongoing professional development; and (d) preparing effective new teachers (Abdal-Haqq, 1998).

Teacher Candidate. These are post-secondary students with a declared education degree route, preparing to enter the teaching profession. In the context of field experiences, the teacher candidate often begins as an observer, taking on gradually increasing responsibilities in the classroom and finishes the teacher education experience as a competent novice teacher.

Teacher Leadership. Historically, responsibilities given to teachers were limited to those directly related to the classroom. As a result of increasing demands on school administrators, schools are increasingly favoring a collaborative management approach where teachers are more engaged in the decision-making process on achieving specific instructional goals (Elmore, 2000). This study used Riel and Becker's (2008) definition of teacher leadership, which states, "teacher leadership is more precisely behavior reflecting a high level of engagement with the profession of teaching and with other teachers" (p. 398). When collaborating and other teachers take on new tasks and roles that demonstrate expert knowledge of learning and teaching processes with increased responsibility, they are engaged in teacher instructional leadership.

Limitations

There are several limitations in completing this study. Glesne and Peshkin (as cited in Creswell, 1998) suggest that there are distinct concerns with studying within one's school district. The authors posit that "studying such people or sites establish expectations for data collection that may severely compromise the value of the data; individuals might withhold information, slant information toward what they want the researcher to hear, or provide 'dangerous knowledge' that is political and risky for an 'inside' investigation" (p. 114). The teachers might not have a high level of comfort in expressing negative opinions or criticisms, in fear that the researcher might disagree in some way. Another disadvantage can be the researcher's deep familiarity with the sites which could limit the ability to see things with a fresh eye, possibly reducing the amount of rich description in the study. The additional steps as described in chapter three of the Methodology section are taken to minimize researcher bias.

Summary and Organization of the Study

This research study consists of five major chapters. The first chapter provides a brief background on the topic, states the purpose, and introduces the problem and research questions addressed. Chapter two is a review of the literature about the historical and contextual frameworks of Professional Development Schools and experienced collaborating teacher leadership. Chapter three provides the methodology, research questions addressed, and settings of the study. Chapter four presents the data analysis of the *Teacher Leadership Inventory* (TLI) (Angelle & DeHart, 2010), individual interviews, and the findings. Chapter five provides key conclusions, implications and recommendations for education, and future research possibilities.

Chapter 2

Literature Review

Leadership is recognized as a critical component to school improvement (Fullan & Steiglbauer, 1991; Hallinger & Heck, 1996; Harris & Muijs, 2005; Senge, 2012)). The pressures exerted on school leaders to raise standards and improve student achievement require the examination of leadership capacity building by empowering teachers to lead and sustain innovation and development within schools (Danielson, 2006; Harris et al., 2008). Professional Development Schools (PDSs) are partnerships between a K-12 school and a university's school of education. They are collaborative learning environments that support the training of new teachers, provide professional development to experienced collaborating teachers, and are committed to improving student achievement through the process. PDSs have increased in number and popularity since they were first proposed by The Holmes Group (1986) as a response to the four major challenges outlined in *A Nation at Risk* (1983). They proposed the model as a means of reforming education simultaneously at both the university and K-12 levels. Through careful collaboration and partnership building, PDSs are intended to improve student learning outcomes while also providing professional development for teachers. This collaboration includes pre-service teacher candidates and in-service (experienced) collaborating teachers (Teitel, 2001).

Professional Development Schools: A Leadership Framework

The National Council for the Accreditation of Teacher Education (NCATE, 2004) reported that 256 of their accredited universities have a commitment to Professional

Development School partnerships, with over 1,000 K-12 schools serving as PDSs. This movement suggests that there is great promise for the PDS model as an initiative to improve the overall quality of teaching and education within the United States. As the number of PDSs increase, many questions have developed regarding their effectiveness. This literature review looks at the historical background of the PDS model along with a focus on the reciprocal professional development benefits of the collaboration of the model on veteran collaborating teacher leadership. There has been a good deal of research on the benefits of this model for teacher candidates, but little work focuses on the professional development and leadership effect on experienced collaborating teachers.

Teacher leadership models explore the potential teachers have to improve student learning through strong professional engagement. Hallinger (2003) suggests that organizations learn and function at high levels when there is shared leadership, due to greater commitment and professionalism. Sharing expertise in a structured leadership model creates a collective responsibility for improving student learning (Kenney, Duel, Nelson & Slavit, 2011). Riel and Becker (2008) indicate that: "We define teacher leadership as behavior reflecting a high level of engagement with the profession of teaching and with other teachers who constitute a teacher's professional colleagues…" (p. 398). Teachers become instructional leaders when there is collaboration and a shared vision (Kurtz, 2009). Beachum and Dentith (2004) detail models of leadership wherein teachers expand their responsibilities and decision-making beyond the classroom. Each of these models assumes that schools have determined and capable teachers who are committed to student success (Keedy, 2009).

Many experienced teachers rise to leadership positions due to intrinsic traits that they already possess. Often, these are the individuals who have a desire to be a part of the decision-making process within the school. They do this by either volunteering or being selected by an administrator for certain roles within the school (Darling-Hammond et al., 1995). Teachers who are actively involved in leadership have more opportunities to learn and collaborate, resulting in more individual professionally engagement. The Professional Development School model provides extensive opportunities for learning and collaboration outside the normal hierarchical structure of the school. This study explores whether a positive consequence of participation in the Wiley Public School District-Rowan University PDS model partnership is the development of expanded leadership capacity among veteran collaborating teachers as a result of the multiple opportunities afforded for learning, collaboration, and decision-making.

The context in which Professional Development School collaborating teachers engage in their craft is a significant factor to their success. The setting must be a learning community for the supportive learning of all members of the community: students, teachers, administrators, college staff, and teacher candidates (Levine & Churins, 1999). Both PDS participants and multiple research studies have identified the learning community concept as the most directly linked to the integration of professional and student learning in the model. This focus has also dramatically impacted what schools look like and what teachers and students do within these settings (Boles & Troen, 1994; Dozier, 2007; Greenlee, 2007; Lieberman, 1987; Smith, 1999).

Having clear partnership expectations and lines of communication between the Professional Development School and the collaborating university are key to sustaining a

meaningful partnership (Doolittle, Sudeck & Rattigan, 2008). Also, the PDS model takes this further by creating a culture where learning is the focus of both teacher and student growth and development. Effective PDSs feature openness, collegiality, reciprocal learning for all community members, and reciprocal observation of practice between and among teacher candidates, teachers, collaborating teachers and university supervisors. Also, university members are fully incorporated into the fabric of the school setting and share equal voices within the organizational structure (NCATE, 2001; Ronfeldt, 2012).

Issues of teacher supply and quality have come full circle since 1983 when the call to action from the *A Nation at Risk* report resonated. This concern also garnered wider attention, especially with the advent of the *No Child Left Behind* (NCLB) Act of 2001. The NCLB demanded the closing of the achievement gap and the placement of a "highly qualified teacher" in all classrooms, as outlined by Darling-Hammond and Sykes (as cited in Epstein, 2004, p. 164). Attempting to improve schools by mandating accountability and curriculum overlooks the multiple skills and leadership abilities exhibited by teachers in the classroom (Angelle, 2007; 2010). Embracing teacher leaders as a part of the vision for improvement is a key to success (Crowther et al., 2003; Murphy, 2005).

Twenty years of school reform research identified teachers as having the most direct impact on school improvement (York-Barr & Duke, 2004). There is also an accumulating body of knowledge and base of research evidence that demonstrates how critical teachers are to student learning. The development of teacher leadership increasingly is viewed as an important factor in improving schools, retaining teachers for

the long term, and improving student achievement (Boles & Troen, 1994; Dozier, 2007; Greenlee, 2007; Lieberman, 1987; Smith, 1999).

According to Smith (1999), experienced classroom collaborating teachers are the crucial agents within school reform initiatives that increasingly require them to change and adapt their content and methods to improve the academic performance of their students. For any school-based initiative to be successful, teachers must be a vital and active part of the process. This concept suggests that the top-down leadership model might prevent the success of any change effort.

The current wave of research on teacher leadership views teachers as key stakeholders in improving school culture and serving as catalysts to change through collegiality and professionalism (Angelle, 2007; Harris et al., 2008; Harris & Muijs, 2011; Silva et al., 2000).   As a large, diverse school district in southern New Jersey, the Wiley Public School District would fit into this classification of teacher need. Wiley students are the very children who were the targets of the reform and educational improvement efforts as envisioned under *A Nation at Risk* and *No Child Left Behind* (NCLB). Darling-Hammond and Sykes (as cited in Epstein, 2004), argue that the ability of local school districts to effectively recruit and retain enough well trained teachers is beyond the sole control of the school district. The dilemma then becomes if policy makers know that the quality of teachers in classrooms matter in student learning, then how do the schools with the greatest need close the achievement gap, if they continue to fail to attract the highest quality teachers?

Furthermore, Darling-Hammond and Sykes (as cited in Epstein, 2004), posit that as the importance of well-qualified teachers has become clear, it has become difficult for

policy makers to ignore, deny, or justify the inequality of teacher distribution in the U.S. The authors issue a strong call for coordinated governance action on the federal, state, and local levels that would create federal investments and incentives to encourage teachers to work in the most challenging schools and districts. They also document that through the dual and simultaneous efforts of restructuring teacher education and schooling, that schools, districts, and universities can exert leadership as agents of change for both the profession and their schools through collaborative work with university faculty through Professional Development Schools.

Futrell (2010) also offers a similar pathway forward through the call for the parallel transformation of the teacher education programs and P-20 education systems. She offers suggestions for the creation of effective teacher residency models to support pre-service teacher candidates at the most critical point of entry into the profession. One such model proposed is the Professional Development School design, which mirrors the medical hospital residency model.

Collaborating Teachers

Clarke, Triggs & Nielsen (2013) suggest that collaborating teachers are an important and significant factor in the university clinical practice process for building the teaching capacity of teacher candidates. This research suggests that teacher candidates universally agree that the clinical practice is the capstone and most important part of the attainment of their degree. They also strongly agree that the collaborating teacher plays an important role in the pre-service experience and degree attainment.

Clarke et al. (2013) further offer that the study of this relationship has been viewed traditionally from the teacher candidate lens and that this warrants more research

from the collaborating teacher perspective. This research also questions how historically one person, who has such a tremendous effect on the success of future teachers, has been the focus of so little research. The evidence offered suggests that teacher education institutions have provided little, if any, consistent formal training for collaborating teachers. There is a new and emerging description of the collaborating teacher as a teacher leader. This description demands that the collaborating teacher be more fully engaged by working more closely with the teacher candidate, eliciting and making meaning out of practice, and assisting in the development of a full teaching toolkit for the teacher candidate. The research identifies this lack of formal training and voice for collaborating teachers as a missing link. This study further explores an alternative collaborating teacher preparation model that might fill this research void: Professional Development Schools (PDSs) as a framework for collaborating teacher leadership.

Moreover, Johnston and Wetherill (2002) add that a primary benefit of the Professional Development School model is that it allows for the identification and the development of a systematic method for teacher preparation where quality collaborating teachers who are capable and interested in assuming a role in teacher education may flourish. PDS partnerships have "resulted in the establishment of formal relationships with a core population of partnership (collaborating) teachers, whose classrooms and schools serve as quality placements for pre-service educators" (p. 26).

Professional Development Schools (PDSs)

Collaborating teachers place a high value on the work that they do with teacher candidates and the associated university staff, which provides for new knowledge for the teachers (Clarke et al., 2013). The Professional Development School model emphasizes

the importance of teacher learning to occur within the clinical practice while setting the context for both the collaborating teacher and teacher candidate. The PDS movement followed as an impetus for the Holmes Group's (1986) proposal for the restructuring of teacher education at the school site level. It envisioned partnerships where researchers, graduate students, teacher candidates and classroom teachers collaborate within the context of pre-service teacher education (Darling-Hammond et. al, 1995; Levine & Churins, 1999).

Ganser (1996) suggests that collaborating teachers have more impact on the teacher candidates than the university supervisors. Further, he outlines how this perceived impact seems to confirm the importance of collaborating teachers in the clinical practice student experience. He describes how due to the lack of formal training provided by the university in the traditional model, collaborating teachers typically base responsibilities and decisions on their experiences as former teacher candidates. Therefore, the role of the collaborating teacher has not been a generalized conception jointly created by the University faculty, school site, and collaborating teacher, but a self-defined idea created solely by the individual collaborating teacher. The collaborating teachers' perceptions of the student teaching experience are essential to understanding their role in the student teaching triad within a Professional Development School model. In the PDS model, the triad of the school site collaborating teacher, university supervisor, and the teacher candidate develop a consistent set of defined collaborating teacher expectations (Holmes Group, 1986).

A second critical attribute of the work within an effective Professional Development School setting is the creation of authentic collaboration among the

partnering organizations and between and among school and university supervisors. This complex process goes well beyond the cooperation at the teacher and university staff level, and it must also exist at the highest levels of the organizations. Senior executive members of both institutions must be actively and intimately engaged in the process with strong commitment through the creative dedication and blending of financial and human resources that allows the PDS to carry out the stated mission. This level of partnership combines tasks that were traditionally undertaken separately in the past such as curriculum, supervision, and research which are now jointly defined and carried out tasks. This type of collaboration connects the university to the field in a meaningful way where K-12 teaching practice and university knowledge are incorporated together to impact teacher candidate preparation (Levine & Churins, 1999).

PDSs: Collaborating Teacher Leadership and Learning

Research suggests that teacher leadership is not necessarily about power, but about teachers extending their presence beyond the classroom by seeking additional challenges and growth opportunities. Danielson (2006) put forth the following attributes as exhibitions of teacher leadership: providing influence beyond one's classroom; mobilizing and energizing others; engaging in complex work with others, and having a passion for the core mission of the school. If the nature of teacher leadership is informal and teachers rise to the occasion on a voluntary basis, this type of emergent leadership characterizes the highest level of professionalism in education. Teacher leaders are rarely in formal roles in which they receive compensation for the tasks that they take on. The motivation of teacher leaders is to improve practice and serve their students well (Danielson, 2006).

Furthermore, Greenlee (2007) suggests that the top-down bureaucratic structure of schools is a challenge for the development of teacher leadership capacity. By design, the Professional Development School model is a collaborative environment where experienced collaborating teacher leaders, administrators, and university faculty share in the decision-making process (Holmes Group, 1986, 2007; NAPDS, 2008; NCATE, 2001; Teitel, 2001). The collaborative nature of the PDS model has the potential for developing a new paradigm of leadership, without formally designated or defined roles (Boles & Troen, 1994).

Moreover, the context in which Professional Development Schools' collaborating teachers engage in their craft is a significant factor in their success and leadership in working with teacher candidates. The school placement setting must be a learning community for the supportive learning of all its members: students, teachers, administrators, college staff, and teacher candidates (Levine & Churins, 1999). Both PDS participants and multiple research studies have identified the learning community concept as one of the most important factors directly linked to the integration of professional and student learning in the PDS model. This new conceptualization has also dramatically impacted what schools look like and what leadership roles are collaborating teachers and teacher candidates embracing within these collaborative settings (Boles & Troen, 1994; Dozier, 2007; Greenlee, 2007; Lieberman, 1987; Smith, 1999).

Cochran-Smith and Lytle (1999) provide compelling evidence through the analysis and examination of teacher learning and leadership as one of the most prominent concerns that have arisen in the education research arena. Framing the discussion of teacher learning around the various definitions of quality instruction and what represents

good teaching, is driven by teacher leadership. Three major conceptions of teacher leadership and learning emerged. The first is "knowledge-for-practice" which describes the formal theory and knowledge generated outside of schools by university researchers and experts with a guided wisdom of practice for teachers to use to improve teaching. The second is "knowledge-in-practice" which describes the reflective examination of the practical knowledge possessed by competent teachers to make wise judgments and decisions within their classrooms. The third is "knowledge-of-practice" which describes the most compelling pathway for teacher learning and leadership to occur. This transformation happens through the generation of local knowledge and leadership as a result of an internal view with an intentional focus on the work at hand, and externally with a connective lens to the larger cultural, political, and social issues affecting the community. This last tenet also allows for Professional Development School collaborating teachers to serve and play critical leadership roles that are central to their life-long learning and provide meaning and substance to the expertise that they bring to the table as researchers embedded in their practice.

The research and literature as outlined in this review suggested that all of the participants in Professional Development Schools could reap positive benefits from the university and school partnership. The teacher candidates from the University will participate in field experiences with the implementation of best practices. This placement can provide them with the foundation and practical experience to be successful novice teachers. The courses taught either on site at the PDS or at the university can provide connected practice with theory. University staff can benefit by being reacquainted with the field where this fieldwork and interactions with school staff can provide even better

connection between theory and practice. University staff can also develop expanded

leadership skills through the provision of guidance and resources to collaborating

teachers and by having decision-making roles within the collaborative model.

As a result, the students who attend the Professional Development Schools can

benefit in multiple ways. The partnership can provide higher quality teaching through the

use of reliable research-based methods within their classrooms. They can also benefit

from having university staff and teacher candidates in the classroom, which creates more

desirable teacher to student ratios. This arrangement can allow for the needs of individual

students to be better met. All of these benefits can contribute to giving students the

opportunity to develop more skills and show greater understanding of the standards for

their grade levels. Ultimately, student achievement should increase, and standardized test

scores should rise, thus addressing the accountability expectations associated with *A

Nation at Risk* and *No Child Left Behind (NCLB)*.

Moreover, the experienced collaborating teacher leaders of Professional

Development Schools can benefit from expanded opportunities to develop new strategies

in conjunction with university staff for implementing research-based teaching methods.

Second, they can gain both formal professional development provided by the university

and by mentoring experiences for teacher candidates. Third, they can also gain valuable

leadership skills and can have an opportunity to provide meaningful input into the

decision-making process (Greenlee, 2007). Each of these activities can assist the

experienced collaborating teachers to build their leadership capacity within the PDS

model.

Collaborating teacher leaders have a strong influence on improving instructional practices (Blase & Blase, 2006; Katzenmeyer & Moller; 2001; Mangin & Stoelinga, 2010; Wilmore, 2007). Within classrooms, collaborating teacher leaders go above and beyond the call of duty to ensure student success (Mangin & Stoelinga, 2010; York-Barr & Duke, 2004). Teacher candidates also greatly benefit from collaborating teacher leaders. Guidance provided by an expert in the field enhances the experience and promotes the growth of both the teacher candidate and experienced teachers (Mangin, 2007).They serve as models for others to observe and implement similar practices. International studies focusing on strong student achievement surfaced evidence promoting teacher leadership as a means to improve education through collaborative work and a school culture that shifts away from the traditional private nature of teaching (NCES, 2011; Stigler & Hiebert, 1999). A shift to Professional Development Schools opens classrooms within the school to serve as laboratories for the study of teaching and learning.

Measuring Teacher Leadership

The need to build leadership capacity at the school level is thought to be essential to school improvement, and research confirms that capacity building within the school setting is necessary for change to occur. There has been general agreement among scholars that teacher leadership is also an essential component of school improvement, but there are very few instruments for measuring the extent to which teacher leadership is present in a school. Measuring teacher perceptions of the success of leadership practices through a teacher leader measure can allow central office and school level administrators

a broad-based assessment of teacher leadership in schools (Angelle & Beaumont, 2006, 2007; Angelle & DeHart, 2010).

In 2008, Angelle, Taylor, and Olivier refined the 25-item *Teacher Leadership Inventory* (*TLI*) measuring teacher leadership. Their work resulted from the previous qualitative investigation of teacher leadership which examined the roles of teacher leaders, as voiced by those identified as leaders within the structure of their workplace. The original study further provided a lens through which to view the ways in which teacher leaders self-identify as leaders (Angelle and Beaumont, 2006, 2007). An exploratory factor analysis of the first administration of the *TLI* resulted in the elimination of eight items from the questionnaire. From the resulting data, a four-factor model of teacher leadership was developed (Angelle & DeHart, 2010). Angelle and Beaumont (2006, 2007) posit that most teachers who take on leadership roles do not see themselves as leaders, but perceive that they accomplish most of their work through informal collaboration or sharing of expertise. Because expertise establishes credibility in the eyes of others, it lies at the foundation of successful teacher leadership.

The extent of teacher leadership within school settings and the strength of school leadership capacity have been difficult to measure. As a result of the critical nature of teacher leadership and the lack of a reliable measurement, the *Teacher Leadership Inventory* (*TLI)* was constructed. The development of the *TLI* resulted from a two-stage analysis. The first stage consisted of qualitative interviews with 14 administrators and 51 teachers at 11 schools located in a southeastern state. Construction of a 25-item survey went through an iterative process of literature reviews, focus groups and expert content examination. A second testing administration of the instrument in three districts in one

southeastern state occurred in the same manner as in the first. The survey was modified to 17 Likert-scale items to elicit information about the role of teacher leaders in respondents' related responses to statements based on the frequency of never, seldom, sometimes, or routinely. The analysis of the data was used to refine the *TLI* to create a model of teacher leadership by establishing four factors that identified the roles of teacher leaders: Sharing Expertise, Sharing Leadership, Supra-Practitioner, and Principal Selection (Angelle & Beaumont, 2006, 2007; Angelle & DeHart, 2010).

Angelle and DeHart (2011) used the *Teacher Leadership Inventory (TLI)* to conduct a multisite quantitative study examining the relationships between teacher perceptions of the extent of teacher leadership in a school and the grade level, degree level, and leadership status of the respondents. Data collection for the study spanned two administrations in 43 schools in seven U.S. states. This study found that "the connection between teacher perceptions of leadership, the role of a teacher leader, and the vision for leadership held by the larger school system may have a bearing on the commitment of teacher leaders to their work, both in the classroom and in the school-wide workplace. Leadership training for experienced teachers may enhance their desire to step out of their classroom and take on a larger school role" (p. 156).

Angelle and Teague (2014) used the *TLI* in concert with the Teacher Efficacy Belief Scale – Collective Form (Olivier, 2001). This study examined the relationship between teacher perceptions of the extent of teacher leadership in their schools and the extent of collective efficacy. The following questions guided this study: Do teachers who perceive a strong sense of collective efficacy also perceive a greater extent of teacher leadership in their schools? Are there differences in perceptions of collective efficacy and

the factors of teacher leadership, including sharing expertise, shared leadership, supra-practitioner, and principal selection? The authors found that the results from the study showed "a clear and strong relationship between collective efficacy and the extent of teacher leadership. A strong collective efficacy of faculty is indicative of a belief in their ability to meet their goals and achieve their mission. Examining mean scores on the *TLI* revealed the importance of teacher leadership as demonstrated through teachers' willingness to offer assistance to their peers and share new ideas for teaching through professional development, grade level or department meetings, and other school-wide meetings. A greater sense of collective efficacy was tied to a greater extent of teacher leadership across the three participating districts as a whole and also within each school district. While this research establishes no causality, clearly teachers who perceive a greater extent of teacher leadership in their school also perceive a greater collective efficacy in their peers. Conversely, teachers who perceive a stronger belief in their peers to meet high levels of student learning also perceive that more teachers in their school are willing to lead beyond the classroom" (p. 746).

The ultimate goal within the Wiley Public School District, in both a professional and research context, is to create effective Professional Development Schools. They would serve the purpose of preparing successful collaborating teacher leaders who will mentor and work with teacher candidates who will be capable of filling the ever increasing vacancies that the school district will experience as the baby boomer generation of teachers begin to retire. Research shows that the most powerful, in-school influence on learning is the quality of instruction that teachers bring to students (Chetty, Friedman, & Rockoff, 2014; Rivkin, Hanushek, & Kain, 2005; Rockoff, 2004). With this

in mind, it is imperative to have well-prepared novice teachers who can competently deliver instruction to the most disadvantaged students, who in turn are more likely to have a novice leading their classrooms. If one of our national educational goals is to close the achievement gaps between disadvantaged students and others, then ensuring that novice teachers are well prepared for the job is essential.

Summary

In conclusion, this survey of the literature suggests that when done well, Professional Development School partnerships have the potential to provide learning, professional development, and leadership opportunities for all stakeholders. This literature also suggests that developing collaborating teachers as leaders within the PDS model is an attainable goal and positive dividend of the University-school partnership. The purpose of this explanatory sequential mixed methods study is to give a voice to the stories and perceptions of collaborating teachers in elementary school PDS settings within a large, diverse southern New Jersey school district. The study sought to discover and explain the perceptions of experienced collaborating teachers' description of the term teacher leadership. Also, to determine whether they believe that the activities of a PDS partnership with Rowan University provide opportunities for increased leadership capacity and, if so, which activities were the relevant contributors in working with teacher candidates and the impact on student learning within their classrooms. The literature reviewed in this chapter informs the design of the study described in the next chapter.

Chapter 3

Methodology

As collaborating teachers are encouraged to assume new leadership roles and responsibilities outside of the classroom and beyond the school, it is important to examine the concept of teacher leadership in practice--specifically, how it is perceived and defined by those most closely associated with it. This study, seeks to identify a shared understanding of teacher leadership from collaborating teachers, uses a mixed-methods design to examine teacher leadership in Professional Development Schools within an urban Southern New Jersey school district. The two-phase explanatory study examines perceptions about collaborating teacher leaders through data collected from the *Teacher Leadership Inventory (TLI)* (Angelle & DeHart, 2010) (Appendix B), and individual in-depth interviews (Appendix C) with selected experienced Professional Development School collaborating teachers.

Purpose Statement

The Holmes Group (1986), NCATE (2004), and NAPDS (2008) have published guidelines that outline the principles and goals of the Professional Development School model. This study focused on the goal of providing professional development and leadership opportunities to experienced collaborating teachers within the PDS. According to Abdal-Haqq (1989), the reciprocal development of experienced collaborating teachers is an important contributor to the success of the PDS model. Professional development is not limited to just content knowledge and teaching methodology, but it also includes leadership development.

The development of teacher leadership in Professional Development Schools is an important component to the success of students. This process does not require the creation of additional hierarchical roles, but an expansion of the normal role of the teacher (Darling-Hammond, Bullmaster, & Cobb, 1995; Greenlee, 2007; Muijs & Harris, 2003; York-Barr & Duke, 2004). Through the creation of professional learning communities, teachers can embrace the idea of being lifelong learners, which is essential in developing increased leadership capacity. Teachers need to be leaders and included in decision-making that affects students. This inclusion contributes to the success of the students and provides a long-term benefit to the school. Decision-making opportunities extended to collaborating teacher leaders allows for improved instruction and professional growth (Barth, 1999; Birky, Shelton, & Headley, 2006; Crowther, Kaagan, Ferguson, & Hann, 2003; Smylie & Denny, 1990; Watkins, 2005).

The purpose of this study is twofold. The first goal is to discover and explain the perceptions of experienced collaborating teacher's roles as leaders in Professional Development Schools. The second goal is to determine whether they believe that the roles, responsibilities, activities and experiences from the PDS partnership between the Wiley Public School District and Rowan University provides opportunities for increased leadership capacity and, if so which were the major contributors to their leadership growth.

Research Questions

This sequential explanatory mixed methods study explores three major research questions:

1. What results emerge from comparing the explanatory qualitative interview data about PDS collaborating teachers' leadership perceptions with quantitativee outcome data measured on the *Teacher Leadership Inventory (TLI)* (Angelle & DeHart, 2010) survey instrument?

2. What are the perceptions of effective PDS collaborating teachers on the reciprocal nature of the clinical practice internship regarding the development of their teacher leadership qualities?

3. To what extent is the professional and leadership growth in a PDS reciprocal for the collaborating teachers and the teacher candidates, as perceived and reported by the collaborating teachers?

Research Design and Strategies of Inquiry

To answer the study's research questions, a sequential explanatory mixed methods design approach is used. Mixed methods are a procedure for the collection, analysis and mixing or integrating of both quantitative and qualitative data at some stage of the research process within a single study (Teddlie and Tashakkori, 2009). Mixed methods designs have roots in the pragmatic orientation. Pragmatism encourages researchers to use whichever methods will help to answer the research questions (Creswell, 2013). Teddlie and Tashakkori (2009) further posit that pragmatism is the philosophical partner

to mixed method strategies due to its rejection of the either or argument of the benefits of quantitative versus qualitative research debate. Mixed methods designs are not bound exclusively by quantitative or qualitative philosophies, which allow the researcher to seek out best the answers to complex questions that guide the direction of the study. Also, combining quantitative and qualitative techniques within a single study allows the researcher to offset the weaknesses inherent in each approach if utilized independently.

Where quantitative research, in general, is designed to answer confirmatory questions, and qualitative research is designed to answer explanatory questions, mixed methods studies allow the researcher to explain and confirm questions within the same study (Johnson & Turner, 2003; Teddlie & Tashakkori, 2009). Deduction, relationships, and the testing of hypotheses characterize quantitative research (Gay & Airasian, 2003). This study uses quantitative methods to determine the participants' perceptions of teacher leadership, as well as describe the variation in their perceptions across an assortment of indicators.

Also, the study seeks to determine changes in the participants' perspectives as a result of their involvement working as experienced collaborating teacher leaders in the Rowan University-Wiley Public School District Professional Development School partnership, and the variables that are associated with those changes. Following the collection and analysis of the quantitative data, qualitative methods are applied to understand better and describe the collaborating teachers' leadership experiences shared by the participants in the study. The quantitative portion of the study helps to establish the "what" and the qualitative methods helps to explain "how" (Gay and Airasian, 2003).

According to Teddlie and Tashakkori (2009), several taxonomies exist for classifying the specific types of mixed methods designs. The various classifications of mixed methods designs are used to identify the timing and sequence of data collection, data analysis, as well as, the dominance of one method in relationship to the other. In this study, the quantitative and qualitative data collection occurred sequentially. Participants completed an online survey of the *Teacher Leadership Inventory* (Angelle & DeHart, 2010). Preliminary data analysis then measured collaborating teachers' leadership perspectives as a means for selecting participants for the qualitative portion of the study. In this regard, the study classification is a Sequential Explanatory Design (Cresswell, 2014).

Furthermore, this study is categorized according to which of the traditional methods is dominant. This study seeks further to analyze the findings of the quantitative strand through qualitative methods. Thus this study is classified as a quan-QUAL Design (Morse, 1991) and a Dominant-Less Dominant Design (Teddlie and Tashakkori, 2009). Morse (1991) defines quan-QUAL Designs as those that use qualitative methods to analyze further and interpret the quantitative findings. Teddlie and Tashakkori (2009) define Dominant-Less Dominant Designs as those in which one method is dominant and the other is used to clarify the results. The qualitative findings are given dominance in this study due to the desire to provide a voice to the leadership perceptions of the veteran collaborating teachers. The following is a visual model of the sequential explanatory design:

quan *Data* *Collection* *(Survey)*	→	quan *Data Analysis*	→	**QUAL** *Data* *Collection* *Interview*	→	**QUAL** *Data Analysis*	→	Combined Interpretation of entire analysis

Figure 1. Sequential Explanatory Mixed Methods Design.

In Figure 1, is the depiction of the steps utilized in the mixed methods approach. "**QUAL**" is shown in capital and bold letters to show that the emphasis of this study is in the qualitative analysis. As seen in Figure 1, the study is carried out in sequential steps. The information learned in the first stage of data collection and analysis determines what qualitative data is collected and analyzed through interviews, during the second stage of collection and analysis.

Mixed Methods Design Rationale

Mixed methods research is the approach that utilizes the combined strategies of both the statistics from the quantitative strand and the stories from the qualitative strand. The use of both quantitative and qualitative research better allow the researcher to answer research questions linked to the stories provided by the participants. The strategy also allows for the use of the best of both research worlds to explore deeper understandings and to search for broader meanings in a connected and purposeful manner that might not be apparent in the use of only one research lens or technique (Teddlie & Tashakkori, 2009).

A sequential explanatory mixed methods design allows for the initial quantitative results to inform the secondary qualitative data collection (Creswell, 2014). In this case, a

survey (*Teacher Leadership Inventory*, Angelle & DeHart, 2010) comprises the first phase of data collection in the study, which then informs the make-up of the final interview participants and questions for the second qualitative phase. The most logical design for the current study is a sequential explanatory mixed methods study that starts with the preliminary quantitative data collection in order to gain a basic understanding of the participants' perceptions about various elements of veteran collaborating teacher leadership.

Mixed Methods Appropriateness

According to Greene (2007), the primary purpose of conducting a mixed methods study is to "better understand the complexity of social phenomena" (p. 20). This study seeks to better understand collaborating teachers' perceptions of their leadership within the PDS context in working with teacher candidates. By examining the work and perceptions of collaborating teachers in Professional Development School settings through the gathering of qualitative data, a deeper understanding of the quantitative data gathered from collaborating teachers on the *Teacher Leadership Inventory* (Angelle & DeHart, 2010) within the Wiley Public School District is established. Also, Bryman (2007) encourages the recognition in advance the various timelines and rhythms that occur with both qualitative and quantitative research and to bring their combined strengths together to provide enhanced understanding and meaning to the findings. This mixed methods study takes a pragmatic worldview that focuses on "the consequences of research, on the primary importance of the question asked rather than the methods, and the use of multiple methods of data collection to inform the problem under study. Thus,

mixed methods are pluralistic and oriented towards what works in practice…" (Creswell & Plano-Clark, 2011, p. 41).

Research Design Decisions

Creswell and Plano-Clark (2011) describe research designs as the procedures for collecting, analyzing, interpreting and reporting data that are useful in helping to make the choices that best fit the research questions, purpose, and the problem of the study. A mixed methods sequential explanatory design is chosen for this study due to the desire to collect the quantitative data from a statistical survey and then compare it to the stories and day-to-day experiences of the PDS veteran collaborating teachers as a starting point. This technique also allows for building upon those emerging and exploratory results from the survey instrument that interpret how the qualitative results build on the quantitative results. Also, the mixed methods approach has gained prominence as an alternative to the sole reliance of a qualitative or quantitative focus (Kington, Sammons, Day, & Regan, 2011; Onwuegbuzie & Collins, 2007; Tashakkori & Teddlie, 1998). The design of this study allows for the use of the information uncovered in prior stages to impact on subsequent stage development, as well as provides the ability to go back and re-analyze previously collected data for alternative or divergent viewpoints.

Settings

The purpose of this study is to develop a thorough and deep understanding of the shared experiences of veteran collaborating teachers working within the Professional Development School model. Coney Avenue, Point Street, and Forest Lane Schools served as the sites for the study. The purposefully selected sites were the three locations,

through the Wiley Public School District, that have engaged with Rowan University through a Professional Development School partnership. Each of the three sites selected is a K-8 elementary school.

Also, consultations took place with the Professors in Residence concerning the research, and they confirmed these schools as the study sites based on their knowledge of the available collaborating teachers located within the school context. Over the past four years, I have observed the direct connection and link between the Rowan University teacher candidates and the participating veteran collaborating teachers from the school district and the resulting conversations and actions regarding the creation of highly effective classroom instructional practices.

This study serves multiple purposes for deeper analysis at both the district and university level as the Professional Development School partnership matures. The identification of the collaborating teacher participants selected for the study took place through both purposeful and criterion sampling processes. According to Patton (2002), purposeful sampling in qualitative research looks deeply at small samples that are "information-rich cases" (p. 230). He also outlines that criterion sampling improves the rigor of a study and allows for the selection of participants who meet certain criteria. The criteria for inclusion will be prior or current work as a collaborating teacher in PDS settings.

Participants

Selection of the participants for the quantitative phase occurred in a purposeful manner from the total universe of the Wiley Public School District collaborating teachers

hosting teacher candidates in one of the three K-8 PDS sites during the 2014-15 or 2015-16 school years. There were 20 collaborating teachers who hosted Rowan University teacher candidates during the 2014-15 school year. There were 30 collaborating teachers who hosted Rowan teacher candidates during the 2015-16 school year. 11 collaborating teachers hosted Rowan teacher candidates during both the 2014-15 and 2015-16 school years. There were 39 PDS collaborating teachers eligible to participate in Phase 1 of the study. The collaborating teachers represented general education, special education, health and physical education, math, science and bilingual education classrooms. The identification of the three collaborating teacher participants selected for the qualitative strand of the study took place through both purposeful and criterion sampling processes.

The participants were selected based on their previous experience with supervising teacher candidates and their agreement to host a teacher candidate for the 2014-15 or 2015-16 school years. Also, the results that emerged from the survey assisted in selecting participants and shaping and constructing the final interview questions used during the qualitative strand of the study. The major sampling decisions as described by Creswell and Plano-Clark (2011) apply to both quantitative and qualitative research such as identifying the study site, selecting the participants, determining the sample sizes, obtaining appropriate permissions, collecting information, recording the data, and administering the procedures.

Positional Context

As the assistant superintendent for the Wiley Public School District and the researcher conducting this study, I did not have any concerns about any possible conflict that might develop due to the steps that were taken to insulate the two roles from each

other. Also, the nature of the research study was not the type where there was a power or positional authority over the participants. I took the standard protective actions to make sure that informed consent from each participant occurred. I had previously sought and received all of the appropriate Wiley Public School District internal approvals to commence the research as soon as IRB approval through Rowan University was granted.

Data Collection

Survey. In 2008, Angelle, Taylor, and Olivier refined the 25-item *Teacher Leadership Inventory* (*TLI*) measuring teacher leadership. Their work built on the previous qualitative investigation of teacher leadership, which examined the roles of teacher leaders, as voiced by those who identified as leaders within the structure of their workplace. The original study further provided a lens through which to view the ways in which teacher leaders self-identify as leaders (Angelle and Beaumont, 2006, 2007). An exploratory factor analysis of the first administration of the *TLI* resulted in the elimination of eight items from the questionnaire. From the resulting data, a four-factor model of teacher leadership was developed (Angelle & DeHart, 2010). Angelle and Beaumont (2006, 2007) posit that most teachers who take on leadership roles do not see themselves as leaders, but perceive that most of their work occurs through informal collaboration or sharing of expertise. Because expertise establishes credibility in the eyes of others, it lies as the foundation of successful teacher leadership.

The extent of teacher leadership within school settings and the strength of school leadership capacity have been difficult to measure. As a result of the critical nature of teacher leadership and the lack of a reliable measurement, the *Teacher Leadership*

Inventory (*TLI*) was constructed. The development of the *TLI* went through a two-stage analysis. The first stage consisted of qualitative interviews with 14 administrators and 51 teachers at 11 schools located in a southeastern state. A 25 item constructed survey resulted from an iterative process of literature reviews, focus groups, and expert content examination. A second testing administration of the instrument in three districts in one southeastern state followed in the same manner as the first. The survey was modified to 17 Likert-scale items to elicit information about the role of teacher leaders in respondents' related responses to statements based on the frequency of never, seldom, sometimes, or routinely. The analysis of the data was used to refine the *TLI* to create a model of teacher leadership by establishing four factors that identified the roles of teacher leaders: Sharing Expertise, Sharing Leadership, Supra-Practitioner, and Principal Selection (Angelle & Beaumont, 2006, 2007; Angelle & DeHart, 2010).

The quantitative phase of the current study collected data through the administration of the *Teacher Leadership Inventory* (Angelle & DeHart, 2010) to all 39 of the collaborating teachers working with the Professional Development Schools partnership schools. The *TLI* consist of statements using a four-point Likert scale (with options *never, seldom, sometimes,* and *routinely*) to measure perceptions about teacher leadership within schools. An open-ended question asked respondents to provide optional comments on teacher leadership within their PDS settings. The open-ended responses assisted with the development of a richer discussion in Chapter 5 concerning the implications, recommendations, and conclusions generated from the interview data. Demographic data collected through categorical scales (i.e., degree, position, gender, age, race, years served at current school, total years in education) also occurred. The data were

uploaded into the Statistical Package for Social Sciences (SPSS 23.0) software and analyzed using an exploratory factor analysis. One-way ANOVAs were run to determine associations.

Exploratory and confirmatory factor analyses of the *TLI* yielded a four-factor model of teacher leadership. These four factors--*Sharing Expertise, Sharing Leadership, Supra-Practitioner*, and *Principal Selection*-- were developed to serve as a framework for assessing perceptions of the extent of teacher leadership. An open-ended question was added to the tool to collect personal definitions of the term *teacher leadership.* Internal consistency of the *TLI* was conducted to measure the reliability of the scale using Cronbach's alpha. Items that loaded on each factor were tested to measure the internal consistency. Cronbach's alphas for the overall instrument and each subscale indicated that the scales had acceptable internal consistency.

Targeted respondents were accessed through electronic mail, thus making recruitment and consent easier than through the use of mailed print surveys (Nardi, 2003). All of the potential participants gained access through the provided secure URL address for the Web-based Survey Monkey survey. Detailed Informed consent and confidentiality agreements populated on the first page of the inventory with an option to give consent, as well as the option to exit the survey at any time. The shift towards conducting electronic surveys allows researchers to obtain information quickly from a large sample of respondents (Dillman, Smyth, & Christian, 2009).

According to Fink (2012), survey selection techniques are critical to producing credible and accurate results. She also explains the importance of pilot testing for

producing a survey form that is usable and provides the needed information to answer the stated research questions. The combined survey instrument was piloted in the spring and fall of 2015. As part of the piloting process plan, appropriate permissions were sought and received from the author to utilize her instrument (Appendix C). As suggested by Fowler (1995), a key strength of survey research is the ability to ask people about their firsthand experiences and things that they have done as a means of accurate and reliable data collection.

Interviews. As suggested by Fowler (1995), a key strength of survey research is the ability to ask people about their firsthand experiences and things that they have done as a means of accurate and reliable data collection. The purpose of the qualitative strand of the research study was to investigate the perceptions of collaborating teachers in Professional Development Schools regarding their leadership roles and experiences with teacher candidates during the university field placement. Furthermore, it explored how they defined successful and highly effective collaborating teachers, and how this work improved their classroom practices and student learning. The qualitative methodology of research was utilized as one part of the study because it lends itself to the systematic collection, organization, and interpretation of data gained through a study design intended to capture the lived experiences of participants. The interview protocols were pilot tested with critical research friends that make up my community of practice in the spring and fall of 2015, before their implementation in the field in the final form during the 2015-16 school year.

Interviewing was selected as a technique due to the ability of personal interviews to bring about a rich understanding of the "lived experience" of the other person and how

they make meaning of that experience (Siedman, 2006, p. 9). Also, interviews are "a conversation with a purpose" that can lead to a better understanding of the context in which the participants operate (Rossman & Rallis, 2012; Rubin & Rubin, 2012). The interviews were semi-structured and created based on the emergence of data from the quantitative phase of the study. The face to face interviews were semi-structured, open-ended questions with directional sub-probes (Rossman & Rallis, 2012; Rubin & Rubin, 2012). This data collection took place in the spring of 2016.

As detailed by Maxwell (2013), the process of qualitative research design is "interactive" and must be tended to throughout in an ongoing manner that allows for flexibility based on the need to reflect back and forth. This concept extends to mixed methods due to the enhanced strengths brought into the process by combining both qualitative and quantitative strategies and techniques.

Patton's (2002) interview typology served as a useful guide in developing the questions for the interview portion of the study. According to Patton (2002), there are six types of questions found in an interview guide:

- Experience/behavior questions ask the interviewee what they do or have done.
- Opinion/value questions ask the interviewee to share their beliefs about the topic.
- Feeling questions ask the interviewee to share their opinions and reactions about the topic.
- Knowledge questions ask the interviewee to share their factual knowledge about the topic.

- Sensory questions ask the interviewee what they see, hear, touch, smell, or taste as it relates to the topic.

- Background/demographic questions ask the interviewee personal questions about their age, race, years of experience, etc.

The ten final interview questions included in the protocol (Appendix F) went through extensive field testing in the spring of 2015 and the fall of 2015 by presenting the various versions to the principals at the Professional Development Schools for feedback and revisions. The principals, in turn, presented the protocol questions to teachers who had previously served as collaborating teachers but were not serving as collaborating teachers for the 2014-15 and 2015-16 school years for additional feedback and suggestions. The semi-structured interviews were guided by ten open-ended questions to gather teachers' perceptions about teacher leadership and the impact of the PDS on specific roles they assumed. When needed, additional probes were posed to stimulate further conversation among the three collaborative teachers interviewed to gather sufficient information to develop descriptions of teacher leadership through the lens of the collaborating teachers.

In this study, Patton's typology was used to assist in deciding what types of questions to pose and when to ask them. The use of face to face interviews provided the following advantages:

- The highest response rates and the most detailed responses;

- The interviewer can observe the surroundings and use nonverbal communication and visual aids;

- The interviewer can ask complex questions and use extensive probes.

There are inherent issues with face-to-face interviews such as attempting to give the interviewer what he or she wants to hear rather than the "truthful" response, and steps were taken to ensure not to communicate any biases. In the qualitative research paradigm, the researcher is the primary research instrument (Creswell, 2013, 2014; Maxwell, 2013). As such, I interacted directly with study participants in the qualitative phase while conducting the three individual collaborating teacher interviews. As a former teacher, principal and current assistant superintendent in New Jersey, I was cognizant that prior professional experiences and assumptions regarding teacher leadership could potentially influence the study findings. I made concerted efforts to remain objective while conducting all interviews by carefully explaining to the participants the purpose of the study, what they were being asked to do, and the use of the data.

Field Notes

Glesne (2006) identifies field notes as the primary recording tool for the researcher in qualitative studies because it provides the opportunity to capture descriptive, analytic and reflexive analysis where a researcher engages in looking at his actions as he looks at the actions of others. Furthermore, varying types of field notes will allow a researcher to capture in the field for later, more detailed expansion. Best practices suggest that the field notes be expanded upon no later than the evening of the writing so that a researcher then begins to look for shapes and patterns, as well as work out problems identified throughout the data collection and analysis process.

Data Analysis

The questions in the survey and the interview protocols focused on Professional Development School collaborating teachers' perceptions about their leadership preparation and experiences as a result of their participation in the Rowan University and Wiley PDS partnership. The PDS school reform literature discussed in the literature review section of chapter two concerning the relationships between collaborating teachers' leadership and the opportunity for leadership roles within the PDS model provided a guideline for emerging themes during data analysis.

Data were triangulated to strengthen the content of the data analysis. According to Teddlie and Tashakkori (2009), triangulation is used by researchers to account for the dependence on particular methods that may limit the validity or scope of the findings. In this study, triangulation provided a better opportunity to analyze collaborating teachers' perceptions of their leadership preparation and experiences through the analysis of the data through different lenses. The combination of surveys, interviews and understanding the site context through field notes, increases the likelihood of understanding the phenomenon of interest from various points of view and ways of knowing. The ability to converge major themes or patterns in the data from surveys, interviews and field notes provided stronger credibility to the findings.

Quantitative. As a means of increasing information and understanding about collaborating teachers' leadership preparation and experiences within Professional Development Schools, this study used purposive sampling. As indicated by Teddlie and Tashakkori (2009), purposive sampling is used to elicit all possible cases that fit

particular criteria and allowed for the identification of particular cases for in-depth investigation. Due to the limited number of collaborating teachers participating in the PDS annually, all 2014-15 or 2015-16 collaborating teachers (39) were invited to participate in the survey. All collaborating teachers were sent the email link for the first part of the study. The survey was used to compare the collaborating teachers' perceptions of their leadership preparation and experiences.

The survey in this study consisted of four factors--*Sharing Expertise, Sharing Leadership*, *Supra-Practitioner*, and *Principal Selection*-- which were developed to serve as a framework for assessing perceptions of the extent of teacher leadership. Participants answered 17 questions based on a four-point Likert-scale with options of *never, seldom, sometimes,* and *routinely*. To analyze the responses of the whole sample, as well as to determine the differences and relationships of the perceptions of the cooperating teachers, the IBM Statistical Package for the Social Sciences 23 (SPSS) was used. Univariate analysis was used to determine the frequency of responses to the 17 survey items and cross tabulations were used to determine significant differences and similarities.

Qualitative. The second phase of the study included face-to-face, semi-structured interviews based on a subset of participants who completed the survey from phase one. The subset identification was based on their previous experience with supervising teacher candidates and their agreement to host a teacher candidate for the 2014-15 or 2015-16 school years. They were also selected as a result of their extensive prior experience working with the PDS model within their school setting and were ranked highly effective as a result of their teacher evaluation ratings. A follow up email was sent to invite participation from the three selected members. To capture interview data in its totality, a

digital recorder and also handwritten notes were taken. The note taking also served as a way to record non-verbal information such as facial expressions. The actual final interview questions were emergent as they drew upon the themes from the survey data. These emergent themes also served as a guide in organizing data into content categories.

According to Patton (2002), data analysis is an ongoing cyclical process that allows for integration into all phases of qualitative research. It is an inductive process in which categories and patterns emerge from data rather than being imposed on before the collection of data. By using an inductive process, this study analyzed collaborating teachers' perceptions about their leadership and experiences from participation in the PDS. All of the interview data were transcribed using a word processing program through the notation and comment feature as a code development strategy. Lincoln and Guba's (1985) constant comparative method was used to organize data into appropriate categories. The constant comparative method is a four-step process that included:

1. Inductive category coding and simultaneous comparing of units meaning across categories;

2. Refinement of categories;

3. Exploration of relationships and patterns across categories; and

4. Integration of data yielding an understanding of people and settings studied.

The constant comparative method allowed for the sorting and resorting of the responses into categories according to patterns and themes that emerged from the data.

After the categorization of the data, files were printed and pasted onto separate index

cards according to the developed categories. The index cards were useful in allowing for

the viewing all of the output data, according to categories, at one time. Finally, after all

the data were categorized and organized on index cards, category frequencies were

determined. This strategy had previously been utilized in a prior research course and

proved extremely beneficial in illuminating data patterns and themes.

Mixing. Connecting, combining, and integrating strategies are used to attempt to

understand the quantitative and qualitative data in context (Maxwell, 2013; Tashakkori &

Teddlie, 1998). Sandelowski (2001) provides evidence that counting and the use of

numbers can generate meaning, provide documentation of the research steps taken, verify

and test interpretations and conclusions, and provide direction for future research. From

the results of the original quantitative data collection, I was able to use that information

as the launching point for the development of the qualitative second phase. I was able to

confer back with the original collaborating teachers from the field test and pilot as a

member check. I was also able to synthesize major findings based on the results from

both strands. The subsequent mixing of both data strands and the frequent transitioning

back and forth provided an enriched understanding and new insights into the

collaborating teaching process, and the requisite supervisory leadership skills displayed.

Qualitative analysis requires that a researcher collect the data, pull it apart to analyze it,

and then put it back together in a way that logically and meaningfully connects the

various data. This process uses the various codes to piece the data together and consider

relationships between the data. The coding process, which may somewhat strip the data

of meaning, must be used in conjunction with connecting strategies to analyze the data

fully. Within this process, I was able to use field notes to provide contextual information that ameliorated the effect of removing meaning from the data through coding. In this study, connecting strategies occurred after coding was complete. Codes, categories, and themes were reviewed and further connections within the data were made. These connecting ideas were reported in the form of memos as suggested by Miles and Huberman (1994) and Maxwell (2013). The written memos at this stage of analysis served to illustrate the relationships that were common through much of the data as reported by survey and interview participants.

According to Teddlie and Tashakkori (2009), the dual analysis of the quantitative and qualitative data will lead to deeper understandings. This concept of dual analysis lead to a deeper understanding of the components of the Rowan University-Wiley Public Schools Professional Development School (RU-WPS PDS) partnership program and how they contributed to veteran collaborating teachers' leadership self-perceptions. Other themes, insights, and explanations also evolved from the analysis of the mixed data. Through this layered analysis, the extent to which the RU-WPS PDS lead to the outcomes of collaborating teacher's leadership roles became clearer. This process of mixed analysis was used specifically to address Research Question 1 concerning the results that emerged from the comparison of the qualitative interview data about PDS collaborating teachers' leadership perceptions with the quantitative outcome data measured on the *Teacher Leadership Inventory (TLI)* (Angelle & DeHart, 2010) survey instrument.

Credibility, Validity and Trustworthiness Threats

Mixed methods research combines the benefits of both quantitative and qualitative strategies, but it also increases the complexity and difficulty of the process due to the need to address the threats to validity in the quantitative approaches and threats to credibility in the qualitative approaches. Prolonged engagement in the field, the use of peer debriefing, triangulation, and member checks in regards to credibility in the qualitative and internal validity in the quantitative were used to address possible threats throughout this study. Also, a rich description was provided along with purposeful sampling in regards to transferability in the qualitative data and external validity in the quantitative data. In addition, an extensive audit trail was generated, using the code-recode strategy, engaging in triangulation, and using a group of critical friends for peer examination to address dependability in the qualitative data and reliability in the quantitative data. The final rigor criteria was that of researcher reflexivity where notes were taken in both phases which were constantly referred to as another lens of confirmability in the qualitative data and objectivity in the quantitative data. Reflexivity also allowed me to look at myself as I watched others throughout the research study.

According to Lincoln and Guba (1985), there are four conditions that contribute to the trustworthiness of qualitative research. These four conditions and questions are what Lincoln and Guba (1985) call "credibility, transferability, dependability, and confirmability." These terms are also known as internal validity, external validity, reliability, and objectivity in quantitative research. Consideration of each of these topics remained in the forefront throughout the completion of the study.

Credibility/internal validity. Credibility is the determination as to whether or not the reconstructions of the researcher are "credible to the constructors of the original multiple realities" (Lincoln & Guba, 1985, p. 296). Internal reliability threats arise from whether or not the treatments make a difference and have the effects that the researcher says. Could something else be going on? Is the study worthy on its terms? Many attempts were taken to address possible threats of internal validity, and to determine if there were other factors influencing the results and findings, such as member checking and detailed qualitative note taking. I understood and was aware that the leadership perceptions of individual RU-WPS Professional Development School participants could be affected by factors other than the individual elements of the PDS model.

However, by utilizing a mixed methods design, collecting survey data, and qualitative interview data, I was better able to distinguish between factors that were related to the RU-WPS Professional Development Schools and factors that were not. This method of triangulation contributed to the credibility of the findings of the study (Lincoln & Guba, 1985). The design of the study also included multiple methods of data collection, analysis, and interpretation of many participants. Since these methods produced similar results and the participants reported similar perceptions of the RU-WPS PDS, then one can assume that there was some validity in the results.

Furthermore, member checking is an additional strategy that was used to assure credibility of the study. Member checking, or the testing of "data, analytical categories, interpretations, and conclusions" using the groups from which the data originated, is "the most crucial technique for establishing credibility" (Lincoln and Guba, 1985, p. 314). Use of this technique occurred during the qualitative strand of the study. After the interview

sessions had been transcribed and reported, I presented the gathered information to the participants to validate the collected data. This participant review ensured that the data were an authentic representation of the perceptions of the participants. Although there might be some threats to the internal validity of this study, they are addressed through the use of triangulation and member checking.

Transferability/external validity. External validity is related to the level in which we can infer that the results of a study or the relationships within a study can be generalized across different settings, persons, and times (Lincoln & Guba, 1985). Generalizability is usually related to a randomized sample within a study. In this study, a very specific sample was used to analyze the RU-WPS Professional Development Schools. The findings of this study were only generalizable to experienced collaborating teachers in the RU-WPS PDS program, and not necessarily representative of a larger population. The use of a mixed methods research model provides an offset to this transferability limitation. The intent of the current study was to provide useful information specifically concerning this programmatic partnership. Therefore, it is appropriate that the results be somewhat uniquely applicable to this program. Transferability is the ability to transfer inferences from a specific sending context to a specific receiving context. In the current study, the issue of transferability is addressed through the provision of a detailed description of the RU-WPS PDS.

Dependability/reliability. Reliability and dependability are evident in research that is stable and predictable and is often demonstrated through replication (Lincoln & Guba, 1985). To address any concerns with dependability and reliability, qualified individuals reviewed the survey and interview questions. After this peer review,

appropriate changes to the questions were made. Also, a detailed audit trail was created as a means for future researchers to examine the inferences made, a code-recode strategy was used, and the triangulation process as previously described was used.

Confirmability/objectivity. Within this study, one must consider the potential biases of the researcher. I had a pre-existing relationship with the participants as the assistant superintendent for the Wiley Public School District at the time the study was conducted. This position and relationship could have a potential effect on participants. The participants might attempt to answer the questions in a way in which they believe I would want them answered due to this pre-established relationship. This issue is addressed with a verbal discussion at the beginning of the interviews. The survey data was not affected by this phenomenon due to the anonymous nature of distribution and submission.

In order to eliminate any potential bias on collected data, direct transcription occurred, in addition to the use of field notes. Sometimes when note taking is the only form of record keeping during interviews, a researcher's biases can seep into the recorded information. Therefore, raw data were recorded in addition to notes (Lincoln & Guba, 1985). In this study, the interview sessions were audio recorded to maintain the integrity of what the participant said during the sessions. Also, member checks were conducted to assure that the data was being reported consistently with the ideas of the participants. As an employee of the WPS, I may have already had feelings about the effect of the Professional Development School model on experienced collaborating teachers' leadership perceptions, therefore causing some bias on my part. The procedures

mentioned previously, such as using evaluators as reviewers and transcribing raw data from the interviews minimized bias in the study.

Ethical Considerations

Mertens (2003) states that: "Ethics in research should be an integral part of the research planning and implementation process" (p. 135). Assurances of ethics and the protection of human subjects were paramount throughout this study. I have previously participated in and passed the National Institutes of Health's (NIH) online course entitled, "Protecting Human Research Subjects" offered through the Rowan University Institutional Review Board (IRB).

The subjects who were involved in this study were chosen solely on their relevance to the problem of practice that was studied. Unique social groups were not intentionally singled out for the purpose of the study. I guaranteed confidentially to the participants throughout the study through the careful guarding of all collected identifying information. I was the only person who had access to the personal information of the participants and the recordings of the interview discussion (transcription). The participants were assigned a number for reference purposes, and names and other identifying information omitted from the transcription discussions. All data, including survey data, audio recordings, and transcriptions were stored on my security encrypted home computer.

Limitations

Certain limitations need to be addressed within this study. Glesne and Peshkin (as cited in Creswell, 1998) suggest that there are distinct concerns with studying within one's own school district. The authors posit that "studying such people or sites establish

expectations for data collection that may severely compromise the value of the data; individuals might withhold information, slant information toward what they want the researcher to hear, or provide 'dangerous knowledge' that is political and risky for an 'inside' investigation" (p. 114). The teachers might not have a high level of comfort in expressing negative opinions or criticisms, in fear that the researcher might disagree. Another disadvantage can be the researcher's deep familiarity with the sites, which could limit the ability to see things that a less closely connected observer might perceive, possibly reducing the amount of rich description in the study. The additional steps as described in the sections above were taken to minimize researcher bias.

Timeline

The data collection for the research study occurred over a two month (January-February, 2016) time span that essentially covered the start of the spring semester of the participating experienced collaborating teacher's Professional Development School assignment with a teacher candidate from Rowan University during the 2015-16 school year. The data analysis and writing of the results and findings took place during the months of February 2016 through November 2016. The study was presented at the dissertation symposium and I graduated the doctoral program in December 2016.

Summary

The Wiley Public School District entered into three Professional Development School Memorandum of Understandings (MOUs) with Rowan University for the 2014-15 and 2015-16 school years. Coney Avenue School continues as the original site, with the addition of Forest Lane School, and Point Street School serving as the basis for the expansion of the program across the school district. The structure of the Professional

Development School program follows the teaching hospital model created in the field of medicine. The plan of action is to move each school on the Professional Development School continuum of practice from the beginning stages to the Meeting Standard level as a minimum. This continuation of the PDS model will allow the Wiley Public School District to continue to grow a ready supply of highly capable teacher candidates who might then, in turn, be prepared to become the next generation of veteran collaborating teacher leaders. There were 28 pre-service teacher candidates placed by Rowan University throughout the Wiley Public School District PDS sites during the 2014-15 school year and 31during the 2015-16 school year. An added layer of the partnership for the 2014-15 and 2015-16 school years was the placement of junior practicum students in a designated PDS school site with the intent to have them also complete their senior pre-service experience within the same placement setting. This two-year relationship was intended to heighten the candidates' comfort and understanding of the community, school, the veteran collaborating teachers, and students with which they worked.

As the lead internal administrative connection with Rowan University, my office provided extensive feedback concerning how the district might better capitalize on the skills and talents of the teacher candidates as a pool of potential applicants for full-time teaching positions. This effort is due to the quality product that the teacher candidates develop into by the end of the clinical practice placement, as well as in light of the resources invested by both Rowan University and the Wiley Public School District in the teacher candidates. As a result of this information, the district will be able to fine tune the recruitment process with the Human Resources Department and to better coordinate with the Rowan University Professors in Residence (PIR).

This research study seeks to reveal the perceptions and the extent to which the

RU-WPS Professional Development School model activities contributed to building

veteran collaborating teachers' leadership capacity. This mixed-methods study, using both

quantitative and qualitative methods, is conducted to reveal what components of the PDS

program experienced collaborating teachers believe contribute to their increased

leadership capacity, their effective work with teacher candidates, and ultimately the

impact that the PDS partnership has on student learning outcomes within their

classrooms. This chapter provides a description of the methodology used in the study.

The next chapter will present the findings, analysis, and summary of the data.

Chapter 4

Findings

This research study reveals the extent to which the Rowan University and Wiley Public School District Professional Development School (PDS) model activities contributed to building veteran collaborating teachers' leadership capacity. This mixed-methods study, using a sequential explanatory design approach, is conducted to reveal what components of the PDS program experienced collaborating teachers believe contribute to their increased leadership capacity, their effective work with teacher candidates, and ultimately the impact that the PDS partnership has on student learning outcomes within their classrooms. This chapter reports an analysis of data collected through the use of the *Teacher Leadership Inventory* (Angelle & DeHart, 2010) (Appendix B), and collaborating teacher leader semi-structured interview questions (Appendix C) to gain perspectives about contemporary teacher leadership within the Professional Development School sites.

This study addresses the following three questions:

1. What results emerge from comparing the explanatory qualitative interview data about PDS collaborating teachers' leadership perceptions with quantitative outcome data measured on the *Teacher Leadership Inventory (TLI)* (Angelle & DeHart, 2010) survey instrument?

2. What are the perceptions of effective PDS collaborating teachers on the reciprocal nature of the clinical practice internship regarding the development of their teacher leadership qualities?

3. To what extent is the professional and leadership growth in a PDS reciprocal for the collaborating teachers and the teacher candidates, as perceived and reported by the collaborating teachers?

This chapter provides general findings from the study that includes (a) demographic information about survey respondents, (b) common perceptions of teacher leadership among respondents, and (c) discussion of the themes that emerged from collaborating teacher definitions of teacher leadership. The chapter also includes the detailed analysis of the participant responses to the 17 closed response questions on the *Teacher Leadership Inventory* (Angelle & DeHart, 2010).

Survey Respondents

Targeted respondents were accessed through electronic mail, thus making recruitment and consent easier than through the use of mailed print surveys (Nardi, 2003). All of the potential participants gained access to a secure URL address for the Web-based Survey Monkey survey. A detailed description of informed consent and confidentiality information populated on the first page of the inventory with an option to give consent, as well as the option to exit the survey at any time. Thirty-nine teachers served as collaborating teachers with the Rowan University and Wiley Public School District PDS partnership at the time of this study from January through April 2016. The collection of data from the teachers within the three partnership PDS K-8 schools occurred during this period. All thirty-nine eligible collaborating teachers received contact through a Survey Monkey email inviting them to consent online (Appendix D)

and participate in the completion of the study and the *Teacher Leadership Inventory*

(Angelle & DeHart, 2010) online survey.

In the quantitative phase, the researcher collected data through the administration

of the *Teacher Leadership Inventory* (Angelle & DeHart, 2010) to the 26 collaborating

teachers working with the Partnership Professional Development Schools (PDSs) who

responded to the Survey Monkey invitation link. The *TLI* consists of statements using a

four-point Likert scale (with options *never, seldom, sometimes,* and *routinely*) to measure

perceptions about teacher leadership within schools. An open-ended question asked

respondents to supply optional comments concerning teacher leadership. Categorical

scales (i.e., degree, position, and gender, and age, race, years served at current school,

total years in education) served as the means for collecting demographic data. The data

were uploaded into the Statistical Package for Social Sciences (SPSS 23.0) software and

analyzed using an exploratory factor analysis. Associations were determined by running

one-way ANOVAs and cross tabulations.

There were 18 (46%) collaborating teachers who consented and participated in the

study in response to the first email. The researcher sent a second email invitation to the

21 teachers who did not respond to the first request. There were eight (21%) additional

collaborating teachers who responded to the second email. A total of 26 of the 39

collaborating teachers responded by consenting and completing the online survey by the

close of the data collection period for a 67% overall participation rate for this research

study. According to Fink (2012), the goal of any survey is to obtain a high response rate.

However, 70% is the target for an adequate response rate for this type of survey. The

original administration of the *Teacher Leadership Inventory* (Angelle & DeHart, 2010) achieved a 67% response rate.

Table 1 represents the presentation of demographic information collected from the sample of 26 respondents as part of the online data collection. Ninety-two percent (24) of the respondents were females, and 8% (2) were males. The data collected demonstrated a level of diversity in the racial make-up of the collaborating teachers with African-American and Hispanic teachers representing 27% (7) of the total number of respondents, while Caucasians made up 73% (19). Table 1 reflects the data reporting the years of teaching experience of the participants. The largest majority, 62% (16) of the collaborating teachers have taught for 5 to 15 years with approximately 81% (21) reporting that they have worked within their current PDS schools from one to ten years. A moderate 39% (10) of the collaborating teachers have received educational training beyond the bachelor's degree level. As shown in Table 1, 69% (18) of the collaborating teachers reported that they hold some leadership position within their PDS school setting. The leadership positions are reported in Table 1and range from ScIP (School Improvement Panel) team membership to PBSIS (Positive Behavior Supports in Schools) team chairperson. In general, the proportion of respondents (26) was similar to the entire collaborating teacher population (39) regarding gender, ethnicity, and total years of experience. Table 1 displays a summary of the respondents' demographic information.

Table 1

Demographic Description of TLI Survey Respondents Phase 1

Area	Frequency (N=26)	Total 100%
Gender		
Female	24	92.3
Male	2	7.7
Total	26	100.0
Ethnicity		
Caucasian	19	73.1
African-American	5	19.2
Hispanic/Latino	2	7.7
Total	26	100.0
Years Teaching		
5-10 years	9	34.65
11-15 years	7	26.95
16-20 years	4	15.40
21-25 years	3	11.55
More than 25 years	3	11.55
Total	26	100.0
Years in Current School		
1-5 years	12	46.2
6-10 years	9	34.65
11-15 years	1	3.85
16-20 years	4	15.4
More than 20 years	0	00.0
Total	26	100.0
Educational Background		
Bachelors	15	57.7
Masters	9	34.6
Masters +	0	00.0
Doctorate	1	3.85
Other	1	3.85
Total	26	100.0
Hold a Leadership Position		
Yes	18	69.3
No	8	30.8
Total	26	100.0

Table 1 (continued)

Area	Frequency (N=26)	Total 100%
Leadership Position		
ScIP (Evaluation) Team	5	19.25
Grade/Team Leader	4	15.40
SLC (School Leadership Council)	3	11.55
Other	3	11.55
Multiple Teams	2	7.7
PBSIS (Student Incentives)	1	3.85
None	8	30.8
Total	26	100.0

Note: Numbers are rounded and may not total 100%.

Discussion of the Quantitative Survey Results

In the quantitative phase, data collection took place through the administration of the *Teacher Leadership Inventory* (Angelle & DeHart, 2010). The *TLI* consists of 17 statements using a four-point Likert scale (with options *never, seldom, sometimes,* and *routinely*) to measure perceptions about teacher leadership within schools. An optional open-ended question asked respondents to define teacher leadership. The *TLI* is divided into four factors. Factor 1 is *Sharing Expertise*; Factor 2 is *Sharing Leadership*, Factor 3, the *Supra-Practitioner*, and Factor 4, *Principal Selection*.

The five items, (1, 2, 3, 4 and 7) that make up *Sharing Expertise* focus on the sharing of pedagogical or classroom management knowledge. These items not only measure the perceptions of teacher leader skills but also their willingness to share these skills with other teachers in the school. *Sharing Leadership* consists of six items (5, 6, 12, 13, 14, and 16) of two sub-sets that frame the willingness of the principal to share

leadership opportunities and the willingness of the teacher to accept those leadership

opportunities. Factor 3, the *Supra-Practitioner* consists of three items (8, 9, and 10) that

measure perceptions of teacher behaviors viewed as willingly engaging in tasks that go

above, beyond and outside their classroom duties. The final factor, *Principal Selection*, is

made up of three items (11, 15 and 17) which describe the impact of the principal on

teacher leaders based on actions to select designated teachers to serve in leadership roles

(Angelle & DeHart, 2011).

Research Question One

What results emerge from comparing the explanatory qualitative interview data

about PDS collaborating teachers' leadership perceptions with quantitative outcome data

measured on the Teacher Leadership Inventory (TLI) (Angelle & DeHart, 2010) survey

instrument?

Item analysis. Table 2 displays the *Teacher Leadership Inventory* (Angelle &

DeHart, 2010) data as frequencies and percentages reflecting the responses of

collaborating teacher leaders. When examining the five items that measure *Sharing*

Expertise, the collaborating teacher leaders indicated that these embedded practices exist

within their PDS. For example, 100% (26/26) of the respondents indicated that either

routinely or sometimes teachers ask one another for assistance with student behavior.

Ninety-three percent (24/26) indicated that either routinely or sometimes teachers ask one

another for assistance with teaching new topics or skills. Eighty-eight percent (23/26)

indicated that either routinely or sometimes teachers share new ideas through grade level

meetings or professional development. Ninety-six percent (25/26) indicated that either

routinely or sometimes teachers discuss ways to improve student learning. Eighty-five percent (22/26) indicated that either routinely or sometimes teachers stay current on educational research as a faculty.

Item analysis for the *Sharing Leadership* Factor suggested that collaborating teacher leaders had less favorable perceptions about teacher involvement with the leadership of the school. Of the six items that measured this factor, two items trended below 50%. Fifty-eight percent (15/26) indicated that either routinely or sometimes teachers are involved in decision-making about professional development activities within the school. Seventy-seven percent (20/26) indicated that routinely or sometimes teachers are involved in school improvement activities. Eighty-nine percent (23/26) indicated that either routinely or sometimes the principal responds to teacher concerns and ideas. Seventy-three percent (19/26) indicated that routinely or sometimes teachers are provided with time to collaborate on teaching and learning. Conversely, 65% (17/26) indicated that seldom or never are teachers involved in the planning of professional learning activities for the school. Also, 55% (14/26) indicated that seldom or never are teachers provided with opportunities to influence important school decisions.

Item analysis for the three items that make up the *Supra-Practitioner* factor suggested that collaborating teacher leaders are often willing to go above, beyond, and outside their classroom duties to assist others for the betterment of the school. Seventy-seven percent (20/26) indicated that routinely or sometimes teachers are willing to stay after school to work on school improvement activities. Eighty-two percent (21/26) indicated that either routinely or sometimes they stay after school to help other teachers who need assistance. Eighty-two percent (21/26) indicated that either routinely or

sometimes teachers are willing to stay after school to assist administrators who need volunteer help.

The items in the *Principal Selection* factor focused on the impact that principals have on the development and use of teacher leaders within the school. Item analysis for the three items that make up this factor suggested that although 31% (8/26) of collaborating teacher leaders feel that principals never object when teachers take on leadership responsibilities, 69% (18/26) responded that this occurs seldom, sometimes, or routinely. 62% (16/26) suggested that sometimes or routinely that the principal consults the same small group of teachers for input on decisions. Finally, 62% (16/26) indicated that sometimes or routinely most teachers in leadership positions only serve because of appointment by the principal. Table 2 displays a summary of *TLI* responses.

Table 2

Frequencies and Percentages TLI CT Responses

Survey Items	N	Ne	Se	So	Ro
1. Teachers ask one another for assistance when we have a problem with student behavior in the classroom.	26 100%	0 0%	0 0%	13 50%	13 50%
2. Other teachers willingly offer me assistance if I have questions about how to teach a new topic or skill.	26 100%	0 0%	2 7%	9 35%	15 58%
3. Teachers here share new ideas for teaching with other teachers such as through grade level/department meetings; school-wide meetings; professional development, etc.	26 100%	0 0%	3 12%	10 38%	13 50%

Table 2 (continued)

Survey Items	N	Ne	Se	So	Ro
4. Teachers discuss ways to improve student learning.	26 100%	1 4%	0 0%	6 23%	19 73%
5. Teachers are involved in making decisions about activities such as professional development, cross curricular projects, etc.	26 100%	2 7%	9 35%	15 58%	0 0%
6. Teachers are involved in finding ways to improve the school as a whole.	26 100%	0 0%	6 23%	16 62%	4 15%
7. As a faculty, we stay current on educational research in our grade level/subject area.	26 100%	0 0%	4 15%	10 38%	12 47%
8. Teachers willingly stay after school to work on school improvement activities.	26 100%	1 4%	5 20%	10 38%	10 38%
9. Teachers willingly stay after school to help other teachers who need assistance.	26 100%	1 4%	4 15%	16 62%	5 20%
10. Teachers willingly stay after school to assist administrators who need volunteer help.	26 100%	2 7%	3 12%	15 58%	6 23%
11. Administrators object when teachers take on leadership responsibilities.	26 100%	8 31%	13 50%	2 7%	3 12%
12. The principal responds to the concerns and ideas of teachers.	26 100%	1 4%	2 7%	8 31%	15 58%
13. Teachers plan the content of professional learning activities at my school.	26 100%	6 23%	11 42%	6 23%	3 12%
14. Teachers have opportunities to influence important decisions even if they do not hold an official leadership position.	26 100%	2 7%	12 47%	10 38%	2 7%
15. The principal consults the same small group of teachers for input on decisions.	26 100%	1 4%	9 35%	7 27%	9 35%
16. Time is provided for teachers to collaborate	26	2	5	11	8

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Table 2 (continued)

Survey Items	N	Ne	Se	So	Ro
about matters relevant to teaching and learning.	100%	7%	20%	42%	31%
17. Most teachers in leadership positions only serve because they have been principal appointed.	26	1	9	10	6
	100%	4%	35%	38%	23%

Key: N (Number) Ne (Never) Se (Seldom) So (Sometimes) Ro (Routinely) Numbers are rounded and may not total 100%.

Descriptive statistics. Further analysis of the *Teacher Leadership Inventory* (Angelle & DeHart, 2010) survey data items through the use of descriptive statistics of minimum, maximum, median, mean and standard deviation scores as presented in Table 3 for each of the 17 questions. The Statistical Package for Social Sciences (SPSS 23.0) system assigned a four-point scale that converted the Likert scales to a numeric representation where "never" was designated as 1; "seldom" was designated as 2; "sometimes" was designated as 3; and "routinely" was designated as 4. The minimum score represented the lowest response provided for each item on the survey. The maximum score represented the highest response provided for each item. The median score represented the middle score where half of the responses were above, and half were below. The mean score represented the average response for each item. The standard deviation represented the average difference of the scores from the mean for each item.

For the *TLI*, descriptive statistics were run to examine mean differences (Table 3). Table 3 contains a display of the variation in the highest and lowest response by item. A

reported rating of 3.5 or greater for three item responses (1, 2, and 4) resulted. Two of the highest rated items emphasized teacher assistance to one another. The first addressed teachers asking one another for assistance with a student behavior problem. The second addressed teacher's willingness to assist other teachers in teaching a new topic or skill. The third, and the highest rated in the survey at 3.65 was the item, "teachers discuss ways to improve student learning."

A reported rating of 3.0 or greater for four item responses (3, 7, 8, and 12) resulted. The highest addressed the willingness of the principal to respond to teacher concerns and ideas. The next focused on teachers' willingness to share new ideas for teaching with other teachers through grade level meetings, etc. The third addressed the teachers staying current on educational research as an overall faculty. The final item focused on teacher's willingness to stay after school to work on school improvement activities.

The remaining ten items rated below 3.0 with the three lowest (11, 13 and 14) mentioning principal support for teacher leadership in some manner. For example, the item addressing teacher involvement in professional development was among the lowest at 2.23. The item addressing teachers having the opportunity to influence important decisions rated at 2.46. The item addressing the objection of administrators when teachers take on leadership responsibilities, with a rating of 2.00, indicated that principals seldom object. Table 3 contains a summary presentation of *TLI* descriptive statistics.

Table 3

Descriptive TLI Median, Mean and Standard Deviation Scores

Survey Scales/Factors	Area	Participants (N=26)	Min.	Max.	Med.	Mean	SD
1. Teachers ask one another for assistance when we have a problem with student behavior in the classroom.			3.00	4.00	3.50	3.50	0.50
2. Other teachers willingly offer me assistance if I have questions about how to teach a new topic or skill.			2.00	4.00	4.00	3.50	0.64
3. Teachers here share new ideas for teaching with other teachers such as through grade level/department meetings; school-wide meetings; professional development, etc.			2.00	4.00	3.50	3.38	0.68
4. Teachers discuss ways to improve student learning.			1.00	4.00	4.00	3.65	0.68
5. Teachers are involved in making decisions about activities such as professional development, cross curricular projects, etc.			1.00	3.00	3.00	2.50	0.64
6. Teachers are involved in finding ways to improve the school as a whole.			2.00	4.00	3.00	2.92	0.62
7. As a faculty, we stay current on educational research in our grade level/subject area.			2.00	4.00	3.00	3.31	0.72
8. Teachers willingly stay after school to work on school improvement activities.			1.00	4.00	3.00	3.12	0.85
9. Teachers willingly stay after school to help other teachers who need assistance.			1.00	4.00	3.00	2.96	0.71
10. Teachers willingly stay after school to assist administrators who need volunteer help.			1.00	4.00	3.00	2.96	0.81
11. Administrators object when teachers take on leadership responsibilities.			1.00	4.00	2.00	2.00	0.92
12. The principal responds to the concerns and ideas of teachers.			1.00	4.00	4.00	3.42	0.79

Table 3 (continued)

Survey Scales/Factors	Area	Participants (N=26)	Min.	Max.	Med.	Mean	SD
13. Teachers plan the content of professional learning activities at my school.			1.00	4.00	2.00	2.23	0.93
14. Teachers have opportunities to influence important decisions even if they do not hold an official leadership position.			1.00	4.00	2.00	2.46	0.75
15. The principal consults the same small group of teachers for input on decisions.			1.00	4.00	3.00	2.92	0.92
16. Time is provided for teachers to collaborate about matters relevant to teaching and learning.			1.00	4.00	3.00	2.96	0.90
17. Most teachers in leadership positions only serve because they have been principal appointed.			1.00	4.00	3.00	2.81	0.83

Degree-level ANOVA. To test for differences in the variables in question (degree level and status of leadership position) and the four factors of the *TLI*, each variable underwent a one-way ANOVA. Computing the factor scores ocurred by calculating the means for all responses composing that factor. For example, a determination for the factor score for *Sharing Expertise* is calculated by the mean of the responses to questions 1, 2, 3, 4, and 7. The factor score for *Sharing Leadership* is determined by calculating the mean of the responses to questions 5, 6, 12, 13, 14, and 16. The factor score for *Supra-Practitioner* is determined by calculating the mean of the responses to questions 8, 9 and 10. The factor score for *Principal Selection* is determined by calculating the mean of the responses to questions 11, 15 and 17.

A one-way ANOVA was used to test for differences in factor scores among collaborating teacher leaders who indicated that they held a leadership position in their school with those who did not hold such a position. There were fifteen collaborating teacher leaders with bachelor's degrees, nine with master's degrees, and one with a doctoral degree. The factor scores for teachers with master's and doctoral degrees were higher on *Sharing Expertise*, *Sharing Leadership*, and *Supra-Practitioner* than those of teachers with a bachelor's degree. Conversely, the factor scores for teachers with bachelor's degrees were higher on *Principal Selection* than those teachers with master and doctoral degrees, but they were not statistically significant. Table 4 illustrates the results of the ANOVA test for the *TLI* factors of *Sharing Expertise*, *Sharing Leadership*, and *Supra-Practitioner*.

Table 4

ANOVA for Differences in Teachers' Degree Levels and TLI Factors

TLI Factors	df	F	Sig.
Sharing Expertise			
Between groups	3	.627	.615
Within groups	22		
Sharing Leadership			
Between groups	3	1.305	.413

Table 4 (continued)

TLI Factors	df	F	Sig.
Within groups	22		
Supra-Practitioner			
Between groups	3	1.242	.374
Within groups	22		

Leadership position ANOVA. A one-way ANOVA was used to test for differences in factor scores among collaborating teacher leaders who hold a leadership position with those who do not. There were eighteen collaborating teacher leaders who indicated that they held some formal leadership position within their school and eight who indicated that they did not hold such a leadership position. The factor scores for teachers who were not leaders reported higher scores for *Principal Selection* than those teachers who did hold such positions. For the factor *Sharing Leadership*, teachers who held a leadership position within their school obtained higher scores than teachers who did not hold leadership positions. Although the scores were higher for those who held leadership positions, they were not considered statistically significant but could be informative for policymakers and administrators. Table 5 illustrates the results of the ANOVA test for the *TLI* factors of *Sharing Leadership* and *Principal Selection*.

Table 5

ANOVA for Differences in Teachers' Leadership and TLI Factors

TLI Factors	df	F	Sig.
Sharing Leadership			
Between groups	1	3.573	.251
Within groups	24		
Principal Selection			
Between groups	1	.315	.667
Within groups			

Open-ended responses. The following three comments were provided during the collection of the quantitative data through the *TLI* survey process:

> I believe teacher leadership is an effective method to further the mission of the school. Having teacher leaders in a position of no form of positional authority allows their colleagues to feel uninhibited when collaborating. Thus their influence stems from the respect they command from their colleagues through their expertise and practice.

> I love helping new teachers; I have been doing it faithfully for ten years. Last year I mentored a teacher in a different district in behavior management where they changed their classroom environment within a week using Harry Wong techniques and positive framing. It helped me change my class and some of the new teachers I have mentored on my free time.

> Greater teacher input into what professional development should be held would be nice. Many times it is a "one size fits all" PD. It is disappointing.

Interview Participants

Identification of the collaborating teacher participants selected for the qualitative strand of the study resulted from both purposeful and criterion sampling. The participants were selected based on their previous experience with supervising teacher candidates and their agreement to host a teacher candidate for the 2014-15 or 2015-16 school years. They were selected as a result of extensive prior experience working with the PDS model within their school setting and were ranked highly effective as a result of their teacher evaluation ratings. As the district Rowan PDS administrator, I had also previously worked extensively with the targeted interview candidates and was familiar with their level of expertise and knowledge of the tenets of the partnership. The results that emerged from the Phase 1 *TLI* survey assisted in selecting the interview participants and constructing the final interview questions. For example, the *TLI* survey data provided the demographic information on the scores for each participant that was above the mean for each item. The results of the survey also informed the content of the final interview protocol through information provided by the participants.

Three collaborating teachers who completed the *Teacher Leadership Inventory (TLI)* (Angelle & DeHart, 2010) during Phase 1 of the research study received an email inviting them to participate in Phase 2. Two of the three identified collaborating teachers responded within the specified time frame, but the third failed to respond. As a result, an alternative teacher was contacted to serve as the third participant in Phase 2. As outlined in Table 6, all three of the interview participants were females; two were Caucasian, and one was African-American; their teaching experience ranged from 10 to 17 years; their collaborating teacher experience ranged from three to ten years; they all held a leadership

position within their school setting; and they all held masters degrees, while one held her

doctorate. The names used are not the real names of the study participants.

Table 6

Demographic Description of TLI Interview Participants Phase 2

Description	Susan	Theresa	Rebecca
Ethnicity	Caucasian	Caucasian	African-American
Gender	Female	Female	Female
Years Teaching	17	10	15
Collaborating Teacher	10	6	3
Teacher Leadership	Y	Y	Y
Educational Background			
Bachelors	Y	Y	Y
Masters	Y	Y	Y
Doctorate	N	N	Y

Discussion of the Qualitative Interview Results

The purpose of this research study was to seek to reveal the perceptions and the

extent to which the RU-WPS Professional Development School model activities

contributed to building veteran collaborating teachers' leadership capacity. This mixed-

methods study, using both quantitative and qualitative methods, was also conducted to

reveal what components of the PDS program experienced collaborating teachers believe

contributed to their increased leadership capacity, their effective work with teacher

candidates, and ultimately the impact that the PDS partnership had on student learning outcomes within their classrooms.

The second phase of the study included face-to-face, semi-structured interviews based on a subset of participants who completed the survey from phase one. I followed up with an email to invite participation from the three selected members. To capture interview data in its totality, I used a digital recorder and also took handwritten notes. The note taking used was as a way to record non-verbal information such as facial expressions. The actual final interview questions were emergent as they drew upon the themes from the survey data. The transcribed interviews were sent back directly through email to each collaborating teacher for their review which served as the member check for the accuracy of the presented data. The emergent themes that developed served as a guide in organizing data into content categories.

According to Patton (2002), data analysis is an ongoing cyclical process that integrates into all phases of qualitative research. It is an inductive process in which categories and patterns emerge from data rather than being imposed on before the collection of data. This study used an inductive process to analyze collaborating teachers' perceptions about their leadership and experiences from participation in the PDS. All of the interview data were transcribed using a word processing program through the notation and comment feature as a code development strategy. Lincoln and Guba's (1985) constant comparative method was used to organize data into appropriate categories. The constant comparative method is a four-step process that included:

1. Inductive category coding and simultaneous comparing of units meaning across categories;

2. Refinement of categories;

3. Exploration of relationships and patterns across categories; and

4. Integration of data yielding an understanding of people and settings being studied.

The constant comparative method allowed for the sorting and resorting of the responses into categories according to patterns and themes that emerged from the data. After the data categorization, files were printed and pasted onto separate index cards according to the developed categories. The index cards were useful in allowing for viewing all of the output data, according to categories, at one time. Finally, after all data were categorized and organized onto index cards, frequencies were determined for each category. This strategy had previously been utilized in a prior research course and proved extremely beneficial in illuminating data patterns and themes.

At the completion of the Phase 2 data collection, transcriptions of the interviews were uploaded into the QSR International NVivo 11 Qualitative Data Analysis Software for Windows. A line-by-line review of each interview allowed for codes assignment. Coding the transcribed data in this manner allowed for an extensive and in-depth analysis while maintaining the relations between the components (Miles & Huberman, 1994). The use of these strategies allowed for the rearrangement of coded data into categories for comparison. The added tools from NVivo 11 allowed for the cross analysis of each of the interview questions within one document. The use of the text search query features created a connected thematic tree from the three interviews, a word count of the fifty

most frequent words and phrases, and a word cloud that presented the data in a graphic

format (Figure 2).

Figure 2. Collaborating Teacher interviews 50 most frequent word cloud.

Twenty codes were developed through the qualitative data analysis resulting in

four major themes. When collaborating teachers (CT) were asked how they were

identified as leaders to work with Professional Development Schools teacher candidates

(TC), different themes arose based on their perceptions and experiences. Analysis of the

interview transcriptions revealed four themes: (1) the reciprocal nature of the PDS

clinical practice (CP) internship on the development of collaborating teacher leadership

qualities; (2) the impact of PDS collaborating teacher leadership on student learning; (3)

the impact of PDS collaborating teacher leadership on the school-university partnership;

(4) the impact of the PDS on the reciprocal professional and leadership growth of

collaborating teachers and teacher candidates (TC).

Research Question Two

What were the perceptions of effective PDS collaborating teachers on the

reciprocal nature of the clinical practice internship regarding the development of their

teacher leadership qualities?

Effect of CP on CT leadership development. There are multiple definitions for

the term *teacher leadership* due to the ever evolving and expanding roles and

responsibilities that teachers assume to improve schools and student achievement

(Meredith, 2007; Riel & Becker, 2008; Silva, Gimbert, & Nolan, 2000). Historically,

responsibilities given to teachers were limited to those directly related to the classroom.

As a result of increasing demands on school administrators, schools are increasingly

favoring a collaborative management approach where teachers are more engaged in the

decision-making process on achieving specific instructional goals (Elmore, 2000). This

study used Riel and Becker's (2008) definition of teacher leadership. The authors state,

"teacher leadership is more precisely behavior reflecting a high level of engagement with

the profession of teaching and with other teachers" (p. 398). When collaborating and

other teachers take on tasks and roles that demonstrate expert knowledge of learning and

teaching processes with increased responsibility, they are engaged in teacher instructional

leadership.

One common thread that runs within the various definitions of teacher leadership

is the opportunity for teachers to impact instructional practices within and beyond

classrooms. These opportunities develop by building relationships among members of the

organization, breaking down barriers to collaboration, and sharing resources to improve

instruction (Meredith, 2007; Urbanski & Nickolaou, 1997; York-Barr & Duke, 2004).

According to the comments made by the collaborating teachers during their interviews,

the clinical practice internship component of the Professional Development School model

provided an extensive reciprocal framework and environment for their leadership to grow

and flourish.

Theresa: Having this role of collaborating teacher in the PDS process also creates a sense of expertise where other teachers within the building will seek out my advice or ask me certain questions. Sometimes this might be because they currently have a teacher candidate for the first time, or maybe they have a candidate that they are having a problem with or some other advice that they are seeking. It may also be simply because of some of the other leadership roles that I also have within the school where I'm part of different committees and teams, such as the School Improvement Panel, where they want a question answered. Working with Rowan University in the PDS has also allowed me to become more confident in serving as a leader in these other roles within the school. I'm a mentor for the first time this year. I feel prepared because I've had these prior experiences and relationships with another teacher through the PDS collaborating teacher process.

I think that leadership can be done and defined in different ways. Sometimes being a leader means taking a back seat and being more of an observer. I do that quite a bit where I observe interactions between the teacher candidate and students, their interactions with other staff members. Are they responsive to administrators? Are they responsive to any types of criticisms? Based on these observations, I'm then able to figure out what they need and then implement it in a more of a leader role. I see what you need so I will now take the initiative and lead in helping to get you what you need.

For example, I have to fill out mid-term and final reports with the teacher candidates, and I use the Danielson rubric. This is leadership where I do just as an administrator would in completing the reflection with the candidates where we go through the same process that I go through as a teacher. One of the reflections from prior years is that there was a distinguished on the Rowan form. I talked to the supervisor to express that there was a concern in rating a teacher candidate as distinguished when I would have a difficult time achieving that rating as a practicing teacher myself. Rowan thought that this was a notable disconnect which could give the teacher candidates a false sense of competency

when they are earning a proficient at the mid-point and a distinguished by the end of the placement. In reality, they should be earning a basic by the midpoint and approaching proficient maybe by the end. So we need to be comparing apples to apples if Rowan is going to use the Danielson rubric. I would not feel comfortable rating a teacher candidate as distinguished if they have not demonstrated those marks. It is impossible for them to reach those domains. I would not want someone to look at those forms (and I am not sure how closely people do), and think it does not reflect progress. This process helps me to see the other side of the coin and helps me to become more reflective when I'm evaluated by an administrator. What would I want to see from a teacher in training? What do I expect of them that I should also be doing? For example, during my two observations this year those pre-planning questions take quite a bit of reflection, takes time, and I wanted to answer them in a meaningful way. This was noted that I put extensive time into the process when I met with the administrator.

I have always felt like this is such an important job. You do not just come into this thinking that you are important. You do this because yes you do want to make a huge difference, but you do it because you love it and want to spend time with kids. You want to have a role in this whole process where I think about becoming an active member of a community. That is why the teachers are coming to my door where I'm able to work in this collaborative teaching leadership capacity. They are also taking ownership of this.

Susan: The PDS had allowed me to grow in my leadership, especially a few years ago when I began because of the kinds of professional development that are given both to the candidates and the staff here in the school. Last year and this year the Professor in Residence also provided PD to our staff which is nice because it is connected to the learning that the teacher candidates are receiving in their courses at Rowan. This provides the candidates with a connection to the things that they are learning at Rowan in their classrooms and what they are implementing in our classrooms.

I think that my leadership work through the PDS has made me a better leader by the way I speak and model and show by example than I was back then. I also just feel that when you grow with age that you also grow with experience. I have been mentoring for about 15 years now, and I just recently submitted an application for the Rowan-Wiley mentoring and building teacher leadership capacity grant program.

Through my leadership activities, I have been able to create great relationships with the administrators within my building and at the central office. They will reach out to me to ask about candidates who have worked for me and they trust my judgment and expertise. This is rewarding in itself. Leadership is reciprocal where the district can provide teachers with opportunities, but teachers have to take advantage of them when offered. I have been able to build relationships within the district because I have taken the initiative in seeking out leadership opportunities to try to make things better. I feel that the people in the central office know whom they can depend on among teachers when they need members for curriculum and different committees. Who wants to be involved in change and can make changes for the better? Maybe they do not see that from everyone because they might not know everyone. So I do feel that much of it does come from the relationships made and the amount of effort that teachers want to put back into the system.

Rebecca: I think that teacher leadership can be defined as anyone who sees an opportunity to lead, and they seize it. They see it and respond to it. I think that teacher leaders who do this then have the ability to encourage other colleagues, to inspire them to contribute to the learning community in various capacities. Teachers right now have great pressures to get things done and are overwhelmed with paperwork and data analysis. I think that within our PLC where we get time to collaborate and talk we can inspire each other despite the fact that we are overwhelmed. We listen to each other and take back that information and use it for our growth with the work with our students in our classrooms.

I think that both my instructional and leadership practices are enhanced because I'm showing someone how to do something which in turn deepens my understanding and knowledge base. As with my students, the teacher candidates learn by doing. In turn, as I'm showing someone something or modeling it for them, they are learning by doing as well. My hope is that it is also deepening the candidates understanding, as well as mine.

CT leadership impact on student learning. The collaborating teachers also indicated that through their participation in the PDS that they have witnessed how their leadership has made a positive impact in their classrooms and on student learning outcomes. They were asked to describe how the PDS teacher candidate placement impacted the learning for the students within their classrooms.

Theresa: I have been able to instill this then into my candidates as we go along with the example of them not just writing the objective on the board, but truly getting the students to understand it. Have students take ownership of their learning and put it into their words. This is something that if you are not used to doing it you do not fall into that habit. For example, providing meaningful feedback, and practicing it is something that I stress with the candidates from the start. If you're not used to giving specific feedback about what a student has done well, you will not remember to do it without purposeful practice because it is difficult. If you do not make sure that you're checking in with students as to why we are doing what we are doing during class, then they will not take ownership which won't allow for the higher order thinking that will be needed later on down the road.

That is what I want for my students so that they understand what they are good at and what they can be successful at. Not necessarily because of the grades that they get on their report card but understanding that there is this bigger picture which allows them to contribute to this world in one way or another.

Including the teacher candidate as being the leader during a parent-teacher conference with me taking the back seat where they can express to a parent the strengths and weaknesses displayed by their student. They do everything that I would do so as to build relationships with the students and parents, which creates rapport.

The students in the classroom ultimately benefit for the unique experience of having two teachers in the classroom. They benefit from the variety of instructional perspectives. Moreover, they benefit from the motivation and support that is provided to them by their teachers.

Susan: I'm going to give you an example with that one. As for stages of transition, you honestly have to scaffold. You cannot just say that this is what you need to do and do it. With that scaffolding (and I know that I have said it a million times), but you need to consistently model. You need consistency in the classroom. Any classroom that doesn't have consistency is going to fall apart, and the candidates need to know that from the very beginning.

Rebecca: The PDS instructional and cultural expectations that I convey is to make sure that the teacher candidate is culturally aware of who is being taught within the classroom and school. The books in the classroom are globally diverse and the students in my classroom include various cultures so I make sure that they are reflected within the lessons. I embrace the cultures and one that is of major concern is the gang culture. I'm here to be an example, to explain that there are choices, and that even though we are in an urban area, the reality is that they get this culture at an early age. I include this into my lessons to let them know that there is a better life outside of what you may see in your own environment. So there are real pressures out in the community and even out on the playground where kids are asked if you are going to be a part of this group or gang? So I do this to encourage them.

For example, we did a writing assignment during the last three weeks of the placement that demonstrated to me her growth by bringing all components of the program together. She had incorporated all of the things that we had talked about and shared during the process where I could just sit back and watch. I was able to assist the students as she directed the major instruction. Having two teachers in the room at the same time was a benefit to the students and their learning.

CT leadership impact on school-university partnership. The collaborating teachers described the ways in which they perceived that the school-university partnership had made a positive impact on their leadership within their PDS setting. They were asked to describe how they convey the PDS expectations to their teacher candidates during the clinical practice placement.

Theresa: I think that as I stated before that it propels me to continue to do my best work. Sometimes this is not always easy, and it is not necessary, but nice to know that someone thinks that you do a great job as a teacher where he or she want to give you someone who is just starting out on their career journey in the teaching profession. This is a nice pat on the back and an acknowledgment of the work that I do as a teacher leader. This keeps me

working hard; it keeps me on my toes, and I want people to look to me for those types of things.

I model them. It is hard work. I'm involved in many things here at our school, and I do that because I want to be knowledgeable. I want to be involved in the whole process where I want to know why things are being implemented, why am I being asked to do this and not that? Why are we changing? I think about our students, and if the teacher candidates are coming from Rowan, typically they have done some additional work in this area where they have been at Wiley or Waketown or Cloverton or Valley County. They are somewhat familiar with the cultural background of our students. However, there is still quite a bit of explanation and talking that has to occur where things that I have gotten used to over the years are new to them.

Everyone that I have worked with at Rowan as a supervisor or PIR (Professor In Residence) over the years has been here to help me, and always asking if there is anything more that they can do. What do you want to learn more about? Our principal asked the grade levels what type of PD they would be interested in. One of the topics is current trends in education where you can sometimes get disconnected from those things because you are so immersed into your classroom. I did a little research on my own, but I also sent an email to the PIR to see if there is anything new that Rowan is working on with the teacher candidates in their coursework that would be helpful in the field. What's going on in the methods classes that could help the collaborating teachers here in our classrooms? In the PDS everything is so interconnected and to think that you know everything and to think that you do not need to grow or develop in multiple ways is detrimental to your students and you as a professional. I think that any means of growing and developing as a professional is important.

Susan: When you are not taking classes yourself you lose that knowledge of what is current in research. You try to do it yourself to stay up to date on the Common Core, best practices, things that have been added or changed, use of technology, and also when it comes done to writing curriculum each summer. The PDS also helps teachers build capacity in these areas and has helped grow leadership within the school.

This is very heavy in the beginning time that I have with the teacher candidates where we focus on the school, district and PDS mission and vision. We focus on curriculum goals for the period that they will be with me; the standards; we discuss classroom climate; and academic data. I provide a background on the cultural diversity of the school and district; socio-economic facts relating to lunches regarding how many are free, reduced or paid; how many families are renting versus owning homes; and the cultural history of Wiley. For classroom observations, I also then make sure to send the teacher candidates to another 2nd-grade classroom, then a 3rd and 1st grade, then I will send them to a middle school classroom, a Behaviorally Disabled classroom, and some related arts subject classroom. This is done to give them a comprehensive view of the school and to let them see what's the same and different across the various grade levels.

Rebecca: The Rowan PIR has come around to ask if we needed any assistance, conducted a survey to see what areas teachers were in need of, and I spoke to her yesterday where

she showed the layout from the survey. It showed that our school was good with family involvement with high numbers, which showed that we did not need any professional development in that area.

Through PDS we have had an opportunity to take a three-credit course through Rowan that was held right here in the building several years ago. It was an awesome experience! We left here and went to college. The one in particular that I remember most was for inclusion. As an inclusion teacher at that time, I found it to be very valuable to me. I could immediately take the information that I learned here on site to use in my classroom. It really helped me to refine my teaching because although I was the special education teacher, I'm in the room for all kids, every kid who needs help. It's said that all kids can learn, and this gave us all a deeper understanding. It was very well attended and it was one of the best and most valuable PDS experiences that I was able to actually put into practice right there within my classroom.

PDS also allows us to showcase our leadership skills and talents because I know that people are watching what we do here. We must reflect on our failures and learn from them to get better.

Research Question Three

To what extent was the professional and leadership growth in a PDS reciprocal for the collaborating teachers and the teacher candidates, as perceived and reported by the collaborating teachers?

Reciprocal CT and TC professional and leadership growth. Among the characteristics of effective clinical practice and preparation that matters the most is the teaching ability of the collaborating teacher or mentor teacher in the classroom in which the teacher candidate learns to teach (Grossman, Ronfeldt, & Cohen, 2012). Experienced collaborating teachers in Professional Development Schools play a significant role in the university clinical practice process for building the teaching capacity of teacher candidates. The research reflects this concept, which indicates that teacher candidates universally agree that the clinical practice is the most important part of the attainment of their degree and that the collaborating teacher plays an important role in that degree attainment (Clarke, Triggs & Nielsen, 2013). Also, there is a new description of the

collaborating teacher as teacher educator and leader which demands the collaborating

teacher be more fully engaged by working closely with the teacher candidates, eliciting

meaning out of practice, and assisting in the development of a full teaching toolkit. Such

new roles shift the focus from efficiency to efficacy, which builds leadership capacity to

create sustainable change within the school community (Angelle & Schmid, 2007;

Mangin, 2007; York-Barr & Duke, 2004).

According to the comments made by the collaborating teachers during their

interviews, the clinical practice internship component of the Professional Development

School model provided significant reciprocal professional and leadership growth for them

and their teaching candidates. They were prompted to respond to how they feel their

work as a PDS collaborating teacher impacts the production of a successful teacher

candidate during each stage of transition.

Theresa: I have sought out the opportunity to be a collaborating teacher. At the same time, they have looked to me because I have that prior experience working with student teachers, the PIR and the college supervisors. They have worked with me to continue the collaborative and cooperative work with the PDS process and placement of teacher candidates. I think that I chose to continue because of the relationships that I have formed with the student teachers. It is really a unique process and offers me the opportunity to reflect on what I do in the classroom. It is also nice because I get encouragement from them as they are new and fresh to the teaching world where they help me. I'm also lucky because I still feel very passionate about teaching. I know that sometimes it becomes tough and difficult to come in and be engaged in the teaching process every day. Having someone else in the classroom is encouraging and motivating to me because I want to model and scaffold for them on how to be a strong teacher. They are coming into the field with so much passion and enthusiasm where it keeps you going. When you look at all the things that are piling up such as paperwork requirements that are handed down and other things that take your attention away from the teaching process. So having a teacher candidate puts me back in that place of reminding me what's most important in the classroom where I'm a strong and meaningful role model for them.

I think primarily the role that I find to be the most important is to be a support system for the teacher candidates. I'm the direct line for the student teacher where they are teachers in training as they are learning. Yes, they have supervisors, they have professors, but we are in this process together. There are times where I'm firm with them, I set high

expectations for them, just as I do for my regular students. But I'm also there to support them when they feel like something has gone wrong, or they feel that they can't perform a task, or where they can't complete all of the obligations that they are set up to complete. I think that is my primary role to serve as a support system. I also think that another important role is to be a model for them where they know exactly what is expected of them. I have to go in every day prepared and taking the time to plan. This includes modeling all of the steps that go into the process. Such as how to present successful lessons, what to do if you still have students in need, and then where to you go next from there?

It helps me to take ownership. If I'm going to take a teacher candidate and be responsible for their training, then I need to present them with all of the skills that they will need to be successful. Yes, it is content knowledge, organization, but it is also time management, being a member of a team, and that is not always easy for people. Where they have to work closely with someone and agree on things that you want to implement at the grade level, or school-wide setting. I feel that I want to prepare them as best that I can and feel confident that when they are done that what they learn with me in my grade will serve them well and can be used in any academic setting. Many times now the teacher candidates are dually certified or in a Special Education capacity that when I write them a letter of recommendation and the principal calls that I can answer how their work will translate into other settings. I can feel confident in the fact that I taught this person what they will need to succeed as a teacher. They need to know quite a bit, even what their own limitations might be and when help is needed and not being afraid to ask. When do you need that extra support and when do you reach out to your teammates? To me, if I'm putting my "stamp of approval" on them then I want it to be meaningful.

It is really nice having a teacher candidate. Many people look at it as having an extra set of hands, an extra person to make your copies or to do your work. However, it is so much more than that. If you go into it and accept a student teacher thinking that is all there is to it then you will be unpleasantly surprised. The amount of extra work that goes into developing, creating and preparing someone that's capable of doing the work when you are not there is enormous. You can feel comfortable if you have to go to PD or some other reason that you are out, where you might have a sub, but you are relying on the teacher candidate to keep the show running smoothly. Not having to check in or worry about my kids when I'm not with them is what I want from and out of a teacher candidate. When I have that feeling, then I know that I have been successful in what I set out to do with each teacher candidate because I can trust them with my classroom.

This is the foundation of the whole process. The teacher candidates are observing, and little by little integrating themselves into the classroom. When they come in during September, it is really nice because everyone is coming in together at the same time. The students are considering both of us as the teachers of the classroom, which are good because they are not just used to me. They immediately have that respect for the teacher candidate as a leader in the classroom. As time goes on I'm letting the candidate know that you will be taking on this new role where sometimes it comes with advanced warning and other times it doesn't. For example, I'm going to work with a small group so why don't you take over with the rest of the class? It is important to always present things

in a way that this person is an equal to me. They are never sitting grading papers while I'm the one teaching the lesson because it is always a collaborative and co-teaching effort. As time goes on, they are then taking on all of the roles and responsibilities that I would within the classroom.

I feel my work as a PDS collaborating teacher promotes a successful transition for the teacher candidate because of my individualized attention to each step of the process. Initially, a teacher candidate will model them after me, which I encourage. However, as a few weeks turn into a month, I am perpetuating the relationship between teacher candidate and student. I want to see the teacher candidate's personality and independence coming through in his or her instruction. As a final step, I allow the teacher candidate to modify the structure of lessons and encourage him or her to take instructional risks. By the time the teacher candidate is the full-time educator in the classroom, he or she is equipped with the necessary tools and confidence to be successful.

Susan: I believe that becoming a partnership with the teacher candidate and the supervisors from Rowan where we become a triangle in the learning process not just for the teacher candidate, but for all three members of the triad. PD for the staff here at our school from Rowan has also helped in the development of our leadership. Passing on the experience and knowledge of other types of PD that you have had in the past to your candidates. Also the collaboration with teacher candidates in prepping them in a real world setting. My teacher candidates also see that I handle many things (leadership) that go on beyond the classroom.

It has helped me to mold my teacher candidates according to the needs and responsibilities of the profession. That would be the teacher candidate observing me modeling, where they are listening and then practicing the application of the skills that she sees from me, and what she has learned from the program at Rowan. Building trust between me, the teacher candidate and the supervisor from Rowan is very important as we discussed I think back in question number 2. Using reflection as a tool to become better in the practice, learning how to analyze data, provide consistent feedback, and to always set high expectations.

With PD I often model heavily verbally, in writing, I scaffold to the teacher candidate, and you can't expect that they will always learn something the first time around. So you want to make sure that you give that scaffolding with many opportunities for reflection. So as I'm working with the candidate and whether they have one subject or five, I have a reflection sheet for each lesson that they teach. It covers pointers on what they did well. What to work on so that they will improve to make it better for the next time to make it a successful lesson. They are expected to examine what they do and write a reflection on the back of the sheet detailing what they thought of the lesson. I want them to understand that when you reflect that you are learning. This allows them to understand that you can improve your teaching in that aspect.

I have been mentoring for about 15 years now and it is important to help new teachers develop a teaching and leadership toolkit. There isn't just one thing that can go into it.

There are just so many things that I'm working on with my mentees this school year such as: classroom management, assessments, time management, professionalism, knowing your content area, understanding your curriculum guides. There is just so much that has to go into that toolkit. You have ten months to do it and many times you just feel that it's just not enough time for certain teachers. But I try to focus on a single area every two weeks to make sure that they don't become overwhelmed. I feel that if you give too much at once it kind of diminishes, so you want to focus on that one area for two weeks. It then becomes more embedded for them where they ingrain and internalize it.

When I get my teacher candidate, I introduce them as part of the classroom community and an equal to me. The students understand that she is going to school to be a teacher. In all of my years as serving as a collaborating teacher, I have never had a class that saw them as different or on a lower status than me. Students always see us on the same page and on the same level. I involve the candidate in all my decision-making that comes with what we're teaching, when we're teaching it, anything that involves the students. We start off with observations in other grade levels, across my grade level classrooms, watching me teach for modeling, talking about different strategies and why certain things work. In addition, understanding classroom management and how and why it is effective in my classroom. Then when it comes to the teacher candidate taking on a subject area, we do one subject area a week where it gradually increases until they are full-time teaching.

Rebecca: One of my reasons is that I love teaching, and I love sharing what I know with others. As like with most teachers who have a heavy load of responsibilities, I want to have an impact on our future teachers. I love sharing what I do with others. I get to nurture future teachers, and one of the big things is that it keeps me on my Ps and Qs. I believe in self-reflection, which helps me to become a better teacher and leader.

Some of the responsibilities include sharing my lesson plans with the teacher candidates, allowing them some responsibility by looking at the lesson and asking what they would do here, what work you feel that the kids could use in this particular skill. The candidate gets the opportunity to plan and teach the lesson which really goes over well with the students. Some of the other responsibilities that I have in relation to the teacher candidates would be: evaluating them, we've done surveys through the program. I think that each time that I'm asked to participate that it contributes to the development of my own leadership capacity where I use it as personal professional development. For example, I use it as a professional growth opportunity where I exchange ideas with the candidate, and it provides me with new methods, research, and strategies to use in my classroom. So the PDS allows me to grow even as a seasoned teacher. There's always room for growth. It's a reciprocal relationship where both me and the teacher candidate learn during the process.

This is probably one of the hardest questions for me to answer. It enhances my development because I want all of my students to have a fun educational experience. I want students to grow and develop academically so I try to exude the best example of what a good teacher actually does. I know that the candidate will come into the room and might be a little nervous. It helps me to produce quality reflective instruction. I also get a chance to reflect on my direct contributions to collaborating teaching, leadership and the

PDS. While learning, it affords me the opportunity to be a leader and to put my leadership skills into actual practice by molding a new teacher.

Within my instruction already within my classroom, the students know it and they can say it by heart: I do, you do, and we do. I model this during my instruction for the teacher candidate where I gradually release it and the candidate observes this. I model instructional strategies and my expectations in the classroom for the teacher candidate and expect that they will do the same as they take a more active role in the teaching. I'm expecting the candidate to observe how I model, how I question, how I prompt my students during instruction, and to rely less on me when they are delivering the instruction. This is even to the point where they have to address any of those behavioral instances that might come up at the same time in the classroom. While I'm teaching them to deliver the instruction through each phase, I'm also expecting them to handle the behavior situations that might come up during each phase as well. I play the role of observer but because of my background as an inclusion teacher, I let my candidate know that we will engage in extensive co-teaching. I allow the candidate to take a leadership role and initiate and want the students to give them that respect. But there are times where I use that co-teaching aspect when they might make eye contact that shows me they need assistance with a situation. I back away initially but if I see some type of struggle, I might say "good job" and then eventually transition. This has gone really well with the candidates that I've had over the past few years.

I want the experience to be a memorable one for the teacher candidate. I want it to have a memorable impact on them so that they can be successful. I provide them with my personal beliefs on teaching where teachers have a meaningful impact on the students in their classrooms.

They need to know that this is the type of job that they are getting into. You have to have a passion for it and they need to know this early on before you get that first job and go into your own classroom. People need to know that teaching is a hard job!

Reflection summaries are required by Rowan on a daily basis for the candidates, but we also do a daily face-to-face reflection and debriefing on how they felt each lesson progressed during the course of the day. What do you think went well? What did you feel you struggled with? I explain to them from day one that I'm very reflective in teaching and evaluating the effectiveness of my lessons and that I will do the same with them. Reflection is the biggest part of growth and we spend quite a bit of time talking about that being a major part and impact of who you are as a teacher. I share with them the poem by Haim Ginott which says: "I am the decisive element in my classroom". It's really a reflective poem that says that it is my attitude and mood that sets the weather. I have it at my desk and outside my classroom to serve as a daily reminder that it is how I respond to the situation that is going to determine the outcome. So for me, I always give that to them as my end of placement gift to the candidate in a little frame. That's big for me because it says that I have the ability to heal or hurt.

Discussion of the Integrated Results

Connecting, combining, and integrating strategies were used to better understand the quantitative and qualitative data in context (Maxwell, 2013; Tashakkori & Teddlie, 1998). The qualitative analysis required that a researcher collects the data, pull it apart to analyze it, and then put it back together in a way that logically and meaningfully connected the various data points. This process used the various codes to piece the data together and consider relationships between the data. The coding process, which may somewhat strip the data of meaning, must be used in conjunction with connecting strategies to analyze the data fully. In this study, connecting strategies occurred after coding was complete. Codes, categories, and themes were reviewed and further connections within the data were then made. These connecting ideas were reported in the form of memos as suggested by Miles and Huberman (1994) and Maxwell (2013). The written memos at this stage of analysis served to illustrate the relationships that were common through much of the data as reported by survey and interview participants.

According to Teddlie and Tashakkori (2009), dual analysis of quantitative and qualitative data will lead to deeper understandings. This concept of dual analysis lead to a deeper understanding of the components of the Rowan University-Wiley Public Schools (RU-WPS) Professional Development School partnership program and how they contributed to veteran collaborating teachers' leadership self-perceptions. Other themes, insights, and explanations also evolved from the analysis of the mixed data as reported throughout this chapter. Through this layered analysis, the extent to which the RU-WPS PDS lead to the outcomes of collaborating teacher's leadership roles became clearer and further expansion will occur in the next chapter of the study.

In addition to the unique quantitative and qualitative findings outlined in this chapter, the results were integrated in order to illuminate how the first phase impacted on the second phase. This study sought to understand better collaborating teachers' perceptions of their leadership within the PDS context in working with teacher candidates. By examining the work and perceptions of collaborating teachers in Professional Development School settings through the gathering of qualitative data, a deeper understanding was established that allowed for comparison to the quantitative data gathered from collaborating teachers on the *Teacher Leadership Inventory* (Angelle & DeHart, 2010). Both data strands demonstrated the importance that collaborating teacher leaders play within the PDS settings in working with teacher candidates to develop effective novice teachers.

Summary

The purpose of this study is twofold. The first goal is to delve into the roles, responsibilities, activities and experiences of collaborating teachers. The second goal is to determine whether collaborating teachers believed that the roles, responsibilities and activities from the Professional Development School partnership between the Wiley Public School District and Rowan University provided opportunities for increased leadership capacity and, if so which were the major contributors to their leadership growth. A mixed methods research methodology is utilized to gather data and to provide an understanding of, and insight into these findings. This chapter presents the findings and analysis of the data collected during the completion of the study. The next chapter will present conclusions that can be drawn based on the study, examine implications

within the field of Professional Development School (PDS) education, and provide

recommendations for future research.

Chapter 5

Conclusions and Implications

This chapter provides a summary of the study, draws conclusions from the findings, and discusses the implications and recommendations for Professional Development School (PDS) educational policy makers, leadership practitioners, and future researchers. The summary reviews the purpose, research problem, and significance of the study. It also includes the methods and procedures used in completing the study. The conclusion section reviews each research question and draws conclusions for each question based on the findings and the review of the literature from chapter two. Recommendations for policy, practice/leadership, and research are made based on the conclusions contained within the study.

Purpose Statement

The Holmes Group (1986), NCATE (2004), and NAPDS (2008) have published guidelines that outline the principles and goals of the Professional Development School model. This study focuses on the goal of providing professional development and leadership opportunities to veteran collaborating teachers within PDSs. According to Abdal-Haqq (1989), the reciprocal development of veteran collaborating teachers and teacher candidates is an important contributor to the success of the PDS model. Professional development is not limited to just content knowledge and teaching methodology, but it also includes leadership development and growth for both the collaborating teacher leader and the teacher candidate.

The development of teacher leadership in Professional Development Schools is an important component to the success of K-12 students (The Holmes Group, 1986). This leadership does not require the creation of additional hierarchical roles, but an expansion of the normal role of the teacher (Darling-Hammond, Bullmaster, & Cobb, 1995; Greenlee, 2007; Muijs & Harris, 2003; York-Barr & Duke, 2004). Through the creation of professional learning communities, teachers can embrace the idea of being lifelong learners, which is essential in developing increased leadership capacity. Teachers need to be educational leaders and included in decision making that affects students. Professional Development Schools would offer talented teachers an added option for advancement through their service as senior teachers (Career Professionals) which would not require them to physically or psychologically leave the classroom. They would be afforded various opportunities to engage in "teaching, research, teacher education, and policy formation" (Holmes Group, 1986, p. 58). This inclusion contributes to the success of the students and provides a long-term benefit to the school. Decision-making opportunities extended to collaborating teacher leaders allows for improved instruction and professional growth (Barth, 1999; Birky, Shelton, & Headley, 2006; Crowther, Kaagan, Ferguson, & Hann, 2003; Smylie & Denny, 1990; Watkins, 2005).

The purpose of this study was twofold. The first goal was to discover and explain the perceptions of experienced collaborating teachers' roles as leaders in Professional Development Schools. The second goal was to determine whether they believe that the roles, responsibilities, activities and experiences from the PDS partnership between the Wiley Public School District and Rowan University provided opportunities for increased

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leadership capacity and, if so which were the major contributors to their leadership growth.

Problem Statement

This study explored and defined collaborating teacher leadership at the three selected Professional Development School locations within the Wiley Public School District and the Rowan University partnership. The study examined whether, or the extent to which, the professional growth is reciprocal (collaborating teacher and teacher candidate) in a PDS. Two broad categories of inquiry guided this study. First, it described what veteran collaborating teachers believe *teacher leadership* means. Second, it provided experienced collaborating teachers a voice regarding the specific roles, responsibilities, activities and experiences within the PDS partnership that contribute to increased leadership capacity among them as they work with teacher candidates.

Methodology

This two-phase study used a sequential explanatory mixed methods design which consisted of data collection through the use of the *Teacher Leadership Inventory (TLI)* (Angelle & DeHart, 2010) (Appendix B), and semi-structured interviews (Appendix C) with purposefully selected collaborative teacher leaders, in order to gain perspectives about contemporary teacher leadership within the Professional Development School school district-university partnership sites. The study provided the previously described advantages of both quantitative and qualitative data sources that encompass the use of mixed methods research techniques (e.g., p. 42) to elicit four key findings of the perceived roles of teacher leaders.

Research Questions

This sequential explanatory mixed methods study addressed the following research questions:

1. What results emerged from comparing the explanatory qualitative interview data about PDS collaborating teachers' leadership perceptions with quantitative outcome data measured on the *Teacher Leadership Inventory (TLI)* (Angelle & DeHart, 2010) survey instrument?

2. What were the perceptions of effective PDS collaborating teachers on the reciprocal nature of the clinical practice internship regarding the development of their teacher leadership qualities?

3. To what extent was the professional and leadership growth in a PDS reciprocal for the collaborating teachers and the teacher candidates, as perceived and reported by the collaborating teachers?

Significance of the Study

School improvement requires the collaborative work and leadership of all members of the school organization (Angelle, 2007; Fullan, 2003; Katzenmeyer & Moller, 2001; Mangin, 2007). Teacher leadership has attracted the attention of educators and others throughout the nation. This study provided an important contribution to the profession due to the need for a conversational space reflecting the continuous need for collaborating teacher leadership and professional development as an expectation of educators and educational leaders throughout the country. This expectation sometimes

comes merely as a matter of professional principle, and sometimes it is a requirement for periodic credential renewal. As of July 1, 2013, teachers in New Jersey must earn at least 20 hours of professional development each year, as required by *N.J.A.C.*6A:9C-3.4 (NJDOE, 2014). As a result, the Professional Development Schools could serve as an important mechanism for the delivery of the required professional development training hours for all instructional staff members.

Also, with the advent of *AchieveNJ*, teachers in New Jersey must consistently demonstrate that they are effective instructors through multiple observations of their practice as well as student growth. For this study, effective Professional Development School collaborating teacher leaders were identified as those classified as "effective" or "highly effective" on the teacher practice component of their prior performance evaluations (Danielson, 2006; NJDOE, 2014). The study suggests that the PDS model fills this need by delivering professional development through the partnership between the university and the schools to meet the needs of each at a lower financial cost.

Key Findings

The conclusions were drawn from the findings of this study, as outlined in chapter four, and the literature reviewed in chapter two. The purpose of this study was twofold. The first goal was to delve into the roles, responsibilities, activities and experiences of collaborating teachers. The second goal was to determine whether collaborating teachers believe that the roles, responsibilities and activities from the Professional Development School partnership between the Wiley Public School District and Rowan University

provide opportunities for increased leadership capacity and, if so which were the major contributors to their leadership growth.

Research Question One

What results emerge from comparing the explanatory qualitative interview data about PDS collaborating teachers' leadership perceptions with quantitative outcome data measured on the Teacher Leadership Inventory (TLI) (Angelle & DeHart, 2010) survey instrument?

Sharing Expertise consists of five items that focus on the sharing of pedagogical or classroom management knowledge. These items measure the perceptions of teacher leader skills and their willingness to share these skills with other teachers in the school. When examining the items that measure *Sharing Expertise*, the collaborating teacher leaders suggest that these practices are embedded within their PDS. The reported percentages ranged from 85% to 100% on the items that comprise the Sharing Expertise factor of the *TLI*.

Sharing Leadership consists of six items of two sub-sets that frame the willingness of the principal to share leadership opportunities and the willingness of the teacher to accept those leadership opportunities. When examining the six items that measure *Sharing Leadership*, the collaborating teacher leaders suggest a less favorable perception about teacher involvement with the leadership of the school. The reported percentages ranged from 35% to 89% on the items that comprise the *Sharing Leadership* factor. Sixty-five percent (17/26) indicate that seldom or never are teachers involved in the planning of professional learning activities for the school. Also, 55% (14/26) indicate

that seldom or never are teachers provided with opportunities to influence important school decisions.

Supra-Practitioner consists of three items that measure perceptions of teacher behaviors viewed as willingly engaging in tasks that go above, beyond and outside their classroom duties. When examining the three items that measure the *Supra-Practitioner* factor, the collaborating teacher leaders suggest that they are often willing to go above, beyond, and outside their classroom duties to assist others for the betterment of the school. The reported percentages ranged from 77% to 82% on the items that comprise the *Supra-Practitioner* factor.

Principal Selection consists of three items that measure the impact of the principal on teacher leaders based on actions to select designated teachers to serve in leadership roles. The items in the *Principal Selection* factor focused on the impact that principals have on the development and use of teacher leaders within the school. When examining the three items that measure this factor, the collaborating teacher leaders suggest that principals never object when teachers take on leadership responsibilities (81%), that the principal consults the same small group of teachers for input on decisions (62%), and that most teachers in leadership positions only serve because of appointment by the principal (61%).

A reported rating of 3.5 or greater, on a scale from 1-4 (Never-Routinely), for three item responses (1, 2, and 4) resulted. Two of the highest rated items emphasized teacher assistance to one another. The first addressed teachers asking one another for assistance with a student behavior problem. The second addressed teacher's willingness

to assist other teachers in teaching a new topic or skill. The third, and the highest rated in the survey at 3.65 was the item, "teachers discuss ways to improve student learning."

A reported rating of 3.0 or greater for four item responses (3, 7, 8, and 12) resulted. The highest addressed the willingness of the principal to respond to teacher concerns and ideas. The next focused on teachers' willingness to share new ideas for teaching with other teachers through grade level meetings, etc. The third addressed the teachers staying current on educational research as an overall faculty. The final item focused on teachers' willingness to stay after school to work on school improvement activities.

The remaining ten items rated below 3.0 with the three lowest (11, 13 and 14) mentioning principal support for teacher leadership in some manner. For example, the item addressing teacher involvement in professional development was among the lowest at 2.23. The item addressing teachers having the opportunity to influence important decisions rated at 2.46. The item addressing the objection of administrators when teachers take on leadership responsibilities, with a rating of 2.00, indicated that principals seldom object. This finding would support the need for principals to heed Smith's (1999) advice that the top-down model is no longer effective and that teachers must be a part of the leadership and decision-making process for the school to be successful.

A one-way ANOVA was used to test for differences in factor scores among collaborating teacher leaders who indicated that they held a leadership position in their school with those who did not hold such a position. There were fifteen collaborating teacher leaders with bachelor's degrees, nine with master's degrees, and one with a doctoral degree. The factor scores for teachers with master's and doctoral degrees were

higher on *Sharing Expertise*, *Sharing Leadership*, and *Supra-Practitioner* than those of

teachers with a bachelor's degree. Conversely, the factor scores for teachers with

bachelor's degrees were higher on *Principal Selection* than those teachers with master's

and doctoral degrees. Although the scores were higher in each instance, they were not

statistically significant.

A one-way ANOVA was used to test for differences in factor scores among

collaborating teacher leaders who hold a leadership position with those who do not. There

were eighteen collaborating teacher leaders who indicated that they held some formal

leadership position within their school and eight who indicated that they did not hold

such a leadership position. The factor scores for teachers who were not leaders reported

higher scores for *Principal Selection* than those teachers who did hold such positions. For

the factor *Sharing Leadership*, teachers who held a leadership position within their school

reported higher scores than teachers who did not hold leadership positions, but they were

not statistically significant. Although the findings were not statistically significant, this

information would offer further guidance and support for administrators to engage as

many teachers as possible in the Professional Development School model through

various collaborative leadership opportunities.

Darling-Hammond, Bullmaster, and Cobb (1995) suggest that teacher leadership

and learning are connected when teachers are given opportunities to showcase their

improved practice. The findings from this study suggest that by providing collaborating

teachers with opportunities for leadership, in addition to their support of teacher

candidates, that they can explore leadership roles through reflective practice and learning.

The findings provide added support for the use of the PDS model as a means to increase

the involvement of teachers within the leadership framework of the schools in which they work. The findings from this study also suggest that a majority of the teacher participants are beginning to view teacher leadership as a positive way for them to make a difference and to play a more active role in the PDS and their school. The participants suggest that the PDS model has been effective when examining the *TLI* survey results for *Sharing Expertise*. The survey and interview findings indicate that teacher leaders are beginning to step outside of their classrooms to assume active roles in and out of the school in advancement of the mission of their PDS and sharing their expertise and skills with other members of the PDS learning community.

The findings suggest that there are differences in the level of support and participation between teachers with Bachelor degrees in contrast to those who hold Master or Doctorate degrees. Teachers with post Bachelor degrees are more supportive and actively engaged in the PDS. Teachers who have a leadership role are also more active in the activities within the PDS setting than those who do not hold a leadership role. The principal also plays a major role in the perceptions of the collaborating teachers regarding the fairness of the process for who is chosen and why they are chosen for leadership opportunities. This was evidenced by the perceptions reported on the *Principal Selection* factor of the *TLI* where the respondents expressed that the principal consults the same small group of teachers for input on decisions (62%), and that most teachers in leadership positions only serve because of appointment by the principal (61%). This data would suggest that principals should take affirmative steps to include more teachers within the leadership framework and expand the selection process for teacher inclusion.

The participants also expressed a strong desire to play a more active role in the development of the professional development activities in a manner that would make the professional development more relevant and salient to the needs of the teachers in contrast to what was described as a one size fits all model. One striking example was expressed by a respondent who shared in the open-ended responses to the *TLI* survey that:

Greater teacher input into what professional development should be held would be nice. Many times it is a one size fits all PD. It is disappointing.

This was contrasted by the interview participants who noted that:

Theresa: PD for the staff here at our school from Rowan has also helped in the development of our leadership. Passing on the experience and knowledge of other types of PD that you have had in the past to your candidates.

Susan: Last year and this year the Professor in Residence also provided PD to our staff which is nice because it is connected to the learning that the teacher candidates are receiving in their courses at Rowan. This provides the candidates with a connection to the things that they are learning at Rowan in their classrooms and what they are implementing in our classrooms.

These findings would provide the Professional Development School partners with the data to investigate further how to better align the professional development provided with the expressed needs and desires of the teachers.

Research Question Two

What are the perceptions of effective PDS collaborating teachers on the reciprocal nature of the clinical practice internship regarding the development of their teacher leadership qualities?

The term *teacher leadership* has been defined in multiple manners due to the ever evolving and expanding roles and responsibilities that teachers assume to improve

schools and student achievement (Meredith, 2007; Riel & Becker, 2008; Silva, Gimbert, & Nolan, 2000). Historically, responsibilities given to teachers have been limited to those directly related to the classroom. As a result of increasing demands on school administrators, schools are increasingly favoring a collaborative management approach where teachers are more engaged in the decision-making process on achieving specific instructional goals (Elmore, 2000). This study uses Riel and Becker's (2008) definition of teacher leadership, which states, "teacher leadership is more precisely behavior reflecting a high level of engagement with the profession of teaching and with other teachers" (p. 398). When collaborating and other teachers take on tasks and roles that demonstrate expert knowledge of learning and teaching processes with increased responsibility, they are engaged in teacher instructional leadership.

Teacher leadership has been put forward as an important quality that allows teachers to improve instructional practices within and beyond their classrooms. Leadership opportunities of this nature break down barriers, support collaboration, and the sharing of resources to improve instruction (Meredith, 2007; Urbanski & Nickolaou, 1997; York-Barr & Duke, 2004). The findings from this study suggest that collaborating teachers believe that the Professional Development School clinical practice model provides a reciprocol framework for their leadership to grow and flourish.

Twenty major codes developed through the qualitative interview data analysis, which on analysis, could then be collapsed into four themes. When collaborating teachers (CT) were asked how they were identified as leaders to work with Professional Development School teacher candidates (TC), different themes arose based on their perceptions and experiences. Analysis of the interview findings revealed three themes

related to research question two: (1) the reciprocal nature of the PDS clinical practice (CP) internship on the development of collaborating teacher leadership qualities; (2) the impact of PDS collaborating teacher leadership on student learning; (3) the impact of PDS collaborating teacher leadership on the school-university partnership.

The collaborating teachers also indicated that through their participation in the PDS they have witnessed how their leadership has made a positive impact in their classrooms and on student learning outcomes. They describe how the PDS teacher candidate placement impacts the learning for the students within their classrooms. The collaborating teachers describe the ways in which they perceive that the school-university partnership has made a positive impact on their leadership within their PDS setting. They also describe the importance of how they convey the PDS expectations to their teacher candidates during the clinical practice placement. The findings persuasively suggest that the interview participants identified the reciprocal nature of the PDS clinical practice internship as an important component on the development of their leadership qualities. The comments that follow demonstrate some of the perceptions that support this finding:

Theresa: Having this role of collaborating teacher in the PDS process also creates a sense of expertise where other teachers within the building will seek out my advice or ask me certain questions. Working with Rowan University in the PDS has also allowed me to become more confident in serving as a leader in these other roles within the school.

Susan: The PDS had allowed me to grow in my leadership, especially a few years ago when I began because of the kinds of professional development that are given both to the candidates and the staff here in the school. Leadership is reciprocal where the district can provide teachers with opportunities, but teachers have to take advantage of them when offered.

Rebecca: I think that teacher leadership can be defined as anyone who sees an opportunity to lead, and they seize it. They see it and respond to it.

The findings for the theme of the impact of the PDS and collaborating teacher leadership on student learning emphasized the concept of modeling. The teachers shared specific examples of how they believed that the children in their classrooms benefited from the PDS model. The visibility and contact with university students and staff provides a positive impact on the PDS students where they get an early understanding and exposure to the concept of attending college. The students in PDS schools are frequently observed by many individuals, including teacher candidates, university supervisors, practicum students and Professors in Residence. The students are provided leadership opportunities through this influx of outside observers and this encourages them to exhibit model behavior. The comments that follow demonstrate some of the perceptions that support this finding:

Theresa: I have been able to instill this then into my candidates as we go along with the example of them not just writing the objective on the board, but truly getting the students to understand it. Have students take ownership of their learning and put it into their words.

Susan: You need consistency in the classroom. Any classroom that doesn't have consistency is going to fall apart, and the candidates need to know that from the very beginning.

Rebecca: Make sure that the teacher candidate is culturally aware of who is being taught within the classroom and school. The books in the classroom are globally diverse and the students in my classroom include various cultures so I make sure that they are reflected within the lessons.

The findings for the theme of the impact of the PDS school university partnership on collaborating teacher leadership was a positive measure. The partnership creates a K-20 continuum that has a positive impact on collaborating teacher leadership. The teachers shared specific examples of how they believed that their involvement in the PDS had a positive impact on their leadership. The PDS partnership offers leadership opportunities for collaborating teachers that would not normally exist absent the partnership. They also

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feel that they are leaders due to the strong influence that they are able to exert in the development of the teacher candidates through the clinical internship process. They saw this as not only as an individual process, but a contribution to the profession. The interview findings further suggest that collaborating teachers view this as leadership due to the requirement that their classrooms become open and accessible. The comments that follow demonstrate some of the perceptions that support this finding:

Theresa: Everyone that I have worked with at Rowan as a supervisor or PIR over the years has been here to help me and always asking if there is anything more that they can do. In the PDS everything is so interconnected.

Susan: You try to do it yourself to stay up to date on the Common Core, best practices, things that have been added or changed, use of technology. The PDS also helps teachers build capacity in these areas and has helped grow leadership within the school.

Rebecca: Through PDS we have had an opportunity to take a three-credit course through Rowan that was held right here in the building several years ago. It was an awesome experience!

Research Question Three

To what extent is the professional and leadership growth in a PDS reciprocal for the collaborating teachers and the teacher candidates, as perceived and reported by the collaborating teachers?

According to Grossman, Ronfeldt, and Cohen (2012), the teaching ability of the collaborating teacher is one of the primary characteristics that matter the most in the creation of an effective clinical practice classroom experience. The collaborating teachers in this study confirm this assertion that they play an important role in building the teaching capacity of the teacher candidate. This also supports Clarke, Triggs and Nielsen (2013), who indicate that teacher candidates universally agree that the clinical practice is the most important component in attaining their degree and that the collaborating teacher

plays a major role in the process. There is also a shift in roles which builds sustainable change within school communities that create leadership capacity through the development of a full teaching toolkit. (Angelle & Schmid, 2007; Mangin, 2007; York-Barr & Duke, 2004).

Collaborating teachers place a high value on the work that they do with teacher candidates and the associated university staff, which provides for new knowledge for the teachers (Clarke et al., 2013). The Professional Development School model emphasizes the importance of teacher learning to occur within the clinical practice setting, which then provides the context for both the collaborating teacher and teacher candidate. The PDS movement resulted as an impetus for the Holmes Group's (1986) proposal for the restructuring of teacher education at the school site level. It envisioned partnerships where researchers, graduate students, teacher candidates and classroom teachers collaborate within the context of pre-service teacher education (Darling-Hammond et. al, 1995; Levine & Churins, 1999).

The role of the collaborating teacher has not been a generalized conception jointly created by the University faculty, school site, and collaborating teacher, but a self-defined idea created solely by the individual collaborating teacher. The collaborating teachers' perceptions of the student teaching experience are essential to understanding their role in the student teaching triad within a Professional Development Schools model. In the PDS model, the triad of the school site collaborating teacher, university supervisor, and the teacher candidate develop a consistent set of defined collaborating teacher expectations (Holmes Group, 1986). The findings from this study suggest that the collaborating teachers involved in this PDS partnership share this same belief and understanding of the

importance of the triad. Analysis of the interview findings revealed one major theme

related to research question three: the impact of the PDS on the reciprocal professional

and leadership growth of the collaborating teachers and teacher candidates.

For the theme of the impact of the PDS on the reciprocal professional and

leadership growth of collaborating teachers and teacher candidates, the findings suggest a

positive impact on both groups. The collaborating teachers suggested that working in the

PDS with teacher candidates causes them to constantly reflect on their teaching practices,

which revitalizes their own teaching strategies. They indicated that the learning was

reciprocal for the teacher candidates and for them through the PDS clinical internship.

Through their interaction with teacher candidates and university staff, the collaborating

teachers believe that they were empowered as leaders within the PDS framework. The

Holmes Group (1986) emphasized that reciprocity is essential to the success of a PDS as

it impacts on all stakeholders. The comments that follow demonstrate some of the

perceptions that support this finding:

Theresa: I think that I chose to continue because of the relationships that I have formed
with the student teachers. It is really a unique process and offers me the opportunity to
reflect on what I do in the classroom. When I get my teacher candidate, I introduce them
as part of the classroom community and as equal to me.

Susan: I believe that becoming a partnership with the teacher candidate and the
supervisors from Rowan where we become a triangle in the learning process not just for
the teacher candidate, but for all three members of the triad. Also the collaboration with
teacher candidates in prepping them in a real world setting. I introduce my teacher
candidate as an equal and part of the classroom community.

Rebecca: I want to have an impact on our future teachers. I use it as a professional growth
opportunity where I exchange ideas with the candidate, and it provides me with new
methods, research, and strategies to use in my classroom. It's a reciprocal relationship
where both me and the teacher candidate learn during the process.

According to prior research and the findings from the interviews with the

collaborating teachers, the clinical practice internship component of the Professional

Development School model provides significant reciprocal professional and leadership growth for them and their teaching candidates. They were prompted to respond to how they feel their work as a PDS collaborating teacher impacts the production of a successful teacher candidate during each stage of transition. As outlined in the findings and research, teachers who are actively involved in leadership have more opportunities to learn and collaborate, resulting in more individual professional engagement (Darling-Hammond et al., 1995). The Professional Development Schools model provides extensive opportunities for learning and collaboration outside the normal hierarchical structure of the school. This study explores the positive consequence of participation in the Wiley Public School District-Rowan University PDS model partnership and the development of expanded leadership capacity among veteran collaborating teachers as a result of the multiple opportunities afforded for learning, collaboration, and decision-making.

In addition to the unique quantitative and qualitative findings, the integrated results provide further results to illuminate how the first phase impacts on the second phase. This study allows for a better understanding of collaborating teachers' perceptions of their leadership within the PDS context in working with teacher candidates. By examining the work and perceptions of collaborating teachers in Professional Development School settings through the gathering of qualitative data, a deeper comparative understanding was established with the quantitative data gathered from collaborating teachers on the *Teacher Leadership Inventory* (Angelle & DeHart, 2010). Both data strands demonstrate the importance that collaborating teacher leaders play

within the PDS settings in working with teacher candidates to develop effective novice teachers.

Implications

The literature review along with the conclusions based on the findings highlight significant implications for PDS educational policy, practice/leadership, and future research.

Policy

Professional Development Schools are collaborative and supportive learning environments created with a medical school and teaching hospital philosophy for improving student learning, providing professional development, and training new teacher candidates (Abdal-Haqq, 1989). The Holmes Group (1986) put forth the Professional Development School model as a response to two of the major challenges detailed in *A Nation at Risk* (1983) concerning the connection of schools of education with K-12 schools and making K-12 schools better learning and working environments for practicing teachers with the goal of improving and reforming teacher education (The Holmes Group, 1986). Professional Development Schools are the resulting focus of goals four and five which place emphasis on the importance of connecting schools of education with district schools as a means to assist with the development of teacher learning and leadership capacity.

Various studies on teacher leadership suggest that teachers are key stakeholders and they must be included in the reform efforts to improve schools and student learning (Angelle, 2007; Harris et al., 2008; Harris & Muijs, 2011; Silva et al., 2000). Darling-Hammond and Sykes (as cited in Epstein, 2004), suggest that there needs to be combined

policy action at the local, state, and federal levles to create incentives to encourage teachers to work in the most challenging school districts. Through the Professional Development School model, the authors offer hope for a redsigned and dual restructuring of teacher education preparation programs and K-12 schools that allow PDS partners to serve as agents of change.

The ultimate goal of the PDS model is to recreate the teaching hospital-medical school model in the K-12 and university partnership setting. PDSs provide a supportive and practical place for the preparation of new teacher candidates, while also providing a renewed environment for experienced collaborating teachers to improve their practice and expand their leadership. The research and findings from this study support the need for administrators to involve teachers in all aspects of the school operation more completely. This study also suggests that the PDS model addresses in a systematic and effective manner, the identified challenges from *A Nation at Risk* (1983) and *No Child Left Behind* (2001).

One of the critical attributes of the work within an effective Professional Development School setting is the creation of authentic collaboration among the partnering organizations and between and among school and university supervisors. This complex process goes well beyond the cooperation at the teacher and university staff level, and it must also exist at the highest levels of the organizations. Senior executive members of both institutions must be actively and intimately engaged in the process with strong commitment through the creative dedication and blending of financial and human resources that allows the PDS to carry out the stated mission. This level of partnership combines tasks that were traditionally undertaken separately in the past such as

curriculum, supervision, and research, which are now jointly defined and executed tasks. This type of collaboration connects the university to the field in a meaningful way where K-12 teaching practice and university knowledge are incorporated together to impact teacher candidate preparation (Levine & Churins, 1999).

An example of this policy strategy and partnership collaboration in action is the joint competitive discretionary grant application submitted to the New Jersey Department of Education (NJDOE), Division of Teacher and Leader Effectiveness for the creation of a model for "Building Teacher Leadership Capacity to Support Beginning Teachers" by the Rowan-Wiley partnership in 2015. As result of the PDS partnership, this joint NJDOE grant submission was approved and awarded for a three-year period in the amount of $200,000. The partners are charged with using the Beginning Teacher Leader Project: Building Capacity & Professional Learning grant to leverage the power of school district and university partnerships to improve support for beginning teachers (both novice and teacher candidates) in a high-needs school district. The Rowan-Wiley partnership is in year two of the grant cycle, which spans three years from September 1, 2015 through June 30, 2018. The Rowan-Wiley partnership project was the only one of the six approved state grantees that consisted of a direct one-to-one university and school district partner relationship, which will allow for a more tailored and community-specific approach to meet the needs of project participants.

The purpose of the grant is to create opportunities for new approaches to meeting the needs of novice and aspiring teachers that will inform New Jersey state educational policy on beginning teacher support. As stated in the grant announcement, "The goals of the grant align with other key New Jersey state policy initiatives seeking to strengthen

teacher preparation and practice that encompass raising the quality of candidates seeking to enter the profession; making initial teacher preparation more rigorous and practice-relevant; increasing teacher retention through more effective supports during the initial years; and improving equity in the distribution of effective teachers across the state" (NJDOE, 2015).

This joint partnership grant allows for the effective alignment of the district and university resources to meet the needs of both beginning teachers and teacher leaders in the Wiley Public School District. The policy goals for Year One of the grant are to: "develop a high quality program of professional learning to prepare teacher leaders to serve as mentors to novice in-service teachers, as collaborating teacher mentors to pre-service teacher candidates, and as supporters of teachers needing assistance; implement mentor training for a cadre of teacher leaders who will then be able to serve as mentors in Year Two and subsequent years; create and implement high quality professional learning opportunities for district and school leaders and School Improvement Panel members to increase support to beginning teachers; and work with school district partners to examine and upgrade their mentoring programs and other policies and practices that support beginning teachers" (NJDOE, 2015).

The findings from this study support the need for such a state model that could include the Professional Development School framework. The outcomes from this study could also further inform the implementation of the joint partnership grant by incorporating the concerns and suggestions provided by the participants involved in both this study and the grant. Two of the three interview participants involved in this study subsequently applied and were selected to participate as mentors and leaders in the

Building Teacher Leadership grant project. As active participants in the grant, they will

be able to ensure that their identified concerns and needs are addressed. For example, one

selected participant shared the following:

Theresa: Working with Rowan University in the PDS has also allowed me to become more confident in serving as a leader in these other roles within the school. I'm a mentor for the first time this year. I feel prepared because I've had these prior experiences and relationships with another teacher through the PDS collaborating teacher process.

Practice/Leadership

As a result of the evolving roles and responsibilities that teachers assume to

improve schools and student achievement, the term *teacher leadership* has been defined

in multiple ways (Meredith, 2007; Riel & Becker, 2008; Silva, Gimbert, & Nolan, 2000).

Teachers have traditionally been given roles limited directly to the classroom. To achieve

specific school level goals, teachers are engaged more in the decision-making process

where administrators increasingly foster a collaborative management and leadership

approach (Elmore, 2000). Riel and Becker (2008) defined teacher leadership as "behavior

reflecting a high level of engagement with the profession of teaching and with other

teachers" (p. 398). The opportunity for teachers to impact instructional practices in and

outside of the classroom through the creation of relationships, breaking down barriers,

and sharing resources is one common theme that runs throughout the various teacher

leadership definitions (Meredith, 2007; Urbanski & Nickolaou, 1997; York-Barr & Duke,

2004). The research and findings from this study support the Professional Development

School model as a framework and environment where collaborative teacher leadership

can grow and flourish.

Teacher leadership models explore the potential teachers have to improve student

learning through strong professional engagement. Hallinger (2003) suggests that

organizations learn and function at high levels when there is shared leadership, due to greater commitment and professionalism. Sharing expertise in a structured leadership model creates a collective responsibility for improving student learning (Kenney, Duel, Nelson & Slavit, 2011). Teachers become instructional leaders when there is collaboration and a shared vision (Kurtz, 2009). Beachum and Dentith (2004) detail models of leadership wherein teachers expand their responsibilities and decision-making beyond the classroom. Each of these models assumes that schools have determined and capable teachers who are committed to student success (Keedy, 2009).

The *Teacher Leadership Exploratory Consortium* was established to promote discussion among stakeholders of the teaching profession regarding the critical leadership roles that teachers play in assisting students and schools to succeed. An outcome of the collaboration is the new *Teacher Leader Model Standards* (Council of Chief State School Officers, 2011). Therefore, studying current roles of collaborative teacher leaders within Professional Development School settings and their perceptions about the impact of teacher leaders in schools is critical to the further development of the concept. Angelle and Beaumont (2006, 2007) posit that most teachers who take on leadership roles do not see themselves as leaders, but perceive that most of their work occurs through informal collaboration or sharing of expertise. Because expertise establishes credibility in the eyes of others, it lies as the foundation of successful teacher leadership.

An example of this practice/leadership strategy in action is the current efforts of the state of New Jersey Department of Education to create and implement a teacher leader endorsement based on the *Teacher Leader Model Standards* (Council of Chief State School Officers, 2011). According to the NJEA Review (2015), this new

endorsement will allow teachers to provide leadership from their classrooms where they will advocate for the profession and student learning. Teacher leaders "will serve in positions where they help improve teacher practice and create a collaborative culture where decisions about schools and learning can be made with teachers, not above them" (p. 17). Such an endorsement will: improve teacher quality and student learning, as teachers learn from other teachers; create collective leadership in a school, which helps both the school culture and student achievement; create a career ladder to help keep highly effective teachers in the classroom; and help ensure schools remain focused on instruction. According to the law, an 11 member advisory board will be appointed by the New Jersey Commissioner of Education to make recommendations to the Commissioner of Education and New Jersey State Board of Education for the promulgation the regulations related to the course of study for the teacher leader program and make recommendations for non-supervisory job titles/positions that should have the certificate.

The findings from this study provide further supportive evidence from teachers working in the field on how this state policy might be more practically implemented to impact practice and leadership within the Professional Development School model. Several of the *TLI* survey respondents shared in the open-ended responses the following informative observations that could inform this conversation:

I believe teacher leadership is an effective method to further the mission of the school. Having teacher leaders in a position of no form of positional authority allows their colleagues to feel uninhibited when collaborating. Thus their influence stems from the respect they command from their colleagues through their expertise and practice.

I love helping new teachers; I have been doing it faithfully for ten years. Last year I mentored a teacher in a different district in behavior management where they changed their classroom environment within a week using Harry Wong techniques and positive framing.

The findings also support the concept that the professional development and leadership growth within the Professional Development School is reciprocal for the collaborating teachers and teacher candidates, as perceived and reported by the collaborating teachers. Several of the collaborating teachers offered how this reciprocal growth occurs in the work that they do with the teacher candidates during the clinical experience:

Theresa: I think primarily the role that I find to be the most important is to be a support system for the teacher candidates. I'm the direct line for the student teacher where they are teachers in training as they are learning.

Theresa: When they come in during September, it is really nice because everyone is coming in together at the same time. They immediately have that respect for the teacher candidate as a leader in the classroom. It is important to always present things in a way that this person is an equal to me.

Susan: When I get my teacher candidate, I introduce them as part of the classroom community and an equal to me. The students understand that she is going to school to be a teacher. Students always see us on the same page and on the same level. I involve the candidate in all my decision-making that comes with what we're teaching, when we're teaching it, anything that involves the students.

Research

Clarke et al. (2013) further offer that the study of this relationship between collaborating teachers and teacher candidates has traditionally been viewed from the teacher candidate lens and that more research is warranted from the collaborating teacher perspective. This research also questions how historically one person, who has such a critical effect on the success of future teachers, has been the focus of so little research. The evidence offered suggests that teacher education institutions have provided little, if any, consistent formal training for collaborating teachers. There is a new and emerging description of the collaborating teacher as a teacher leader. This description demands that

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the collaborating teacher be more fully engaged by working more closely with the teacher candidate, eliciting and making meaning out of practice, and assisting in the development of a full teaching toolkit for the teacher candidate. The lack of formal training and voice for collaborating teachers existed in the research as a missing link (Clarke et al., 2013).

This study further explored an alternative collaborating teacher education model that might fill this research void: Professional Development Schools (PDSs) as a framework for collaborating teacher leadership. The study adds to the research body that supports the Professional Development School model and the impact that it has on the development of teacher leaders. Additional studies might be conducted to test further the theories outlined in the PDS model. For example, a more expansive national study might be conducted to test the usefulness of the PDS model across multiple settings.

Also, an example of this research strategy in action is the Beginning Teacher Leader Grant project described above, which has specific goals with measurable outcomes. The goals align with implementation activities for increasing beginning teacher persistence, improving student outcomes, and building community between teacher candidates, novice teachers, teacher leaders/mentors, district and school leaders, and community stakeholders. The project is framed by research related to signature pedagogies, a collaborative professional learning model, Critical Friends Groups, and community engagement (Rowan-Wiley Beginning Teacher Leader Project Narrative Overview, 2015). By using this research as a framework, the project unfolds in a sustainable, tiered model of support for beginning teachers that draw on the expertise of teacher leaders. The University researchers will use a cognitive-development approach to mentoring that will assist teacher leaders in building trust with teacher candidates and

beginning teachers by engaging in courageous conversations around context-based student engagement and growth.

To effectively meet the needs of teacher candidates, beginning teachers and teacher leaders, the university researchers will systematically collect data at several stages during the four phases of the Beginning Teacher Leader project. The purpose of the data collection is to ensure the Professional Learning Series and other components of the grant address the needs of those individuals targeted by the grant. As such, this model is an organic and sustainable approach to building teacher leadership capacity to support beginning teachers (Rowan-Wiley Beginning Teacher Leader Project Narrative Overview, 2015).

The findings from this study supports the Professional Development School University and school district partnership as a leverage point for expanded professional development opportunities. Teachers who participated in the survey and interviews are now members of the partnership grant project. Their voices were heard through this research study and they were actively engaged in the selection of the professional development topics as the work of the grant unfolded. For example, Theresa shared that:

Theresa: This is really a nice pat on the back and an acknowledgment of the work that I do as a teacher leader. This definitely keeps me working hard, it keeps me on my toes, and I want people to look to me for those types of things. This helps to keep me involved in all areas and aspects of the school where I'm not just tied only to my classroom, but the bigger picture.

The teachers who were selected as grant participants were required to submit an application where they were evaluated on their teacher effectiveness rating, their work attendance record, and their contributions to the school district's learning community

goals. They were also required to commit to attending the grant kick-off meeting, attending monthly after school professional learning series meetings, participating in the Teacher Leader blog, attending the two day Summer Leadership Institute, and agreeing to put the training received into action by mentoring one or more teacher candidates or beginning teachers. In return for their commitment, the teachers were paid a grant stipend for each professional development session they attended, they were provided with extensive and ongoing professional learning, and they were provided a personal iPad to navigate the Teacher Leader blog.

Recommendations

To address the policy, practice/leadership, and research implications, the following recommendations are provided to address the findings that arose through this study.

Policy

Leadership is recognized as a critical component to school improvement (Fullan & Steiglbauer, 1991; Hallinger & Heck, 1996; Harris & Muijs, 2005; Senge, 2012)). The pressures exerted on school leaders to raise standards and improve student achievement require the examination of leadership capacity building by empowering teachers to lead and sustain innovation and development within schools (Danielson, 2006; Harris et al., 2008). Professional Development Schools (PDSs) are partnerships between a K-12 school and a university's school of education. They are collaborative learning environments that support the training of new teachers, provide professional development to experienced collaborating teachers, and are committed to improving student achievement through the process. PDSs have increased in number and popularity since they were first proposed by The Holmes Group (1986) as a response to the four major

challenges outlined in *A Nation at Risk* (1983). The model was proposed as a means of reforming education simultaneously at both the university and K-12 levels. Through careful collaboration and partnership building, PDSs are intended to improve student learning outcomes while also providing professional development for teachers. This partnership includes pre-service teacher candidates and in-service (experienced) collaborating teachers (Teitel, 2001).

The findings from this study support Hallinger's (2003) assertion that shared leadership within organizations allow for high levels of learning. The findings support Kenney, Duel, Nelson and Slavit's (2011) assertion that sharing expertise in a structured leadership model creates a shared responsibility for improving student learning. It is clear from the responses shared by the collaborating teachers from the *TLI* survey and interviews that the leadership process within the Professional Development School model does not have to be a formal role. The results also support the need for principals to encourage leadership among teachers by supporting and creating a collaborative learning environment. Also, the findings further support Kurt's (2009) assertion that teachers become instructional leaders where there is collaboration and a shared vision, and Keedy's (2009) assertion that schools have capable and determined teachers who are committed to student success.

Darling-Hammond and Sykes (as cited in Epstein, 2004), posit that as the importance of well-qualified teachers has become clear, it has become difficult for policy makers to ignore, deny, or justify the inequality of teacher distribution in the U.S. They issue a strong call for coordinated governance action on the federal, state, and local levels that would create federal investments and incentives to encourage teachers to work in the

most challenging schools and districts. The research and the findings from this study also document and support that through the dual and simultaneous efforts of restructuring teacher education and schooling, that schools, districts, and universities can exert leadership as agents of change for both the profession and their schools through collaborative work with university faculty through Professional Development Schools. It will be important for policymakers at the federal, state and local level to provide the needed supports to implement the PDS model as the standard for teacher preparation programs (The Holmes Group, 1986).

The findings from this study confirms this finding and indicates that the professional and leadership growth for both the collaborating teachers and teacher candidates provides further evidence for policy makers to explore the PDS model for the development of teacher leadership and the development of quality novice teacher candidates (The Holmes Group, 1986). The findings suggest and support York-Barr and Duke's (2004) assertion that identified teachers as having the most direct impact on school improvement and student learning. Teacher leadership has been put forth as an important factor for improving schools, retaining teachers, and improving student performance over the long term (Boles & Troen, 1994; Dozier, 2007; Greenlee, 2007; Lieberman, 1987; Smith, 1999).

The findings from this study support Smith's (1999) assertion that the top-down model is no longer effective in school change and that teachers must be vital and active participants for a school to be successful. This concept suggests that the top-down leadership model might prevent the success of any change effort. The findings from this

study offer support for this assertion and participants expressed a strong desire to play a more active role in the development and selection of professional development activities.

Clarke, Triggs & Nielsen (2013) suggest that collaborating teachers are an important and significant factor in the university clinical practice process for building the teaching capacity of teacher candidates. This research and the findings from the current study suggests that teacher candidates universally agree, as expressed indirectly to the collaborating teachers, that the clinical practice is the capstone and most important part of the attainment of their degree. They also strongly agree that the collaborating teacher plays an important role in the pre-service experience and degree attainment. The findings of this study continues this trend and would offer further evidence for policy makers to explore the PDS model for the development of teacher leadership and the development of quality novice teacher candidates. For example, several interview participants expressed a similar sentiment:

Theresa: Have students take ownership of their learning and put it into their words. For example, providing meaningful feedback, and practicing it is something that I stress with the candidates from the start.

Theresa: The students in the classroom ultimately benefit for the unique experience of having two teachers in the classroom. … it propels me to continue to do my best work. nice to know that someone thinks that you do a great job as a teacher where he or she want to give you someone who is just starting out on their career journey in the teaching profession.

Susan: …anything new that Rowan is working on with the teacher candidates in their coursework that would be helpful in the field. What's going on in the methods classes that could help the collaborating teachers here in our classrooms? In the PDS everything is so interconnected.

Susan: When you are not taking classes yourself you lose that knowledge of what is current in research. You try to do it yourself to stay up to date on the Common Core, best practices, things that have been added or changed, and use of technology. The PDS also

helps teachers build capacity in these areas and has helped grow leadership within the school.

Practice/Leadership

The findings of this study support the importance of the PDS paradigm as a supportive means to improve both teacher practice and leadership within the model as reported in both the quantitative and qualitative data strands. According to Abdal-Haqq (1989), the reciprocal development of veteran collaborating teachers and teacher candidates is an important contributor to the success of the PDS model. Professional development is not limited to just content knowledge and teaching methodology, but it also includes leadership development. The development of teacher leadership in Professional Development Schools is an important component to the success of K-12 students (The Holmes Group, 1986). This process does not require the creation of additional hierarchical roles, but an expansion of the normal role of the teacher (Darling-Hammond, Bullmaster, & Cobb, 1995; Greenlee, 2007; Muijs & Harris, 2003; York-Barr & Duke, 2004). Through the creation of professional learning communities, teachers can embrace the idea of being lifelong learners, which is essential in developing increased leadership capacity. Teachers need to be leaders and included in decision-making that affects students.

As discussed by Greenlee (2007), the top-down bureaucratic structure of schools present challenges to developing teacher leadership capacity. The Professional Development School model is designed to be a collaboration where teacher leaders, administrators, and university faculty engage in shared decision-making (Holmes Group, 1986, 2007; NAPDS, 2008; NCATE, 2001; Teitel, 2001). Shared collaboration as

designed within the PDS model has the potential for developing a new paradigm of leadership without formally designated or designed roles (Boles & Troen, 1994).

As detailed by Levine and Churins (1999), the context for collaboration within a Professional Development School is an important factor for their success in leadership and working with teacher candidates. The creation of a supportive school placement environment focused on the learning community concept is important for students, teachers, administrators, college staff, and teacher candidates. Both PDS participants and multiple research studies have identified the learning community concept as one of the most important factors directly linked to the integration of professional and student learning in the PDS model. The theme of collaboration also supports what schools look like through a new conceptualization of the leadership roles that collaborating teachers and teacher candidates can embrace within the PDS setting (Boles & Troen, 1994; Dozier, 2007; Greenlee, 2007; Lieberman, 1987; Smith, 1999).

The need to build leadership capacity at the school level is thought to be essential to school improvement, and research agrees that capacity building within the school setting is necessary for change to occur. There has been general agreement among scholars that teacher leadership is also an essential component of school improvement, but there are very few instruments for measuring the extent to which teacher leadership is present in a school. Measuring teacher perceptions of the success of leadership practices through a teacher leader measure can allow central office and school level administrators a broad-based assessment of teacher leadership in schools (Angelle & Beaumont, 2006, 2007; Angelle & DeHart, 2010). Each of these research tenets were supported by the findings from the current study where the participants offered concrete suggestions as

practicing teacher leaders for effective embedded PDS practices within the field. For

example, one interview participant reinforced these conceptualizations and provided a

salient example of how her work within the Professional Development School as a

collaborating teacher had a practical impact on the workings of the partnership:

Theresa: I have to fill out mid-term and final reports with the teacher candidates, and I use the Danielson rubric. This is leadership where I do just as an administrator would in completing the reflection with the candidates where we go through the same process that I go through as a teacher. One of the reflections from prior years is that there was a distinguished on the Rowan form. I talked to the supervisor to express that there was a concern in rating a teacher candidate as distinguished when I would have a difficult time achieving that rating as a practicing teacher myself.

Research

The issues of teacher supply and quality have come full circle since 1983 when

the call to action from the *A Nation at Risk* report resonated. This concern also garnered

wider attention, especially with the advent of the *No Child Left Behind* (NCLB) Act of

2001, which demanded the closing of the achievement gap and the placement of a "highly

qualified teacher" in all classrooms, as outlined by Darling-Hammond and Sykes (as cited

in Epstein, 2004, p. 164). Attempting to improve schools by mandating accountability

and curriculum overlooks the multiple skills and leadership abilities exhibited by teachers

in the classroom (Angelle, 2007; 2010). Embracing teacher leaders as a part of the vision

for improvement is a key to success (Crowther et al., 2003; Murphy, 2005).

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Blase and Blasé (2006), Katzenmeyer and Moller (2001), Mangin and Stoelinga, (2010), and Wilmore (2007) all suggest that collaborating teacher leaders have a strong influence on the improvement of instructional practices. To ensure student success within their classrooms, they are willing to go above and beyond the call of duty (Mangin & Stoelinga, 2010; York-Barr & Duke, 2004). Teacher candidates also greatly benefit from working with collaborating teacher leaders as guidance provided by an expert in the field enhances the experience and promotes the growth of both the teacher candidate and experienced teachers (Mangin, 2007). They serve as models for others to observe and implement similar practices. International studies focusing on strong student achievement surfaced evidence promoting teacher leadership as a means to improve education through collaborative work and a school culture that shifts away from the traditional private nature of teaching (NCES, 2011; Stigler & Hiebert, 1999).

A shift to Professional Development Schools opens classrooms within the school to serve as laboratories for the study of teaching and learning. Both the research and the findings of this study support this important conceptual model as a means to transform the teaching and learning that occurs within schools. For example, the interview participants shared examples of how they are able to implement this shift:

Theresa: Having this role of collaborating teacher in the PDS process also creates a sense of expertise where other teachers within the building will seek out my advice or ask me certain questions. Working with Rowan University in the PDS has also allowed me to become more confident in serving as a leader in these other roles within the school.

Theresa: Yes you do want to make a huge difference, but you do it because you love it and want to spend time with kids. You want to have a role in this whole process where I think about becoming an active member of a community.

Susan: Through my leadership activities, I have been able to create great relationships with the administrators within my building and at the central office. They will reach out to me to ask about candidates who have worked for me and they trust my judgment and expertise. Leadership is reciprocal where the district can provide teachers with opportunities, but teachers have to take advantage of them when offered.

The evidence offered suggests that teacher education institutions have provided little, if any, consistent formal training for collaborating teachers. There is a new and emerging description of the collaborating teacher as a teacher leader. This description demands that the collaborating teacher be more fully engaged by working more closely with the teacher candidate, eliciting and making meaning out of practice, and assisting in the development of a full teaching toolkit for the teacher candidate. The research identifies this lack of formal training and voice for collaborating teachers as a missing link. This study further explored an alternative collaborating teacher education model that might fill this research void: Professional Development Schools (PDSs) as a framework for collaborating teacher leadership.

The findings from this study support Danielson's (2006) assertion that teacher leadership is not about power, but about teachers seeking challenges and growth opportunities beyond their classrooms. The findings from this study also further suggest that the attributes put forth by Danielson (2006) as evidence of teacher leadership in the areas of influence beyond one's classroom, mobilizing and energizing others, engaging in complex work with others, as well as having a passion for the core mission of the school are consisten with the sentiments expressed by the teachers during their interviews.

According to Danielson (2006), improving practice and serving their students well are the primary motivating factors for teachers assuming leadership roles. If the nature of teacher leadership is informal and teachers rise to the occasion on a voluntary basis, this type of emergent leadership characterizes the highest level of professionalism in education. Teacher leaders are rarely in formal roles in which they receive compensation for the tasks that they take on (Danielson, 2006). For example, one interview participant summed up this concept by stating that:

Rebecca: I think that teacher leadership can be defined as anyone who sees an opportunity to lead, and they seize it. They see it and respond to it. I think that teacher leaders who do this then have the ability to encourage other colleagues, to inspire them to contribute to the learning community in various capacities.

Rebecca: I think that both my instructional and leadership practices are enhanced because I'm showing someone how to do something which in turn deepens my understanding and knowledge base. As with my students, the teacher candidates learn by doing. In turn, as I'm showing someone something or modeling it for them, they are learning by doing as well. My hope is that it is also deepening the candidates understanding, as well as mine.

According to various research studies, the most powerful in-school influence on student learning is the quality of instruction provided by teachers within each classroom setting (Chetty, Friedman, & Rockoff, 2014; Rivkin, Hanushek, & Kain, 2005; Rockoff, 2004). Having well-prepared novice teachers who can competently deliver instruction is critical for the most disadvantaged students, who are more likely to have a novice leading their classrooms. If one of our national goals is to close the achievement gaps between disadvantaged students and others, then ensuring that novice teachers are well prepared for the job is essential. As a practicing central office administrator, the goal was to create a professional and research paradigm of effective Professional Development Schools that would successfully prepare collaborating teacher leaders who would in turn work with and mentor teacher candidates and novice teachers. The findings from this study support

the research assertions for the Professional Development School model as evidenced by

the confirming comments shared by the collaborating teachers in their interviews

concerning the creation of successful teacher candidates and novice teachers. The

following statements from interview participants serve as illustrative examples of the

study's findings in this area.

Theresa: They have looked to me because I have that prior experience working with student teachers, the PIR (Professor in Residence) and the college supervisors. They have worked with me to continue the collaborative and cooperative work with the PDS process and placement of teacher candidates.

Theresa: It is important to always present things in a way that this person is an equal to me. They are never sitting grading papers while I'm the one teaching the lesson because it is always a collaborative and co-teaching effort.

Susan: I have been mentoring for about 15 years now and it is important to help new teachers develop a teaching and leadership toolkit. There isn't just one thing that can go into it.

Susan: When I get my teacher candidate, I introduce them as part of the classroom community and an equal to me. The students understand that she is going to school to be a teacher. I involve the candidate in all my decision-making that comes with what we're teaching, when we're teaching it, anything that involves the students.

Suggestions for Further Research

The findings from this study are a positive development for proponents of the

Professional Development School model as a standard for teacher preparation programs

and improved student performance. The potential impact of the PDS model on teacher

leadership is worthy of further investigation. It also seems clear from the findings of this

study and the prior research presented that various components of the PDS model are also

primed for additional study. The existence of the Rowan University Professional

Development Schools Network and the new Ph.D. in Education within the Center for

Access, Success, and Equity (CASE) within the College of Education could both serve as

effective resources for further exploration of the PDS model on a larger scale. For

example, the PDS concept is built on providing a higher quality education for students

and producing high quality novice teachers for entry into the teaching profession. The

findings from this study indicate that the participating collaborating teachers believe that

the PDS model can positively impact student performance and plays a critical role in the

development of quality novice teachers. If the PDS model is to be promoted as the

standard method for teacher education preparation programs, the impact of the PDS

model on student performance and the development of quality teacher candidates are

areas that would warrant further research. Also, the growth of the Professional

Development School Network and the supportive structures could expand the reach and

breadth of related research, e.g., using more than one district, interviewing other

constituents/stakeholders, and even comparisons between PDS/non-PDS settings.

Conclusions

For the past thirty-three years, the American education system has been shaped by

the reform and educational improvement efforts as envisioned under *A Nation at Risk* and

No Child Left Behind (NCLB). The education system is now at the intersection of the

next incarnation of education change and reform focused on the *Common Core State*

Standards (CCSS), the *Partnership for Assessment of Readiness for College and Careers*

(PARCC), and the *Every Student Succeeds Act* (ESSA, 2016), which have generated

much controversy and debate. The ultimate goal is to achieve student readiness for

college and work in a technologically advanced global economy by the completion of

high school. The CCSS, PARCC, and ESSA all envision deep engagement by students

with important concepts, skills, and perspectives that will make American students competitive in the global marketplace.

This new paradigm places a major emphasis on active, rather than passive, learning on the part of students. In every subject area, a premium is placed on deep conceptual understanding, thinking and reasoning, and the skill of discourse (students taking a position and supporting it with logical evidence). This transition begins with the expectation that educators are to educate all students, requires diagnosing each student's instructional needs, adjusting instruction, and monitoring student progress in a systematic manner. The PDS model provides a collaborative and supportive framework that can address this next wave of reform.

As outlined by Anyon (1980), it is clearly understood and known what a good education and curriculum consist of, as evidenced by the executive elite school model. The students in the executive elite school are allowed to develop their intellectual skills and the tasks that they are engaged in are at the highest level of Bloom's taxonomy. The schoolwork for students is fashioned in a manner that focuses on how it prepares the students to achieve, excel and prepare for life. The students could clearly see the connection between school and the future possibilities available to them. Rules within the school were meant to provide students with the ability to self-regulate, were very few and relied on a collective personal engagement. The teachers treated the students with a high level of dignity and respect.

According to Anyon (1980), this difference in preparation on the part of our schools has led to the reinforcement and maintenance of a "hidden curriculum." This curriculum differentiation, in essence, prepares certain students to occupy the higher and

more desirable occupations, while at the same time preparing others for lesser jobs in the economy. The next step is to use this information to examine our schools for such inequities and create plans of action to disrupt and eliminate them. This executive elite school model must be the standard for every school with an insistence on creating equitable education opportunities for all students. Prior research and this study suggest that the PDS system could provide such a forum and means of equalization for the elimination of a "hidden curriculum".

Another step in the education reform movement would be the artful and skillful use of what we know about learning theories and practical craft knowledge to create learning environments that work for all students. This reform might start with the creation of what is known as personalized learning that would expand upon the concept of multiliteracies. Such a concept would be represented by students becoming stewards of their learning; educators serving as facilitators, advisors, and content experts; the flexible use of time; the creation of strong and respectful relationships between and among students, teachers and the community; and the final realization that "one size does not fit all" and that standardized test are just "one" measure of student performance and success. What is the institutional, social justice and moral responsibility of school leaders to disrupt inequitable learning opportunities to create elite executive schooling for *all* students within the American education system? The PDS framework could be one possible answer that can serve as a model for sharing best practices that are connected to improving student performance through the various collaborative activities of the university-school partnership.

The research and findings as outlined in this study suggest that all of the participants in Professional Development Schools can reap positive benefits from the university and school partnership. The teacher candidates from the university will participate in field experiences with the implementation of best practices. This placement can provide them with the foundation and practical experience to be successful novice teachers. The courses taught either on site at the PDS or at the university can align connected practice with theory. University staff can benefit by being reacquainted with the field where this fieldwork and interactions with school staff can provide even better connections between theory and practice. University staff can also develop expanded leadership skills through the provision of guidance and resources to collaborating teachers and by having decision-making roles within the collaborative model.

As a result, the students who attend the Professional Development Schools can benefit in multiple ways. The partnership can provide higher quality teaching through the use of reliable research-based methods within their classrooms. They can also benefit from having university staff and teacher candidates in the classroom, which creates more desirable teacher to student ratios. This arrangement can allow for the needs of individual students to be better met. All of these benefits can contribute to give students the opportunity to develop more skills and show greater understanding of the standards for their grade levels. Ultimately, student achievement and performance should improve, thus addressing the accountability expectations associated with *A Nation at Risk* and *No Child Left Behind (NCLB)*.

First, the experienced collaborating teacher leaders of Professional Development Schools can benefit from expanded opportunities to develop new strategies in

conjunction with university staff for implementing research-based teaching methods. Second, they can gain both formal professional development provided by the university and by mentoring experiences for teacher candidates. Third, they can also gain valuable leadership skills and can have an opportunity to provide meaningful input into the decision-making process (Greenlee, 2007). Each of these activities can assist the experienced collaborating teachers to build their leadership capacity within the PDS model.

In conclusion, this study suggests that when done well, Professional Development School partnerships have the potential to provide learning, professional development, and leadership opportunities for all stakeholders. This study also suggests that developing collaborating teachers as leaders within the PDS model is an attainable goal and positive dividend of the university-school partnership. This explanatory sequential mixed methods study gave voice to the stories and perceptions of collaborating teachers in elementary school PDSs settings within a large, diverse southern New Jersey school district. The study discovered and explained the perceptions of experienced collaborating teachers' description of the term teacher leadership, and whether they believe that the activities of the PDS partnership with Rowan University provided opportunities for increased leadership capacity and, that the activities were relevant contributors in working successfully and effectively with teacher candidates and the impact on student learning within their classrooms.

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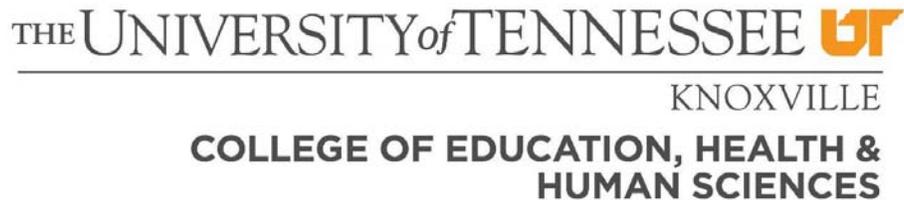
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Permission Letter to Use the Teacher Leadership Inventory

THE UNIVERSITY *of* TENNESSEE

KNOXVILLE

COLLEGE OF EDUCATION, HEALTH & HUMAN SCIENCES

Nedd Johnson, Assistant Superintendent
Wiley Public Schools
41 A Street
Wiley, NJ 08000
June 30, 2015

Dear Nedd Johnson,

With this letter, I grant permission to use the quantitative instrument, the Teacher
Leader Inventory, for your research study. You have my permission to disseminate
the instrument either through an online or hard copy format. You do not have
permission to modify the instrument without additional permission.

This permission is granted with the following terms:
- The instrument will be used for research purposes only, barring any monetary
  profiting from the instrument.
- Author citation is included on all copies.
- Links to subsequent manuscripts generated from the study will be forwarded
  to me.
- A summary of research results is forwarded to me upon completion of
  the study.

Best wishes for your research and I look forward to seeing the results.

Pamela S. Angelle, Ph.D.
Associate Professor and Graduate Program
Coordinator The University of Tennessee
Department of Educational Leadership and Policy
Studies 323 Bailey Education Complex
Knoxville, TN 37996

Appendix B

Teacher Leadership Inventory

Teachers often take on leadership responsibilities in schools. Sometimes teachers are appointed to fulfill these responsibilities by the principal. Other times, teachers naturally take on leadership responsibilities because of their interest or expertise. Understanding teacher leadership, whether appointed or natural, is important to understanding how schools function effectively. The items which follow ask your opinion about various aspects of teacher leadership. There are no wrong answers so feel free to respond to each statement candidly. Your responses will be completely anonymous. No one who completes this survey will be identified. Thank you for your cooperation.

I wish to participate in this study. Yes   No

For each statement below, indicate how often this occurs in your school. Mark only one response per item.

	Never	Seldom	Sometimes	Routinely
Item I: Teachers ask one another for assistance when we have a problem with student behavior in the classroom.	☐	☐	☐	☐
Item 2: Other teachers willingly offer me assistance if I have questions about how to teach a new topic or skill.	☐	☐	☐	☐
Item 3: Teachers here share new ideas for teaching with other teachers such as through grade level/department meetings; schoolwide meetings, professional development, etc.	☐	☐	☐	☐
Item 4: Teachers discuss ways to improve student learning.	☐	☐	☐	☐

Item 5: Teachers are involved in making decisions about activities such as professional development, cross curricular projects, etc.

☐ ☐ ☐ ☐

Item 6: Teachers are actively involved in finding ways to improve the school as a whole.

☐ ☐ ☐ ☐

Item 7: As a faculty, we stay current on education research in our grade level/subject area.

☐ ☐ ☐ ☐

Item 8: Teachers willingly stay after school to work on school improvement activities.

☐ ☐ ☐ ☐

Item 9: Teachers willingly stay after school to help other teachers who need assistance.

☐ ☐ ☐ ☐

Item 10: Teachers willingly stay after school to assist administrators who need volunteer help.

☐ ☐ ☐ ☐

Item 11: Administrators object when teachers take on leadership responsibilities.

☐ ☐ ☐ ☐

Item 12: The principal responds to the concerns and ideas of teachers.

☐ ☐ ☐ ☐

Item 13: Teachers plan the content of professional learning activities at my school.

☐ ☐ ☐ ☐

Item 14: Teachers have opportunities to influence important decisions even if they do not hold an official leadership position.

☐　　☐　　☐　　☐

Item 15: The principal consults the same small group of teachers for input on decisions.

☐　　☐　　☐　　☐

Item 16: Time is provided for teachers to collaborate about matters relevant to teaching and learning.

☐　　☐　　☐　　☐

Item 17: Most teachers in leadership positions only serve because they have been principal appointed.

☐　　☐　　☐　　☐

How many total years of experience in teaching do you have?

How many years have you taught at your present school?

Highest degree earned:

BA/BS　　Masters　　Masters +30　Masters +45　Specialist　　PhD/EdD Other

Are you certified to teach in your present assignment?　Yes　　No

Gender:　　Female　　Male

Race/Ethnicity:

Caucasian　　African-American　　Hispanic/Latino　　Asian　　Mixed Other

Do you hold a leadership position at position at your school?　Yes　　No

What teacher leadership position do you hold?

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Additional comments (optional):

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Appendix C

CT Leadership in PDS Interview Protocol

First, thank you for finding the time to meet with me today. Is it okay that I tape record this interview so that I do not miss anything? You signed the consent form for the interview, however, I want to remind you that your participation is voluntary and you are free to withdraw from this study at any time. (Interview questions will we read aloud and audio taped. The interviewer will take additional notes).

1. What are your reasons for choosing to serve as a PDS collaborating teacher?

2. What are examples of the specific PDS and collaborating teacher roles, responsibilities, activities, or opportunities that you believe contributed to the development of your leadership capacity?

3. How would you describe or define the term teacher leadership within the Professional Development School (PDS) and within your role as a collaborating teacher?

4. How has your participation as a collaborating teacher improved your own instructional and leadership practices?

5. How does your contribution to the production of quality teacher candidates aid you in developing your teacher leadership qualities?

6. How do you convey the PDS instructional and cultural expectations to your teacher candidate?

7. What aspects of the Rowan University provided professional development has made an impact on your instructional and leadership practices within your classroom? How has it made an impact? How do you use the PD to assist your teacher candidate?

8. Has your perspective on teaching and learning changed since serving as a PDS collaborating teacher leader and if so, how?

9. Please describe how you implement the gradual release of instructional responsibilities to the teacher candidate. What role do you play at each stage of the transition?

10. Describe how you feel your work as a PDS collaborating teacher impacts on the production of a successful teacher candidate during each stage of transition. How does a PDS teacher candidate placement impact the learning for the students within your classroom?

Thank you for talking with me today. An overview of this interview will be provided to you. This overview will highlight important points made during the interview. Please review it to be sure it reflects what you intended to say. And remember, you are always free to contact me if there any areas upon which you would like to elaborate.

Appendix D

Online Survey (Alternate Consent)

You are invited to participate in this online research survey entitled A Mixed Methods Study of Collaborating Teacher Leadership in Professional Development Schools (PDSs). You are included in this survey because you have served as a collaborating teacher in the Wiley-Rowan Professional Development School partnership. The number of subjects to be enrolled in the study will be thirty-nine.

The survey may take approximately twenty minutes to complete. Your participation is voluntary. If you do not wish to participate in this survey, do not respond to this online survey. Completing this survey indicates that you are voluntarily giving consent to participate in the survey.

The purpose of this research study is to explore classroom teachers' perceptions of being an effective collaborating teacher leader and working with teacher candidates in a Wiley-Rowan Professional Development School partnership setting.

There are no risks or discomforts associated with this survey. There may be no direct benefit to you, however, by participating in this study, you may help us better understand the clinical practice process based on the work with teacher candidates and the impact on collaborating teacher leadership within the Wiley-Rowan Professional Development School partnership settings.

Your response will be kept confidential by the researcher. Due to the use of a third party vendor, there is a slight risk of loss of confidentiality. We will store the data in a secure computer file and the file will destroyed once the data has been published. Any part of the research that is published as part of this study will not include your individual information. If you have any questions about the survey, you can contact me at the address provided below, but you do not have to give your personal identification.

Nedd J. Johnson, Co-Investigator Rowan University Doctoral Candidate, 41 A Street, Wiley, NJ 08000, 856-455-8000 Extension 2005, njohnson@wiley.k12.nj.us.

Please complete the checkbox below.

To participate in this survey, you must be 18 years or older. Place a check here ☐

Completing this survey indicates that you are voluntarily giving consent to participate in the survey ☐

Appendix E

Interview Informed Consent

Please read this consent document carefully before you decide to participate in this study.

You are invited to participate in a research study about understanding collaborating teachers' perceptions on leadership through their work with teacher candidates within the Wiley Public School District and Rowan University Department of Education partnership Professional Development School locations. You are invited to participate in this online research survey entitled A Mixed Methods Study of Collaborating Teacher Leadership in Professional Development Schools (PDSs). You are included in this study because you have served as a collaborating teacher in the Wiley-Rowan Professional Development School partnership.

Responses will be used to draw conclusions about the impact that collaborating teachers' work with teacher candidates has on their leadership. This study is being conducted by researchers in the Department of Education at Rowan University. The Principal Investigator of the study is Dr. Peter Rattigan. The Co-Investigator is Nedd J. Johnson, Rowan University Doctoral Candidate.

In Phase 1, we will ask the participants to answer seventeen questions on the Teacher Leadership Inventory (TLI) (Angelle & DeHart, 2010) about their perceptions regarding teacher leadership within a Professional Development School while working with teacher candidates. In Phase 2, some participants will also be selected to participate in a ten question face to face interview. Participation in this study is voluntary. If you agree to participate in this study, you would be interviewed for about forty minutes. The number of participants in Phase 1 of the study is thirty-nine (39).

There is little risk in participating in this study; after the interview, you may have questions about your responses which will be answered immediately by a member of the study team.

Your identity will be kept confidential to the extent provided by law. Your information will be assigned a code number that is unique to this study. No one other than the researchers would know whether you participated in the study. Study findings will be presented only in summary form and your name will not be used in any report or publications.

Participating in this study may not benefit you directly, but it will help us learn more about the clinical practice process and the impact on collaborating teacher leadership within Professional Development School settings. *Your participation in this study is*

completely voluntary. If you choose not to participate in this study, this will have no effect on the services or benefits you are currently receiving. You may skip any questions you don't want to answer and withdraw from the study at any time without consequences.

If you have any questions about this study, please contact Dr. Peter Rattigan, Principal Investigator, Rowan University, 201 Mullica Hill Road, Glassboro, NJ 08028. 856-256-4785, rattigan@rowan.edu or Nedd J. Johnson, Co-Investigator Rowan University Doctoral Candidate, 41 A Street, Wiley, NJ 08000, 856-455-8000 Extension 2005, njohnson@wiley.k12.nj.us.

Social and Behavioral IRB Research Agreement

I have read the procedure described above. I voluntarily agree to participate in the procedure and **I have received a copy of this description.**

Name (Printed) _____

Signature: _____

Date: _____

Co-Investigator: _____ Date: _____

If you have questions about your rights as a research participant, please contact the Rowan University Glassboro/CMSRU IRB at 856-256-5150 or 856-256-4058.

<div align="center">

ROWAN UNIVERSITY INSTITUTIONAL REVIEW BOARD

AUDIO/VIDEOTAPE ADDENDUM TO CONSENT FORM

</div>

You have already agreed to participate in a research study conducted by Dr. Peter Rattigan, Principal Investigator and Nedd J. Johnson, Rowan University Doctoral Candidate and Co-Investigator. We are asking for your permission to allow us to audiotape as part of that research study. You do not have to agree to be recorded in order to participate in the main part of the study.

The recording(s) will be used for analysis by the research team. The recording(s) will include numbered participant identification information. The researcher will guarantee confidentially to the participants throughout the study through the careful guarding of all collected identifying information. The researcher will be the only person who will have access to the personal information of the participants and the recordings of the interview discussion (transcription). The participants will be assigned a number for reference purposes, and names and other identifying information will be left out of the transcription

discussions. All data, including survey data, audio recordings, and transcriptions will be stored on the researcher's security encrypted home computer.

The recording(s) will be stored on the researcher's security encrypted home computer and will be destroyed upon publication of the study results

Your signature on this form grants the investigator named above permission to record you as described above during participation in the above-referenced study. The investigator will not use the recording(s) for any other reason than that/those stated in the consent form without your written permission.

YOU WILL BE GIVEN A COPY OF THIS FORM WHETHER OR NOT YOU AGREE TO PARTICIPATE.

Social and Behavioral IRB Research Agreement

I have read the procedure described above. I voluntarily agree to participate in the procedure and **I have received a copy of this description.**

Name (Printed) _____

Signature: _____

Date: _____

Co-Investigator: _____ Date: _____