Developing Teacher Leader Identity Through Community of Practice

by

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ABSTRACT

This action research case study explored the ways participation in a teacher leader learning community contributed to the identity development of teacher leaders at the Canajoharie Central School District. The goal of the study was to identify how a teacher leader learning community supported the identity of teacher leaders in their work. This action research study used a case study methodology and included qualitative and quantitative data collection. Purposive sampling identified six participants for the study. The qualitative data collection included initial and final one-on-one semi-structured interviews, meeting observation notes, research journal entries and peer interaction logs. Quantitative data were gathered using pre- and post- innovation surveys. Participants completed a pre-innovation survey and initial interview prior to the start of the innovation. Structured teacher leader learning community meetings were conducted over a four-month period of time in the Fall of 2018. Study participants led the design of collaborative group norms and meeting protocols. Participants facilitated the teacher leader learning community meetings. At the conclusion of the study period participants completed a post-innovation survey and final interview. Meeting observation notes, research journal entries and peer interaction log data were collected during the study period.

Analysis of the quantitative and qualitative data of this study suggests that teacher leader identity is supported by participation in a structured teacher leader learning community. Teacher leaders benefitted from a formal structure through which to share

successes, problem-solve situations and continue growth as leaders. The findings also suggest

that meeting norms and protocols benefit the work of the teacher leaders in the learning

community. These findings are consistent with previous research studies which

indicate that teacher leaders need opportunities to come together and network to sustain their

work. The findings from this action research study may assist other school districts in supporting

teacher leaders in their local context.

DEDICATION

A journey like this is never accomplished alone. Thanks to my husband Jeff, for driving everywhere so I could work, for providing food, laundry service and emotional support when I wondered why I chose this endeavor. Thanks to our children, Ron, Abby, Julie and Noyan for their encouraging words. Thanks to the whole extended Parker clan, and all our friends for always being there for me.

This work is dedicated to my Mom, Jean Parker. She lived her life as an educator in service to hundreds of children as a kindergarten teacher and later as a day care teacher. She touched the lives of so many. She showed me how precious each child is and how to always make sure teachers were respected for the work they did every day. Miss Jean – this one is for you.

ACKNOWLEDGEMENTS

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INTRODUCTION

Teacher. Leader. Two words that have separate meanings; and when combined into one

entity, teacher leader, can represent a catalyst for school change to improve student learning

(Katzenmeyer & Moller, 2009; Mayers, Zapeda & Benson, 2002; York-Barr & Duke, 2004).

Teacher leadership is not a new concept, and yet it is a strategy that has been slow to grow within

the education profession (Barth, 2013). Barth (2013) stated that while it has always been the

"right" time for teachers to play a more direct and stronger leadership role in schools, it has

never been the "successful" time for wide spread implementation of teacher leadership (p. 10).

The status of teachers within schools and society has remained very stable, and to some degree

unchanged (Lortie, 2002). Teachers are recognized for teaching and leading students, but not

necessarily leading efforts in their schools. Teachers do not see themselves as leaders, because

they are seldom asked to provide leadership. (Lambert, Collay, Dietz, Kent & Richert, 2002).

Creating more opportunities for teacher leadership has the potential to benefit teachers'

professional development. Teaching as a profession often follows a relatively stagnant career

path. Entering professionals in the field can anticipate a career with a relatively flat trajectory,

unless they choose to move into administrative roles (Ado, 2016; Lortie, 2002). The potential for

upward mobility is the essence of a professional career (Lortie, 2002; Mayers et al., 2002).

Compared to other occupations, however, there is less opportunity for advancement in the

teaching profession.

Expanded opportunities for teacher leadership also has the potential to improve schooling

more broadly. The needs of today's schools require expanded leadership, particularly that of

teachers. One of the many challenges facing U.S. education today is that our schools continue to

be primarily structured to meet the needs of an agrarian and industrial age that does not exist as it once did (Wagner & Dintersmith, 2015). To support current societal needs, U.S. policymakers and leaders have incrementally added initiatives to the educational system rather than undertake the difficult process of a radical redesign (Brady & Johnson, 2015). Systemically society continues to view K-12 schools as a place to gain knowledge and content, with traditional, often standardized, assessments being the primary measure of knowledge learned. Contrastingly, educators, researchers, and policymakers do not really assess what students can do with their learning nor how it applies to life beyond twelfth grade (Wagner & Dintersmith, 2015).

As schools are challenged to transform, leadership in schools often follows a similar approach, adhering to the same basic design while making changes within the existing structure. The traditional model of a single leader, the school principal at the helm, continues. It is often difficult for principals, who are ultimately responsible for their schools, to share that control with other stakeholders such as teachers, who might be willing to contribute to the leadership of a school (Barth, 2013; Katzenmeyer & Moller, 2009). There is a recognition by teachers and principals that schools require more than just one individual in a leadership role (Barth, 2013; Danielson, 2006; Mayers et al. 2002). The complexity of today's schools and the learning needs of students require more than a principal to lead school efforts. (Ado, 2016; Barth, 2013; Danielson, 2006).

Teacher Leadership

Despite the often-archaic structure and accountability system of education, some schools are working to improve learning environments to best meet the needs of today's students. One model to bring about change in schools is teacher leadership, as part of a distributed school leadership model (Barth, 2013; Camburn, Rowan & Taylor, 2003; Katzenmeyer & Moller, 2009;

Nappi, 2014; Woods, Bennett, Harvey, & Wise, 2004). Teacher leadership is not a new phenomenon in schools. York-Barr and Duke (2004) conducted a review of the literature from two decades of research and concluded that there was the potential for positive student learning outcomes when teachers and administrators persevered in support of teacher leadership. Barth (2013) posed the question, "Is it a promising time for teacher leadership?" nine years after York-Barr and Duke (2004). Most recently, Wenner and Campbell (2017) conducted a review of teacher leadership research completed since York-Barr and Duke. They stated that conceptualizations of what defines teacher leadership are widely varied, but in general, teacher leadership is defined by specific roles and functions that teachers assume beyond their own individual classrooms within a school setting, such as supporting peer learning and influencing policy and decision making. Wenner and Campbell (2017) asserted that successful teacher leadership structures can be an important strategy for improvement of student learning. Recent research also recognized the positive impact teacher leaders have on school improvement efforts (Angelle & DeHart, 2016).

The concept of teacher leadership is often operationalized through various formal titles and jobs: department chair, instructional coach, or team leader. Teacher leadership can also be informal (Ackerman & Mackenzie, 2006; Katzenmeyer & Moller, 2009; Mayers et al., 2002). There continues to be varying definitions and ideas about what exactly teacher leadership looks like in practice. While job descriptions may delineate specific duties within these positions, the concept of teacher leader is unique to each individual that holds such positions, as well as colleagues and administrators who work with teacher leaders (Wenner & Campbell, 2017; York-Barr & Duke, 2004).

Why teacher leadership? As stated above, the work of schools today requires leadership beyond the principal. As building and district level administrators are required to spend more time meeting state and federal mandates and assessments, teacher leaders can assist with implementation of goals and actions at the building level (Danielson, 2006; Mayers et al., 2002).

Teacher leadership in schools benefits the profession and the continual growth of teachers as they move along their career paths. Katzenmeyer & Moller (2009) identified that the teaching profession benefitted from opportunities for leadership by increasing professional efficacy, retaining teachers, enhancing teachers' careers without leaving the classroom, overcoming resistance to change, influencing other teachers and improving their own classroom performance. Wenner & Campbell (2017) included teacher attrition information in the rationale for their review of literature about teacher leadership. Ingersoll and Martin (2012) (as cited in Wenner & Campbell, 2017, p.137) reported a teacher attrition rate of 40% to 50% over the first five years of teaching. Guha, Hyler, & Darling-Hammond (2017) stated that national studies indicated that 20% to 30% of new teachers leave the profession within the first five years, and that rate is higher in high-poverty schools. While some teachers may choose to enter administration as the next step of their careers; many teachers wish to continue working in their classrooms and contribute in a more substantial way to the operations of the school. Teacher leadership may reduce attrition in the profession by creating a viable career path (Katzenmeyer & Moller, 2009; Lortie, 2002; Wenner & Campbell, 2017).

Teachers move into leadership roles because they want to make a larger difference and impact on their schools and students (Danielson, 2006; Mayers et al., 2002). Teacher leaders have "ground level" expertise and can provide that view within the larger educational context. Without this perspective, processes, policies and practices are incomplete (Mayers et al. 2002).

Teacher leaders can communicate the organization's vision and goals more effectively when they are part of the decision-making process of the school (Barth, 2007). Teacher leaders understand the culture and communication patterns of their school and use that knowledge to effectively share processes, policies and practices (Mayers et al., 2002). Teachers who choose to become leaders within their schools or districts assume an element of risk because they are willing to gather and deliver information to their colleagues. Teacher leaders are risk takers; willing to take on the role of change agent for school improvement efforts (Barth, 2007; Katzenmeyer & Moller, 2009; Mayers et al. 2002).

Teacher leadership develops synergistically within any given individual based on his or her view of leadership, work with leadership practices, and development of teacher leader identity (Sinha & Hanuscin, 2017). The development of identity as a teacher leader is as integral to the success of a teacher leader as is carrying out the functions of leadership. Formal university or district level professional development programs provide opportunities for teachers to learn about leadership and the role of teacher leaders in schools. Through these processes, teachers begin to develop their identity as teacher leaders (Bradley-Levine, 2011; Katzenmeyer & Moller, 2009; Ross, Adams, Bondy, Dana, Dodman & Swain, 2011; Sinha & Hanuscin, 2017; Taylor, Goeke, Klein, Onore & Geist, 2011). The work of teachers as leaders in the day-to-day world of teaching and learning continues to refine the identity of teacher leaders. In that context, there is a continuing need to support teacher leaders in their work (Katzenmeyer & Moller, 2009; Lieberman & Friedrich, 2010). Teacher leaders are in the best position to support each other as they pursue their lived experiences as teacher leaders.

Local Context and Problem of Practice

Canajoharie Central School District is a small, rural, high needs district located in upstate New York. New Yorkers traveling the thruway recognized Canajoharie, at Exit 29, by the large Beechnut factory sign that towered over the roadway. In 2011, Beechnut closed the factory and offices and left the area. Canajoharie became another example of a Rust Belt community, with the loss of its primary industrial employer. The community has changed in the past seven years and is still seeking its next identity.

Canajoharie Central School District encompasses 100 square miles of territory including two villages and overlaps parts or all of six towns. According to the New York State District report card, our total PreK-12 student population has decreased overall from 1003 students in 2011 to 909 in 2018. In addition to the overall decreased population, the level of poverty has inversely increased. In June 2016, 60% of elementary students qualified for free and reduced lunch (L. Broady, personal communication, June 22, 2016). In June 2017 the school district was accepted into the USDA's Community Eligibility Program. The district provides a free breakfast and lunch to every student.

Students' outcomes vary considerably according to family income. For example, the high school graduation rate in 2016, for students who are not economically disadvantaged was 89%. In the same year, the graduation rate for students who were economically disadvantaged was 65%, a twenty-four percent difference (New York State School Report Card, 2016). As a school community, we are struggling to meet the needs of all our students. A model of education that is based on a long past industrial era, where schools primarily transmitted knowledge, and youth with a high school degree (or even less) could secure stable well-paid employment, is no longer effective for our community.

The Fulton-Montgomery Regional Business plan (2011), identifies the skills local employers need employees to possess. Employees need to be thinkers, problem solvers, good communicators and team members; that is, skills that are connected to 21st-century learning. Within our region, there are employment opportunities for our graduates, and yet our local businesses are not able to fill those positions. Our schools are not meeting the current needs of our local employers; and by correlation, the needs of modern employers [writ large]. To meet those needs, the Canajoharie Central School District's schools need to innovate and adapt to the 21st-century in many ways, including how and what we are teaching our students.

At the time this project was implemented in 2018, the district identified, through a strategic planning process, the need to transform instructional practices in schools and classrooms. As I considered this reality in my district, the problem of practice it raised for me is how teacher leadership can contribute to innovating instruction not only in our classrooms but also lead improvement efforts at the school and district levels. For teacher leadership to be an effective part of the change process, teacher leaders must be supported and support each other in this work. By creating a self-sustaining learning community for teacher leaders, the structure will be in place to support distributed leadership, to improve instructional practices and ultimately ensure students are learning the content, dispositions, and skills necessary to succeed in contemporary society.

Definition of Terms

For purposes of this study the following key terms are defined:

- Teacher leader: Those teachers who lead within and beyond the classroom; are part of and contribute to a community of teacher leaders; support and influence others towards

improvement in their practice and are responsible for their leadership outcomes (Katzenmeyer & Moller, 2009).

- Teacher leadership: The definition of teacher leadership used in this study is focused on the <u>practice</u> of teacher leadership; the process of how teachers, either individually or collectively influence their colleagues to improve student learning (Sinha & Hanuscin, 2017).

Innovation

The innovation at the center of this study was the implementation of a teacher leader learning community, a structured community of practice, in the Canajoharie Central School District. To inform the design of this innovation, I interviewed five emerging teacher leaders in my school district through a semi-structured interview process in the Fall of 2017 (Grimshaw, 2017). Participants were asked a series of questions to explore their definition of teacher leadership along with the skills, knowledge and qualities teacher leaders should possess. The final question, "What professional development or coaching would support teachers functioning as teacher leaders?" was asked to learn information that could be used to guide the innovation of this research project.

The complexity of self-identifying as a teacher leader – and tensions between being simultaneously a "teacher" and a "leader" – emerged as a main theme from these interviews. Participants indicated reluctance to assume the identity of a teacher leader. One participant stated, "I feel like I'm in purgatory, swirling between the two worlds" as she described her day to day work as a teacher leader. Not quite the same as a classroom teacher anymore and not fully an administrator, teacher leaders live in a world of two perspectives. The first interview I conducted led to an unexpected enlightenment about self-identity and teacher leadership. The teacher

expressed surprise that I thought of her as a teacher leader. This point of reference about self-identity became a thread throughout the data analysis. One participant talked about the loss of "your person" within the work setting and how important it is to have "your person" to be a support. A second participant identified that is it is "very tricky to be a teacher leader and not be a teacher leader". These ideas speak to the identity balance that teachers who assume a leadership role face. You are not "better" than your colleagues; however, you are working in a different capacity, and that changes your identity as a professional and as a person.

The central finding from my initial interviews was that teacher leadership is as much about the identity of each person in the role as it is with specifics of the functions and tasks. Unfortunately, other researchers have found that teachers who accept the identity as teacher leaders risk losing their identity as colleagues with their peers and potentially impact their social-professional relationships (Struyve, Meredith & Gielen, 2014). The findings from my initial interviews, coupled with the risks of asking teachers to individually assume leadership roles, contributed to my decision to create a community of practice for teacher leaders to learn and grow together in their leadership, to problem-solve together over challenging situations they face in their work and to share successes to support the development of their identity as a teacher leader.

Based on these interviews, I designed and implemented a structured teacher leadership learning community to explore how a structured teacher leader learning community might support teacher leaders in their identity development. The innovation consisted of the implementation of a teacher leader learning community (TLC). The TLC structure was based on the research of communities of practice (Wenger, 1998), professional learning communities (DuFour & Eaker, 1998; Hord & Sommers, 1998) and adaptive schools (Garmston & Wellman,

2013). In keeping with researched best practices in developing professional learning communities (DuFour & Eaker, 1998; Hord & Sommers, 1998), the initial meeting included organizational tasks needed to implement the teacher leader learning community (See Appendix C). I facilitated the initial meeting using the agenda found in Appendix C. Participants in this study developed their own shared purpose of the learning community (DuFour & Eaker, 1998) and the norms of collaboration and meeting protocol (Garmston & Wellman, 2013). The participants determined three meeting dates that were aligned with the time period for this study. The participants created a meeting protocol that was used for each meeting (See Appendix J). As part of the meeting protocol, the participants decided to include an article read and discussion on topics relevant to their work as teacher leaders. Appendix K contains the full listing of articles selected by the participant leaders. This addition, driven by the participants themselves, allowed the protocol to be owned by the group.

Upon completion of an earlier cycle of action research (Grimshaw, 2017) participants were asked to provide input into the design of this study. The suggestion was to add peer partners as a component of the innovation. The purpose of the peer partners was to have an established support mechanism in between the formal teacher leader learning community meetings. As part of the initial teacher leader learning community meeting, participants self-selected partners. After selecting partners, the participants further decided to develop and implement a leadership rotation for the remaining teacher leader learning community meetings. One pair of teacher leaders facilitated each meeting according to the protocol and selected the article. A second pair acted as timekeepers, while the third pair kept minutes of the meeting. A shared Google Drive, housed on the district's server, contained all teacher leader learning community meeting minutes and information.

The teacher leader learning community met a total four times between October 2018 and December 2018 following the dates the participants determined at the initial meeting. Each meeting was facilitated by one pair of teacher leader participants. The meeting protocol included a welcome, a review of the collaborative norms, sharing successes, reflection on current challenges, a discussion of the relevant article, and a concluding debrief question.

The peer partners connected with each other independently between teacher leader learning community meetings. The expectation was for a weekly interaction; however, the peer partners could be in contact more often. A simple online log (See Appendix H) was used by the participants to log their interactions. The peer partner component was implemented from October 2018 to December 2018.

Overview of Purpose and Significance of the Study

The purpose of this study was to explore the impact of a structured teacher leader learning community on the development of teacher leader identity. Current literature highlights university coursework or district level professional development as the primary methods for training teacher leaders (Camburn, Rowan, & Taylor, 2003; Sinha & Hanuscin, 2017; Taylor et al., 2011). This study sought to move beyond common training methods to create a structured teacher leader learning community. The innovation provided a learning community as a strategy for teacher leaders to support each other and grow together. As participants in the learning community, the intention was for teachers to grow and sustain their identity as teacher leaders and continue to lead efforts of instructional improvement within their buildings.

By creating an ongoing structure for support, the motivation behind this innovation was to enable participants to develop and refine their identity as teacher leaders. Efficacious teacher

leaders are a critical component of a distributed leadership model that will help improve learning outcomes of the students at Canajoharie Central School.

Research Questions

The specific questions addressed by the study are:

RQ1: In what ways does participation in a teacher leader learning community develop and sustain teacher leader identity?

RQ2: What are the factors associated with teachers' beliefs about the success and sustainability of a teacher leader learning community?

For purposes of both research questions, "sustain" and "sustainability" are defined as the ongoing work of teacher leaders over time. However, it is important to acknowledge that the time constraints of this study provided limited exploration of longer-term sustainability. Sustainability in this study was primarily researched in relation to self-reported changes in teacher leader characteristics and skills due to participation in a structured teacher leader learning community over the course of four months. Teacher leader identity development is an ongoing process that extends beyond the time constraints of this research project.

Background/ Role of the Researcher

I have spent my entire adult life as an educator. One could say that I loved school so much, I never left. And that is true. Over 37 years I have had the opportunity to work as a teacher, professional development specialist, community college administrator, graduate level adjunct instructor in education, K-12 building and district administrator, and superintendent of schools. The common thread throughout these positions was the development of the individual - student or teacher. I value the expertise and knowledge that teachers bring to their students every day. Often in school improvement efforts, the burden of change is on the administrators alone. It

is my firm belief that education systems and schools are missing an opportunity to include our best asset, our teachers.

At the time of this project, in the 2018-2019 school year, I was the Superintendent of the Canajoharie Central School district, and I had held this position for seven and a half years. In that capacity I was the chief executive officer for the district. I was responsible for overall leadership of all facets of school district operations and student learning. My positionality in this study was one of insider-researcher (Herr & Anderson, 2015). As the researcher, I created the overall research design and innovation, data collection and data analysis methodology. Of note in this study was my position as superintendent of schools. While I had overall responsibility for every employee in the organization, I did not have direct supervision of the teacher participants in this research project. In designing this project, I worked with the participants to make clear delineations between activities that are part of this action research project and indirect supervisory activities.

This project is the convergence of my administrative experience and my vision for schools, with support for our teachers as leaders, to transform the Canajoharie Central School into a model 21st learning environment for our students.

Organization of the Study

This study is organized in five chapters. This first chapter provided an overview of the need for this project along with the problem of practice and research questions. Chapter 2 provides the theoretical background, concepts and constructs for the study. Chapter 3 provides the methodology for the project and links the methods to the research questions. In Chapter 4, the analysis of the data occurs using qualitative and quantitative methodologies. Conclusions and implications of the study are discussed in Chapter 5.

Chapter 2

LITERATURE REVIEW

As this chapter demonstrates, the literature on teacher leadership has focused primarily on the function and development of teachers in specific leadership roles. Scholars advanced our understanding of the desirable qualities of teacher leaders and the role of training and professional development in developing teacher leader skills. This project contributes to and advances the literature by exploring how teachers develop and sustain their identity as leaders through participation in a structured teacher leader learning community.

This chapter presents a review of related research on school leadership, teacher leadership and identity development as part of a community of practice and professional learning communities. The first section discusses leadership in schools. In the second section, I review the literature on teacher leadership within the school setting and the development of teacher leaders. In the third section, I explore identity development through a community of practice and professional learning communities.

School Leadership

The traditional school leadership model centers on one leader, usually the principal, leading initiatives within the school. The primary responsibility for student success rests with the principal (Barth 2013; Muijs & Harris, 2003). While this model may have worked at one time, the complexity of today's schools requires a broader, more inclusive orientation towards leadership. Though principals have ultimate responsibility for the school, there is a recognition that principals alone cannot meet the demands of today's schools (Ackerman & Mackenzie, 2007; Barth 2013; Camburn, Rowan & Taylor, 2003; Danielson, 2006; Wenner & Campbell, 2017). Schools today are expected to demonstrate improved student achievement, including

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students represented in underserved populations. Teachers and principals are held accountable for the academic performance of their students as determined by annual accountability measures. School improvement and accountability requirements in schools are daunting. Principals cannot improve student outcomes in schools by themselves. (Camburn, Rowan & Taylor, 2003: Danielson, 2006; Katzenmeyer & Moller, 2009; Wenner & Campbell 2017).

To best meet the needs of today's schools, more than one leader needs to be a part of the improvement process (Barth, 2013; Camburn, Rowan & Taylor, 2003; Danielson, 2006). Teachers can play an active role in the leadership of school improvement. Teacher leaders provide an opportunity for leadership that facilitates change and distributes leadership responsibilities across a broader base of the school community (Angelle & DeHart, 2011; Muijs & Harris, 2007; Nappi, 2014; York-Barr & Duke, 2004). Scholars have increasingly recognized that the long-term sustainability of school improvement efforts relies on collective endeavor of individuals within a school rather than a collection of individual efforts. Teacher leadership is particularly successful in an environment where a collaborative relationship with the school principal is present (Angelle & DeHart, 2011; Nappi, 2014). Teacher leadership, which will be discussed in more detail below, is complementary to administrative leadership within a school. (Danielson, 2006; Muijs & Harris, 2003: Wenner & Campbell, 2017; York-Barr & Duke, 2004).

Distributed Leadership. The notion of including teachers in school and district decision-making reform can be situated within a distributed leadership model. The definition of distributed or shared leadership is an interactive process of influence among individuals within a group to lead one another toward the achievement of specified goals (Avolio, Walumbwa & Weber, 2009). Distributed leadership suggests that the boundaries of leadership are more expansive and inclusive than in a traditional single leader model. It is a form of collective

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leadership that is shared within a group or network of interacting individuals; where the outcome of the collective expertise is greater than the individual (Avolio, Walumbwa & Weber, 2009; Harris, 2002; Spillane, 2009; Woods, Bennett, Harvey & Wise, 2004). Distributed leadership can be conceptualized as an emergent practice of groups of people. The practice of leadership is the action and interaction taken by members of the group in relation to someone or something else (Spillane, 2009; Woods, Bennett, Harvey & Wise, 2004). In contrast to a traditional hierarchical leadership approach, the distributed perspective of leadership separates leaders from leadership practices. The perspective of the practice of leadership considers the interactions among the individuals and their context and tasks. "Practice emerges from the interactions among people and their situation, rather than as a function of the actions of any one individual leader" (Spillane, 2009, p. 209). Within that framework, the interactions of teacher leaders in their schools constitutes a distributed leadership practice.

Adaptive Leadership. Another facet of leadership relevant to teacher leadership is adaptive leadership. Adaptive leadership is the work of Ronald Heifetz (Heifetz, 1994) and has its origins in biology. In biology, an adaptation is required when the response to a situation is an action outside of the current repertoire of the organism (Gary, 2005). Flexible and adaptive leadership is important when there are disruptions in the environment or when an immediate problem requires attention (Gary, 2005; Yukl & Mahsud, 2010). This is different than what is required to address technical problems, problems that are well-defined with known solutions. Anyone in the organization with the knowledge of the solution can address the problem (Heifetz & Linsky, 2003; Randall & Coakley, 2007).

Adaptive leadership is process oriented and requires individuals to focus on problems that may not be well defined. An adaptive challenge requires people to develop new responses. In

doing so they need to find innovative ways to address new challenges and opportunities. The work of adaptation is the work of individuals within the organization. It does not emanate solely from the leader (Gary, 2005; Heifetz & Linsky, 2003; Randall & Coakley, 2007; Yukl & Mahsud, 2010). There are six stages to addressing an adaptive challenge: identification of the type of problem, focused attention on the issue, framing the issue, securing ownership, managing stakeholder conflict and stress, and creating a safe haven (Randall & Coakley, 2007). Engaging in such a process should net a positive outcome where an innovation is added to the existing organization's work (Gary, 2005; Randall & Coakley, 2007).

Adaptive leaders have a sense of openness to learning and new ideas, exert influence through empathy and relationships, create a shared sense of purpose and encourage experimentation (Torres, Reeves & Love, 2013; Yukl & Mahsud, 2010). Adaptive leadership embodies an experimental approach, not an "I've got the answers" mindset (Gary, 2005, pg. 47). The experimentation allows for innovative ideas to be integrated into the best parts of the existing organization so the organization successfully moves into the future (Gary, 2005).

Randall & Coakley (2007) offered a case study of the application of adaptive leadership in higher education. Using the six stages of addressing an adaptive challenge, the authors highlighted how the use of adaptive leadership supported a successful change initiative. This contrasted with a second case study where a top down approach only worked to manage the crisis at hand. The complexity of today's schools requires adaptive leadership to meet the needs of today's students. Teacher leaders can be part of an adaptive leadership orientation.

School Leadership and Gender. Gender equity issues in K-12 educational leadership exist, particularly in principal and superintendent positions (Sanchez & Thornton, 2010; Sperandio, 2015; Superville, 2016). A recent analysis of 30 years of data on the teaching

workforce shows that the overall number of teachers is increasing and becoming more female-dominated (Ingersoll, Merrill & Stuckey, 2018). Yet the glass ceiling effect is still present (Sanchez & Thornton, 2010) with less than a quarter of the nation's superintendent positions held by women (Superville, 2016). Females comprise 76 percent of the teaching positions in the United States (Superville, 2016). Women face a variety of barriers in becoming educational leaders. Some women simply do not want a leadership position. Their passion is teaching and being with students (Superville, 2016). If not a personal preference choice, barriers exist for females wanting to move into leadership positions (Sanchez & Thornton, 2010). Sanchez and Thornton (2010) highlighted, in their review of literature on gender equity, a variety of real and perceived barriers including stereotypes of preferred leadership styles that highlight masculine traits, sexism, bias and discrimination, role conflict, high job demands and lower salaries, family obligations and self-doubt around confidence and career aspirations. Women comprise an increasingly large portion of the education system; yet continue to be relegated to lower leadership positions (Sanchez & Thornton, 2010). In addition to actual and perceived gender-oriented barriers, women face a level of scrutiny that men in similar positions do not (Superville, 2016). Removing or breaking down these gender barriers is imperative if our schools' leadership is to be reflective of the education workforce. Some female leaders are creating their own career paths that lead them to upper level administrative positions (Sperandio, 2015). Several strategies identified in the literature included finding mentors and advocates, pursuing an approach of rising through the ranks, and changing the past patterns of leadership (Sanchez & Thornton, 2010; Sperandio, 2015). In the larger context of educational leadership, it is possible that teacher leadership could provide an avenue for women to be involved in the practice of leadership, giving them a way to build leadership skills and identity.

Teacher Leadership

Distributed leadership in education grew out of the school reform era when accomplishing improvement tasks required more than a single leader in the school setting (Camburn, Rowan & Taylor, 2003; Katzenmeyer & Moller, 2009). Teacher leadership is often viewed as a narrower concept of distributed leadership because of the focus on teachers as a specific leadership group (Muijs & Harris, 2007). In the education context, teacher leadership is not congruent or static. Various definitions are used to describe the concept of teacher leadership (Wenner & Campbell, 2017; York-Barr & Duke, 2004). To illustrate the challenge of defining teacher leadership, the following examples are offered in Table 1. For this research project the definition of teacher leader cited by Katzenmeyer & Moller (2009) was used. Their definition is "teacher leaders who lead within and beyond the classroom; identify with and contribute to a community of teacher learners and leaders; influence others toward improved educational practice; and accept responsibility for achieving the outcomes of their leadership" (p. 6). The definition offered by Katzenmeyer & Moller is most relevant to my study. Teacher leaders in the context of this research project lead their students in the classroom and their colleagues outside of the classroom.

Table 1

Definitions of teacher leadership

Definition	Source
Teacher leadership is the process by which teachers, individually or collectively, influence their colleagues, principals, and other members of school communities to improve teaching and learning practices with	York-Barr and Duke (2004) pgs. 287-288

Definition	Source
the aim of increased student learning and achievement.	
The term teacher leadership is a set of skills demonstrated by teachers who continue to teach students but also have an influence that extends beyond their own classrooms to others within their own school and elsewhere.	Danielson (2006) p.12
...teacher leaders lead within and beyond the classroom; identify with and contribute to a community of teacher learners; influence others toward improved educational practice; and accept responsibility for achieving the outcomes of their leadership.	Katzenmeyer and Moller (2009) p. 6
Teachers who maintain K-12 classroom-based teaching responsibilities, while also taking on leadership responsibilities outside the classroom.	Wenner and Campbell (2017) p. 140

Functionally, teachers' experiences and interactions frame their personal construct of teacher leadership. Angelle and DeHart (2011) stated that teacher leadership is defined "by the context in which it is experienced. Teacher leadership cannot be defined by a singular role or a narrow list of activities" (p. 142). The definition of teacher leadership in the local context is often constructed by those in the positions and those working with teacher leaders. As the table presented here indicates, various definitions exist, which makes it challenging for teachers to create a leadership identity.

Teacher leader roles and attributes. Teacher leaders can have formal or informal roles within a school or district. The functions of teacher leaders can be assigned administrative roles or informal leadership actions with colleagues and peers that is primarily influence or relationship based (Angelle & Teague, 2014). Beyond the basic functional roles, some scholars have characterized teacher leaders as possessing various common attributes such as: capable with students, approachable, influencing primarily through relationships, attending to their own learning and motivating colleagues towards improved practice (Katzenmeyer & Moller, 2009). Successful teacher leaders have high efficacy with students, love to learn, and want to be part of something bigger than their classroom setting. The teacher leader is one who is a committed educator, who is professionally and personally ready to grow (Criswell, Rushton, McDonald, & Gul, 2017). Dempsey (1992) characterized teacher leaders in terms of four key images: a fully functioning person, a reflective practitioner, a scholar and a partner in learning.

Published in 2011, the Teacher Leader Model Standards were developed to provide a structure for dialogue about the needed competencies of teacher leaders. The standards identified seven attributes of model teacher leaders: fostering a collaborative culture, accessing and using research to improve practice, promoting professional development, facilitating improvements in instruction, promoting use of assessments and data, improve outreach and collaboration with families and community, and advocating for student learning and the profession (Cosenza, 2015; Nappi, 2014).

Michael Cosenza (2015) conducted a qualitative study of teacher leadership that sought to evaluate and affirm the Teacher Leader Model Standards. The purpose of his study was to gain insight into how practicing teachers defined teacher leadership and compared the definitions to the Teacher Leader Model Standards. Twenty-two participants from grades K-8 participated in

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the study. One semi-structured individual interview was conducted with each participant to gather the information. Systematic thematic analysis was used to determine emergent themes from the interview responses. Five emergent themes were identified: collaboration, sharing best practices, taking action, role modeling, and formal roles. These emergent themes aligned to six of the seven Teacher Leader Model Standards. Cosenza concluded that the teacher's definition of teacher leadership "supports a more progressive understanding of the term teacher leadership" (p. 96). Cosenza also found that most of participants believed that teachers can be leaders in their schools with or without the support of their administrator and that a collaborative school environment is the key to raising student achievement. In addition to substantiating the Teacher Leader Model Standards, this study demonstrated that teachers can provide leadership in their schools without needing to leave the classroom.

Teacher leader development. Preparation and training for teacher leaders is critical to the success of teacher leadership work. There are two primary methods to develop teacher leaders, programs situated within a formal university context and standalone teacher professional development programs (Wenner & Campbell, 2017). University programs focus primarily on leadership and interpersonal skill development, using an inquiry-based model in the formal education setting (Ado, 2016; Bradley-Levine, 2011; Taylor, Goeke, Klein, Onore & Geist, 2011). Some courses within these programs use the Teacher Leader Model Standards to provide a common set of competencies for teacher leader skill development (Ado, 2016). Research conducted within the context of university programs showed the benefits of focusing on leadership to provide teachers an opportunity to consider teacher leadership in the context of their professional lives (Ado 2016; Bradley-Levine, 2011).

Taylor et al. (2011), in their phenomenological study, identified that teachers' beliefs and understanding about teacher leadership were impacted by participation in a teacher leadership university program that connected teaching, learning and leading through an inquiry-based approach. Using semi-structured interviews, each participant provided information about their experience as an emergent teacher leader. Analysis of the interview data led to three emergent themes. The first theme was that their coursework led them to "find their professional voice" (p. 925). The teachers moved from being passive receivers of knowledge to active participants in their construction of knowledge as professionals. The second theme was that the teachers realized they had the knowledge and skills to be change agents in their schools. Because of that realization, teachers engaged in leadership action related to school initiatives. The last theme was that teacher leaders reframed their own work through "widening circles of influence and impact" (p. 926). The teachers spoke about collaboration with other teachers and other schools to facilitate improvement in their schools. Taylor et al. (2011) and other similar studies (e.g. Helterbran, 2010; Nicholson, Capitelli, Richert, Bauer, & Bonetti, 2016; Warren, 2017) help us understand the impact of university programs on the growth of teacher leaders. However, there is little to no literature about how teachers continue to develop their leadership identity once these university programs ended.

A second and more common path for teacher leadership development is structured professional development programs. These programs focused on building teacher's capacity as teacher leaders (Wenner & Campbell, 2017; York-Barr & Duke, 2004). Ross, Adams, Bondy, Dana, Dodman and Swain (2011) conducted a qualitative study of principals' and teachers' perceptions of the impact of a job embedded teacher leadership program on school improvement efforts. One research question focused on teachers' perceptions of the impact of the professional

development program on their leadership in the school. The findings suggested shifts in two frames of leadership reference: "adopting a leadership stance and viewing student learning as a communal rather than individual responsibility" (p.1218). Teachers learned to see themselves as leaders and acted on the new perceptions by taking on formal leadership roles in their schools. The professional development program facilitated the shift in teachers' perceptions to a leadership stance. The second perspective shift was that teachers adopted a perspective of responsibility for the learning of all students. The teachers opened their practice and classrooms to their peers, sharing successes and failures and accepting responsibility for the learning of all students through collaboration. While Ross et al., and other studies like theirs (e.g. Huggins, Lesseig and Rhodes, 2017; Yost, D., Vogel, R. & Rosenberg, 2009), indicated that professional development programs have an immediate impact on leadership capacity, again there is also little to no literature about the continued development of teacher leader identity once the professional development programs were completed.

Beyond the formal education and professional development programs, many scholars contend that teacher leaders need opportunities to come together and continue their learning and identity development as leaders. In her autoethnography, Knapp (2017) argued that maintaining a disposition of continuous learning was an important factor supporting her own leadership development. Katzenmeyer and Moller (2009) indicated that, in addition to developing leadership and interpersonal skills, capacity building for teacher leaders needed to include opportunities for structured programs of collaboration or networking. These opportunities provided teacher leaders space to work together on new strategies and reflect on their work as teacher leaders. Ackert and Martin (2014) offered that teachers who were willing and wanting to

become teacher leaders needed opportunities to build networks, collaborate with fellow teacher leaders, and focus on continuous learning to enhance student achievement.

Impact of Teacher Leadership on Schools and Students

When implemented effectively, models of teacher leadership can be used as a strategy for school improvement, increased student achievement and cultural change. Teacher leadership is an established strategy to address the complex changes needed in our schools (Angelle & DeHart, 2016; Katzenmeyer & Moller, 2009; Sinha & Hanuscin, 2017; Wenner & Campbell, 2017). More specifically, teachers who have authority for making and carrying out decisions for student learning, in turn, have increased accountability for student results (Katzenmeyer & Moller, 2009). As summarized below, several scholars have observed that teacher leaders can have a positive impact on school improvement efforts and student outcomes.

Teacher leadership as a strategy for school improvement. Teacher leadership grew from school improvement efforts of the 1980's and from organizational development research that suggested that active participation by individuals in an organization led to long term systemic change (Danielson, 2006; Katzenmeyer & Moller, 2009; York-Barr & Duke, 2004). Barth (2001) made a clear statement about teacher leadership as a key mechanism for reforming schools, "All teachers can lead. Indeed, if schools are going to become places in which all children are learning, all teachers *must* lead" (p. 444).

A number of studies examined the role of teacher leadership in school improvement initiatives (Katzenmeyer & Moller, 2009; Wenner & Campbell, 2017; York-Barr & Duke, 2004). In a review of the literature, York-Barr and Duke (2004) concluded that teachers are in a unique position to support improvement efforts in schools. They cited three benefits of employee participation: schools are too complex for a principal to lead alone, participation results in more

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effective decisions, and participation leads to greater ownership and commitment. Building on the work of York-Barr and Duke (2004), Wenner and Campbell (2017) examined teacher leadership research and noted the evolution of teacher leadership to support accountability mechanisms in schools in the 1990's and 2000's. They proffered that the three distinct phases schools went through from the 1980's through the 2000's shaped how teacher leadership was regarded. Teacher leadership was initially viewed as small-scale and rooted in specific teaching contexts. The second phase of teacher leadership was a component of whole school reform efforts. The third phase was to support accountability mechanisms required in schools due to federal and state laws. In the last decade, teacher leadership has evolved again to build teachers' instructional capacity so that students' performance on required assessments increased (Wenner and Campbell, 2017). Wenner and Campbell (2017) further concluded that teacher leaders have an impact beyond their own classrooms, influencing peers and policy/decision making in the schools.

The role of teacher leaders in school reform has become more prominent in the research, with researchers citing teacher leadership as a key component of successful school improvement initiatives (Angelle & DeHart, 2016; Cooper, Stanulis, Brondyk, Hamilton, Macaluso, & Meier, 2016; Cosenza, 2015). Angelle and DeHart (2016) and Cosenza (2015) presented research in the literature review of their studies that indicated the positive effects of teacher leadership in school improvement. Angelle and DeHart (2016) cited research that inclusion of teacher leadership increased school effectiveness through greater acceptances of school reform efforts. Further, involvement of teacher leaders allowed for more positive implementation of new policies and procedures (Angelle & DeHart, 2016). Cosenza (2015) presented a review of teacher leadership and school improvement research through the lens of teacher development. Schools who

incorporated teacher leaders in the collaborating with other teachers for best practices, and mentoring new teachers provided a collective effort that positively affected school improvement efforts (Consenza, 2015). Cooper et al. (2016) cited empirical research studies that posited that "teacher leaders are vital for successful school reform" (p. 87). Teacher leadership that worked in collaboration with the school principal, in a culture that sought to build community, and support teachers and actualize a school-wide vision, was found to be an integral component of school improvement (Cooper et al., 2016).

Other scholars found that teacher leaders had the capacity, through collaborative practice, to share instructional best practices, encourage professional learning and help with issues specific to the teachers they support (Angelle & Teague, 2014). Coggins and McGovern (2014) described the goals of teacher leadership as to improve student outcomes, to improve the access of effective teachers for high-needs learners, to extend the careers of teachers looking for growth opportunities, to expand the influence of effective teachers on their peers and to ensure a role for teachers as leaders in policy decisions. Coggins and McGovern further asserted that teacher leadership has "always had implicit ties to supporting improved student learning" (2004, p. 12). Their T3 Initiative studied the impact of teacher leadership on student assessments. Over a two-year period, students' English Language Arts and Math test scores improved in every school identified in the study. Schools not identified in the T3 Initiative showed flat or declining scores. Student proficiency on standardized assessments is one outcome of successful teacher leadership implementation.

Teacher leadership and school culture. School culture has an important influence on how and to what extent school operations achieve positive results for students (Danielson, 2006). A school's culture is a critical factor in a successful instructional program. The school must

"embrace an optimistic and rigorous educational mission and it must do so in an environment of respect and a culture of hard work and success". (Danielson, 2006, p.126). York-Barr & Duke (2004) stated that scholars widely recognized school culture as a significant influence on the success of improvement initiatives and teacher leadership within the school context. This norm is established by the school's administration and maintained by the teachers (Danielson, 2006).

Hargreaves and Fullan (2012) offered that a professional culture of "individual classroom autonomy, unquestioned expertise, and unassailable knowledge and expertise" (p. 143) is being replaced by collaborative school cultures. There is increasing pressure on the current cultural homogeneity of schools as alternative possibilities to school culture are available (Lortie, 1975). The goal of this re-culturing was to engage teachers and other stakeholders to work together with a more a collaborative culture (Katzenmeyer & Moller, 2009).

Danielson (2006) noted that school cultures with teacher leadership included the expectations of demanding work and respect for teachers. Establishing and promoting that culture was the responsibility of the district administrators (Danielson, 2006). Researchers have argued that for schools to exhibit positive change through teacher leadership, they must have cultures that promote communication, collaboration, learning, risk-taking and democratic norms (Cooper et al., 2016; Danielson, 2006). Teachers must also have the authority to make decisions (Danielson, 2006; Reeves, 2008).

Professional inquiry is another important factor of school culture that promoted teacher leadership (Danielson, 2006). Cultural openness allowed for the examination of better ways of doing things, the experimentation of new approaches, and the assessment of the success of those approaches (Danielson, 2006).

As there are positive factors that promote teacher leadership in the school culture, there are also factors that inhibit teacher leadership growth. These factors included teacher reluctance to step up and outside the culture, a lack of teacher confidence, teachers who focused on their classrooms, a school climate that is resistant to change, and administrators who felt threatened or insisted on maintaining rigid control (Danielson, 2006; Wenner & Campbell, 2017). Teacher reluctance may be due to concerns about stepping outside the acceptable behavioral norms of teachers, or that some teachers do not perceive themselves as leaders (Danielson, 2006). Another factor of teacher reluctance is that teachers in leadership positions may disrupt the egalitarian culture of teachers which changes their relationships with peers and administrators in a negative way (Wenner & Campbell, 2017).

Evidence suggested that students learn better when principals, teachers, and others developed collaborative relationships within a professional learning community (Katzenmeyer & Moller, 2009). Gonzales (2004) found that leadership capacity of all teachers awakened as the schools in her study re-cultured to include teacher leadership.   The purpose of her study was to explore factors that facilitated or inhibited the sustainability teacher leadership when teachers from a school with teacher leadership as part of their leadership structure moved to a school that was in the process of establishing teacher leadership (Gonzales, 2004). Six components were found to be necessary to enable a culture of teacher leadership: learning, valuing, nurturing, supporting, sharing, and coaching.

Teacher leadership that is integrated into the culture of a school connects learning and leading through collaborative, trusting relationships (Muijs & Harris, 2007). Regardless of the exact definition of teacher leadership, most scholars argue that distributed leadership in a school setting is based on the relationships and connections of individuals such as teachers, principals

and other invested stakeholders (Camburn, Rowan & Taylor, 2003). Donaldson (2007) offered three assets that teachers bring to school leadership: building relationships, maintaining a sense of purpose and improving instructional practice.

The proper implementation of teacher leadership, that is reinforced by the principal, creates a culture within the school community that supports teacher leaders and underscores a commitment to the values of trust, empathy and truth (Katzenmeyer & Moller, 2009; Oswald & Englebrecht, 2013; Woods, Bennett, Harvey & Wise, 2004; York-Barr & Duke, 2004). Where a participatory and collaborative culture existed, teachers developed stronger teams based on trust. School cultures showed more positive student outcomes and embraced norms of teamwork and openness (Ackert & Martin, 2014; Muijs & Harris, 2006; York-Barr & Duke, 2004).

The roles of teacher leaders in a participatory and collaborative culture included building relationships with other colleagues and bringing them together around common work, maintaining a sense of purpose around a common perspective or value, and improving instructional practice by sharing successes and struggles with colleagues through formal or informal collaborations (Danielson, 2006; Muijs & Harris, 2003). In addition, teacher leadership allowed for greater participation and commitment to decisions made in the school setting. (Ackert & Martin, 2014; Spillane, 2009; York-Barr & Duke, 2004).

The heavy work of school improvement, including increased outcomes for all students, can be accomplished by a culture that supports collaboration between principals and teachers and provides opportunities for teacher leadership development (Ackert & Martin, 2014).

Teacher leadership and student outcomes. Some scholars continued the work of examining teacher leadership as a structure that recognized the strength of teachers in effecting improvement in student learning (Katzenmeyer & Moller, 2009; Muijs & Harris, 2003). In 2001,

Katzenmeyer and Moller (as cited in Muijs & Harris, 2003) identified three facets of teacher leadership: leadership of students or other teachers, leadership of operational tasks and leadership through decision-making or participation. They used the metaphor of a sleeping giant to describe how the power of teacher leadership can be a positive catalyst in school improvement efforts. Subsequently, Katzenmeyer and Moller (2009), drew upon two decades of teacher leadership research to argue that school transformation could be accelerated, and learning for all students would improve, if the resource of teacher leadership is tapped. The basic premise offered by Katzenmeyer and Moller was, "By helping teachers recognize that they are leaders, by offering opportunities to develop their leadership skills, and by creating school cultures that honor their leadership, we can awaken this sleeping giant of teacher leadership" (2009, p. 3).

Barth (2001) argued that students benefit from teacher leadership in schools as the governance within schools shifts from a perceived dictatorship (principal as sole leader) to a more democratic environment. Barth postulated that when teachers take on leadership of important school responsibilities, students noticed the shift. He stated, "the more the school comes to look like, act, and feel like a democracy, the more students come to believe in, practice and sustain our democratic form of government" (p. 444). By observing teacher leadership in their own schools, students learned the application of important concepts of citizenship in a democracy. The impact of teacher leadership on student outcomes provides one way students become effective citizens.

Conceptualizing Teacher Leader Identity Development

The lack of a consistent definition of teacher leadership creates challenges for teachers to establish a leadership identity. Furthermore, the underlying process for how teacher leader identity develops has not been clearly explained in the literature. Some studies included identity

development in relation to specific roles or functions of teacher leaders (e.g. Sinha & Hanuscin, 2017; Smith, Hayes & Lyons, 2017), but teachers who take on leadership roles do more than assume new roles and functions; Their identity as a teacher changes (Struyve, Meredith & Gielen, 2014). The development of that identity is situated in teachers' interactions with others in the work that is accomplished together (Ross et al., 2011). We learn together, and through learning and interaction we create our identity, and when that occurs in a joint activity, we develop a community of practice (Gonzales, 2004; Lieberman & Friedrich, 2010). To conceptualize how teachers' identities might be impacted by participating in a structured learning community, I reviewed three key studies that focused on identity development. I chose these studies because they are representative of how teachers' identities as leaders can be socially constructed. It is the interactions with others that supports teacher leader identity development.

Lieberman and Friedrich (2010) conducted a study of teacher leaders working within the context of the National Writing Program. Three key ideas about sociocultural identity theories from Wenger (1998) and Holland, Lacchiote, Jr., Skinner and Cain (1998) framed their understanding of how leadership identity developed for teachers. The first was that identity is constantly negotiated. Due to participation in many social communities, individuals are always reconciling their multiple conceptions of self. The second was the idea identified by Lieberman and Friedrich (2010) that identity is "both how we see ourselves and how others perceive us" (p. 9). Identity develops over time through our day-to-day interactions with many social groups. The final idea that guided Lieberman and Friedrich was that while self-conceptions are "informed and constrained by larger social forces" (p. 10), identity growth can continue as individuals respond to social interactions and forces. Their analysis of identity development of teacher leaders indicated that teachers developed identities as leaders over time, as they negotiated the

day-to-day interactions with those they lead. Teacher leaders co-developed their leadership practices and identities within the contexts of accepted expectations and defined roles. As expertise developed in leadership practices; identity as a leader grew. Teacher leaders also learned to navigate their identities as teachers and as leaders, interacting with colleagues and administrators as members of multiple communities (Lieberman & Friedrich, 2010).

Sinha and Hanuscin (2017) used the constructs of teacher leadership as practice and identity to frame their study on the development of science teacher leaders with varying years of experience. The conceptual framework of their study used work by Krause (2004) and Gee (2000) to state that identity was based on social roles and role identity. These two constructs stated that teachers developed ways of "being" leaders through position within a social group and interaction and feedback from others. An individual's position within a group influenced their identity. In the context of teacher leadership development, becoming a leader occurs through interactions in these new roles. A teacher's personal vision of leadership and recognition contributed to their confidence and defined their sense of self as a leader. Through a multiple case study approach, Sinha and Hanuscin (2017) found that the identity development of teacher leaders occurred gradually over time, as the participants gained confidence in their work as leaders. The implications offered in the findings of this study indicated that professional development for teacher leadership should focus on broadening the view of leadership, expanding opportunities for teachers to lead and supporting teachers in creating an identity as a teacher leader. An additional recommendation was that professional development programs include feedback from peers and discussion opportunities about the challenges and successes of the work on leadership practices.

Similarly, Gonzales, (2004) conducted a study about the factors that sustained teacher leadership in the 21st century. Gonzales' qualitative conception of teacher leadership involved a social reality that was "constructed by the individuals involved in the research situation" (p. 18). In making this assertion, Gonzales recognized that teacher leadership identity was constructed by the individuals and community sharing a common experience. Gonzales (2004) offered, "When teachers recognize themselves as leaders, the meaning they give to leadership is socially constructed and is not necessarily the same as the meaning and definition attributed to this term by outsiders" (p. 20). Teachers, in Gonzales' study, described teacher leadership identity that was "constructed by a community of learners" (p. 128). The reality of teacher leader identity was that it was created by interaction with others; including other teacher leaders.

Communities of Practice

The culture of closed-door teaching continues in many schools (Margolis & Doran, 2012). Teacher leaders, working with their peers, can challenge that culture and the egalitarian nature of teachers in schools (Margolis & Doran, 2012). Teachers who chose to be in leadership roles reported feelings of loss as they move from being teacher peers to teacher leaders (Grimshaw, 2017). By forming a new community that is relevant to their work as leaders, teachers can have a "space and place" to develop this new identity of teacher leadership.

Wenger (1998) offered the construct of communities of practice to support the professional identity development of individuals who share a common occupation or interest. Wenger identified three dimensions of community and practice that together create a unit defined as a community of practice: mutual engagement, joint enterprise and shared repertoire. Mutual engagement is what defines the community. The membership is the people and their

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relationships relative to their practice. The community of practice is formed because the members "sustain dense relations of mutual engagement organized around what they are there to do" (Wenger, 1998, p. 74). A requirement for engagement was to be included in what matters, in the work of the community of practice. The work of mutual engagement facilitates the development of the community, serving as the entryway to a sustained group with complex and diverse connections and forms of participation (Wenger, 1998).

Joint enterprise is the second characteristic. Wenger (1998) defined joint enterprise as the negotiated response of the participants to their situation. Joint enterprise is deeply rooted in the participants shared experience and goes beyond external influences that are out of the control of the community of practice. Due to that shared experience, participants created their own level of mutual accountability that drives and continues the practice of the community. "The enterprise is joint not in that everybody believes the same thing or agrees with everything, but in that it is communally negotiated" (p. 78). The participants of the community are engaged together in the work of making the practice real and living. Ultimately it is the participants' understanding of the practice, in the collective experience, that creates a congruent though not uniform product. The community negotiates the conditions and resources that shape the engagement in the practice. This negotiation creates a level of shared accountability among those involved. Wenger, 1998, found that this accountability included:

> what matters and what does not, what is important and why it is important, what to do and not to do, what to pay attention to and what to ignore, what to talk about and what to leave unsaid, what to justify and what to take for granted, what to display and what to withhold, when actions and artifacts are good enough and when they need improvement or refinement (p. 81).

The joint enterprise is a process that evolves over time.

The third characteristic of practice as part of community is a shared repertoire. The repertoire of a community includes the ways of doing things such as routines, words, or concepts that the community has produced that are part of how things are done. The repertoire of the community allows members to create and express their identities (Wenger, 1998). These three characteristics are dynamic in nature and facilitate the development of the cohesive community of practice.

Identity within the community of practice is negotiated through the shared experiences. Three modes of belonging contribute to identity development within the community: engagement, imagination and alignment (Huggins, Lesseig and Rhodes, 2017; Wenger, 1998). Engagement in identity development is similar to mutual engagement within the community. Huggins, Lesseig and Rhodes (2017) stated, "Identity formation begins through mutual engagement in shared activities" (p. 31). The contributions to the practice define the identity of the individual within the community. The shared day-to-day experience with others in the practice of the community contributes to identity development. Wenger (1998) states, "Indeed, our identities are rich and complex because they are produced within the rich and complex set of relations of practice" (p. 162). The work of belonging is for members of the community to define and engage in meaningful activities of the practice and accumulate a shared history through the group's interactions with each other and others.

As shared experiences shape the identities of the members and the practice, imagination moves the work forward towards new possibilities. Imagination, as defined by Wenger (1998), involves seeing beyond our current time and space and creating new images of the world and ourselves. This use of imagination requires one to reflect on engagement within the community

and integrate new meanings and other's perspectives into their own identity (Huggins et al.,

2017). Imagination creates identity that evolves over time. Within the community, the work of

imagination defines the direction of the group, the historical artifacts and to reinvent oneself, the

practice and the community (Wenger, 1998).

Alignment is the third mode of belonging. Alignment is the recognition of the practice

within a broader perspective. In involves coordination of the energy, activities and practices of

the community towards a common purpose (Wenger, 1998). Identity development within the

mode of alignment recognizes the larger context and how, by doing their part, one belongs to

that context. Rituals and common practices connect communities across locations and time.

Belonging within the mode of alignment requires coordination of effort and sharable artifacts to

connect individual and community identity to a greater purpose (Wenger, 1998). Communities

of practice are formed based on engagement, mutuality and common work or tasks. In the

school setting, communities of practice are often formed under the structure of professional

learning communities.

Professional Learning Communities

Professional learning communities (PLCs) are an oft cited component of school reform

to increase student achievement. The basic premise of the PLC movement is that the collective

intelligence of teachers working together nets better results than the "factory model" of

hierarchical leadership in schools (DuFour & Eaker, 1998). PLC's share unique team

characteristics intended to support the work of teachers' learning and acting together within the

school setting. The characteristics of effective teacher professional learning communities include

a shared mission, vision and values, collective inquiry, collaborative teams, action orientation

and experimentation, continuous improvement and a results orientation (DuFour, DuFour, Eaker

& Karhanek, 2004; DuFour & Eaker, 1998). The major emphasis in the professional learning community is collective learning, where the members learn more together than if they were learning independently (DuFour, DuFour, Eaker & Karhanek, 2004; DuFour & Eaker, 1998; Hord & Sommers, 2008).

Two key components of successful learning communities in school settings are inquiry and dialogue around the common work of teaching and student learning (DuFour & Eaker, 1998; Hord & Sommers, 2008). The culture of a successful professional learning community is relationship based with a shared practice around individual and group consciousness, creativity and coaching (DuFour, DuFour, Eaker & Karhanek, 2004; DuFour & Eaker, 1998; Hord & Sommers, 2008).

As professional learning communities were actualized in the school setting (DuFour & Eaker, 1998; Hord, 1997) the PLC as a structure for professional development emerged (DuFour & Eaker, 1998; Hord & Sommers, 2008). Well-developed PLC's lead to and support improved teacher practices (Hord, 1997). Because of the isolation of classroom instruction, many teachers do not have the opportunity to learn together (Hord & Sommers, 2008). Professional development structures often do not include the time for teachers to work together. Teachers' interactions with each other and the complexity of their work can develop and sustain positive outcomes for student learning. (Turner, Christensen, Kacker-Cam, Fulmer, & Trucano, 2018).

Teacher leader development literature included the concepts of coming together or networking. Katzenmeyer and Moller (2009) offered professional networks, "formal or informal communities of practice" (p. 57) as a strategy for teacher leader development. Other teacher leader development strategies cited in the literature included teacher leader networks, structures where collaborative work is accomplished. Teachers, including teacher leaders, need

opportunities to build networks and communities who share their vision of the work (Dozier, 2007; Ross, Adams, Bondy, Dana, Dodman, & Swain, 2011; Wenner & Campbell, 2017; York-Barr & Duke, 2004).

Summary and Implications of Literature Review

This action research project sought to add to the literature by creating a specialized professional learning community to support the identity of teacher leaders in their day-to-day work. We create our identities through those interactions around common practice (Wenger, 1998). Teacher leaders develop their identity through personal growth, their work and interaction with other teacher leaders. Teacher leaders who come together and support each other in a structured professional learning community continue to develop their individual leadership identity. The formation of the community was grounded in the three dimensions of a community of practice: mutual engagement, joint enterprise and shared repertoire (Wenger, 1998). The core premise of this project was that teachers develop their identity as teacher leaders through their experience and interaction with others who share a teacher leadership role.

In Chapter 3, I detail the innovation of creating a structured learning community for teacher leaders to develop identity, as well as the methodology used to address the study's research questions.

Chapter 3

METHOD

The purpose of this action research study was to explore how individuals' roles in a teacher leader learning community developed and sustained their identity as a teacher leader. The prior chapter outlined the theoretical and conceptual frameworks for this project. In the scholarly literature, teacher leadership has been addressed mostly in relation to how it is defined, its functional roles, and its development and impact on student achievement (Angelle & DeHart, 2016; Cosenza, 2015; Katzenmeyer & Moller, 2009; Wenner & Campbell, 2017; York-Barr & Duke, 2004). The development and sustainability of teacher leader identity has been less researched in the literature (Cortez-Ford, 2008; Judkins, 2014; Lieberman & Friedrich, 2010; Yost, Vogel & Rosenberg, 2009). To contribute to this literature gap and better understand the experience of teacher leaders' identity development within a structured learning community, this study asked the following research questions:

RQ 1: In what ways does participation in a teacher leader learning

community develop and sustain teacher leader identity?

RQ 2: What are the factors associated with teachers' beliefs about the

success and sustainability of a teacher leader learning community?

To address my research questions about teacher leader identity development and sustainability, I situated this action research study within a mixed methods design, using a case study methodology. This chapter addresses the following areas: setting, participants, research design and procedures, role of the researcher, innovation, instruments, data collection and analysis procedures.

Setting

The setting for this project was the Canajoharie Central School District, a small rural district in upstate New York. The district educates approximately 909 students in grades PreK – 12. The district employees 86 full- and part-time instructional faculty. There are three school buildings in the district: East Hill Elementary for grades PreK-5, Canajoharie Middle School for grades 6-8, and Canajoharie High School for grades 9-12. The poverty level of the students attending the district's schools has increased from 43% in 2011 to nearly 60% in 2016 (personal communication from L. Broady). The district provides school supplies to students in grades K-8 and a free breakfast and lunch for every student in grades K-12. Amid a shifting student and community population, the district's teachers remain committed to providing the best instructional learning environment for all students.

Currently the leadership model of the district most closely resembles a traditional school leadership model, which consists of one principal to each building. There is also one district-wide director position and a superintendent of schools. Secondary department chairs contribute some curriculum and instructional leadership. The elementary school has one teacher on special assignment who supports the implementation of a building-wide social-emotional program. There is an informal network of teacher leaders who participate on various committees and work groups. Some of the members of the informal network were participants in this study. A current initiative in the district is the development of a teacher leader structure as part of a distributed leadership model.

Participants

Sample. Purposive, convenient and snowball sampling strategies (Creswell, 2015) were used to identify the participants in this study. A previous action research cycle included five

teacher participants (Grimshaw, 2017). These same participants were provided the opportunity to be part of this research project. In June 2018, I approached the participants from the prior action research cycle and personally solicited involvement in this study. All five participants agreed. The previous participant group suggested other potential participants; one agreed to be part of the study. Ultimately, six teachers comprised the participant group. In September 2018, all participants received the recruitment letter via school email (see Appendix A). The consent form was hand delivered to each participant (see Appendix B)

Prior to the start of the study, I met with the participants on two occasions. We discussed the potential effect of my positionality on the responses of participants. We specifically discussed how my role shifted to that of researcher when I conducted the interviews and meeting observations. This effort was made in advance of the start of the study time period to minimize researcher effect on the participants' responses. Researcher effect or the Hawthorne effect is a threat to internal validity (James & Vo, 2012). The terms refer to the tendency of study participants to change their responses as a result of being observed (Brink, 1993; Herr & Anderson, 2015; James & Vo, 2012). All teacher participants who were invited to participate in this study had the full knowledge that their participation was voluntary, would not impact their employment, and they could discontinue their participation in the study at any time.

Description of participants. All participants were employed by the Canajoharie Central School District during the 2018-2019 school year. Table 2 provides a summary of participant characteristics. The teachers represented instructional faculty from each grade level configuration in the district: elementary, middle and high school. One participant worked at the elementary school, two worked at the middle school, and three worked at the high school. The number of years of teaching experience in the district ranged from seven to 26 years, with a

mean of seventeen years. All participants have completed master's degrees in education. The study participants were all female and Caucasian. Several male teachers were approached to be part of the study; these invitations were declined.

The teacher leadership roles assumed by the participants included an instructional coach, members of building leadership teams, members of district-wide teams and teachers who initiated and supported building wide student-teacher activities. As stated in Chapter 1, a current initiative in the district is the development of a formal structure for teacher leadership. Teachers have been involved in change initiatives at the district and building levels, primarily as participants on committees or task forces. The participants in this study were members of committees and leaders of the work being accomplished. Five of the six participants were informal teacher leaders. One participant had a formal role as an instructional coach at the K-6 grade levels. Her responsibility was to support teachers and students as the school implemented a social-emotional program. She developed and conducted training for teachers and staff, provided shoulder-to-shoulder teacher coaching, established and implemented procedures, and led the building level steering committee. She also worked directly with students, supporting their social-emotional skill development. At the time of this study, the participant was completing her third year in the position.

The remaining five participants were informal teacher leaders. Four of six were part of their building's leadership teams. Beginning with the 2018-2019 school year, the district established building leadership teams, led by building principals. The purpose of the building leadership teams was to promote distributed leadership and decision making at the school level. Principals sought members of the team through volunteer requests and direct solicitation. The expectation of building leadership team members is to participate in decision-making and lead

initiative implementation. An example of action taken by a building leadership team that involved participants in this study was the establishment of the "Cougar Closet" at the high school. Recognizing that some of our high school students did not have access to personal care products, school supplies or clothing and outerwear, the team established a location in the school and gathered donations from staff and local businesses. Students can access the Cougar Closet during regular school hours and take the items they need.

Three of the participants are members of the district's Next Generation Standards Implementation Team. New York State has developed revised standards in English/Language Arts and Mathematics, scheduled for full implementation in September of 2020. The district formed an implementation team consisting of two administrators, four teachers and a curriculum coach. The team's directive is to plan, train and support teachers in the implementation of these standards. The three participants of this study attended training, planned the timeline, conducted awareness sessions and facilitated colleagues' work on standards implementation.

Two of six participants had a lead role in implementing revised student behavioral structures in their building. During a time of instability of building leadership, these participants worked with a group of their colleagues to revise student behavioral expectations across the building. The result was a building-wide set of expectations and behavioral structures reflected in a written manual.

Five of the participants were involved in a district-wide task force on social-emotional learning. In September 2018, New York State released guidance documents for social-emotional learning as part of the total curriculum for students. The district established a task force to provide overall guidance and coordination of social-emotional learning direction and activities

in the district. This task force was responsible for implementing a pilot climate survey in Spring of 2019; the results will be used as a baseline to determine further action. Members of the task force were charged with determining those actions and leading the implementation. Table 2 provides a summary of the participants and their teacher leadership involvement.

Table 2

Summary of Participant Characteristics

Participant	Gender	Years of Teaching Experience in District	Grade Levels	Teacher Leader Involvement
Farrah	F	26	K-6	Implementation of social emotional learning program, Member of Principal's Leadership Cabinet, Member of Social-Emotional Task Force
Tamaya	F	10	6-8	Implementation of student behavioral structures and social emotional strategies, Member of Standards Implementation Team, Member of Social-Emotional Task Force
Soleil	F	21	6-8	Implementation of student behavioral structures and social emotional strategies, Member of Social-Emotional Task Force
Nora	F	21	9-12	Member of Building Leadership Team, Member of Standards Implementation Team, Member of Social-Emotional Task Force
Emily	F	7	9-12	Implementation of social emotional strategies and, Member of Building

Participant	Gender	Years of Teaching Experience in District	Grade Levels	Teacher Leader Involvement
				Leadership Team, Member of Standards Implementation Team
Mary	F	17	9-12	Member of Building Leadership Team, Implementation of social emotional strategies, Member of Social-Emotional Task Force

Members of this study participated in the study activities and data collection at varying levels. All six participants participated in the initial and final interviews for this project. All six participants participated in the four scheduled teacher leader learning community meetings. Three participants completed the pre-innovation survey and five participants completed the post-innovation survey. Two peer partner pairs logged interactions during this study. The first pair noted three interactions. The second pair noted six interactions during the course of the study.

Research design and procedures

Action research was the overall framework for the design of this study. Action research is a systematic inquiry that seeks to address problems or concerns in the local context (Mertler, 2014). Action research is a cyclical process that consists of the following stages: identifying a problem, collecting information, planning for action, implementing action, evaluating data about the action, reflection and revising the action based on data evaluation and reflection (Ivankova, 2015; Mertler, 2014). In action research one step leads to another, with the end of one cycle leading to the beginning of the next cycle (Ivankova, 2015). For this study, earlier cycles of

research focused on gathering preliminary data used to inform the development of my specific innovation. Action research is best completed in collaboration with others who have a vested interest in the problem or concern being examined (Herr & Anderson, 2015; Ivankova, 2015; Mertler, 2014). I sought to understand teacher leader identity development in my district as we work to improve educational outcomes for our students through a distributed leadership model. This problem of practice and the local context for the problem made action research the appropriate overall study design framework.

More specifically, I used a case study methodology to explore teacher leader identity development within a structured learning community. A case study methodology allowed me to explore the bounded system of a teacher leader learning community in depth. Plano Clark and Creswell (2015) defined *system* as a "program, event or activity involving individuals" and *bounded* as meaning that "the researcher separates out the case in terms of time, place, or some physical boundaries for the purposes of the research study" (p. 292). In this case study, the bounded system was the teacher leader learning community in the Canajoharie Central School District. A case study methodology is a detailed, in-depth exploration of single examples. Case studies are "description, holistic, heuristic, and inductive" (Rossman & Rallis, 2017, p. 91). My case study sought to describe and explain the development of teacher leader identity because of participation in a structured learning community within my school district.

This study used a convergent mixed method design for data collection. Mixed methods design combines qualitative and quantitative data to understand a research question or questions (Ivankova, 2015; Plano Clark & Creswell, 2015). The rationale for using a mixed methods design was to provide corroboration of data findings by employing the strengths of both quantitative and qualitative data (Ivankova, 2015). Mixed methods design was appropriate for

this study because the research questions focused on exploring and explaining the development of teacher leader identity (Plano Clark & Creswell, 2015). Qualitative and quantitative data was given equal priority, using both sets of data results to explore the research questions and interpret the findings.

Data was collected concurrently, meaning that quantitative and qualitative collection and analysis occurred at the same time (Plano Clark & Creswell, 2015). The qualitative data set included the initial and final semi-structured interviews, observation of teacher leader learning community meetings, peer partner interaction logs and research journal entries. The quantitative data set included the pre- and post- innovation surveys.

Teachers who reach out beyond their classroom walls to take on leadership positions live an experience that is uniquely their own. A mixed methods design allowed me to best understand their experience and the development of their teacher leader identity.

Role of the Researcher

At the time of this study, I was the Superintendent of Schools for the Canajoharie Central School district, a position I held for seven-and-half years. As Superintendent, I served as the chief executive officer for the district. I was responsible for overall leadership of all facets of school district operations and student learning.

My positionality in this study was one of insider-researcher (Herr & Anderson, 2015). As the researcher, I created the overall research design, data collection and data analysis methods. Of note in this study is my position as superintendent of schools. While, I had overall responsibility for every employee in the organization, I did not have direct supervision of the teacher participants in this research project. In designing this project, I made clear delineations between activities that were part of this action research project and indirect supervisory

activities. I informed the teachers directly that participation in this research project was voluntary and not connected to any supervisory or evaluation process. Formal teacher evaluations in the district are conducted by building principals and district administrator; I am not involved in the process. I shared information with the administrative team about the overall project and the identity of the participants. I informed the team that this project is outside of the evaluation process.

Innovation

A prior cycle of action research conducted in Fall 2017 (Grimshaw, 2017) provided information that assisted me in the development of the innovation. Using a semi-structured interview format, participants were asked a series of questions to explore their definition of teacher leadership along with the skills, knowledge and qualities of teacher leaders. The final question, "What professional development or coaching would support teachers functioning as teacher leaders?" was asked to learn information that could be used to guide the innovation of this research project (Grimshaw, 2017).

The construct of teacher leadership included two subthemes: defining teacher leadership and qualities of teacher leaders. Common words used to define teacher leadership included: "change", "willingness", and "learn". Qualities of teacher leaders included "risk taker," "ok to change," "approachable," "non-threatening." Participants defined teacher leadership and teacher leader qualities using similar terms. Within the theme of identity, participants indicated the hesitancy of assuming the identity of teacher leader. There is a balance that teachers face when they assume the identity of a leader. The participants expressed concern in terms of "you" [as the teacher] are not "better" than your colleagues, however you are working in a different capacity [as a teacher leader], and that changes your identity as a professional and as a person. This cycle

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of research provided me three insights that facilitated the development of the primary innovation of this research project, the teacher leader learning community. The first insight was that there was a sense of isolation in taking on the role of a teacher leader; Sometimes relationships with colleagues changed as teachers assumed a leadership orientation in their work. Second, teacher leaders expressed a desire for support in a safe place. One participant discussed support for teacher leaders stating that the "support that people need is that safe environment where we can really kind of talk about the struggles" (Grimshaw, 2017, p. 8). The final insight was that an orientation towards taking leadership actions was already occurring among some teacher leaders through informal connections. Connecting to others who were also engaged in the work of teacher leadership provided motivation to continue the work and growth as teacher leaders.

Drawing from these findings, as well as the literature described in Chapter Two, the innovation at the center of this study was the implementation of a structured teacher leader learning community in the Canajoharie Central School District. The central premise was that, through collaborative work in a learning community focused on teacher leadership, participants developed their identity as teacher leaders and sustained their leadership practice. An overall finding from my previous research cycle was that teacher leadership is more than a job description, it is about a transformation of professional identity (Grimshaw, 2017). The creation of a structured learning community was intended to provide teacher leaders a place to learn and grow together in their leadership, to problem-solve together over challenging situations they face in their work, and to share successes. Also, teachers who accepted the identity as teacher leaders risked losing their identity as colleagues with their peers, which impacted their social-professional relationships (Struyve, Meredith & Gielen, 2014). The teacher leader learning

community provided the connection and care that teacher leaders needed to be successful in growing this part of their identity.

The model of learning community specifically applied to this study was based on the Communities of Practice (Wenger, 1998) and Professional Learning Communities (DuFour & Eaker, 1998) described in Chapter Two. The teacher leader learning community was established with the co-creation of a common purpose (DuFour & Eaker, 1998) to answer the question, what does the group hope to become and attain because of their work together? (Hord & Sommers, 2008). To accomplish the purpose, the learning community used a meeting protocol consistent with the tenets of PLC's and communities of practice that included collaborative norms, an agenda, and a meeting debrief (DuFour & Eaker, 1998; Garmston & Wellman, 2013; Hord & Sommers, 2008; Wenger, 1998). A set of collaborative norms was established by the teacher leader learning community during the initial teacher leader learning community meeting (See Appendix J). The meeting protocol was based on the Adaptive Schools work of Garmston and Wellman (2013) and included opportunities to share successes and challenges, professional development through an article read, and reflection on the work of teacher leadership (See Appendix J). At the end of each learning community meeting a reflection question was discussed by the participants (See Appendix J).

At the conclusion of the prior research cycle in Fall 2017, participants met to review the findings. During that session the participants suggested the idea to add teacher leader peer partners as part of the innovation. The participants offered that the pairs could communicate via face-to-face meetings, phone calls, texts or emails in between the scheduled teacher leader learning community meetings to provide support to each other. This innovation strategy aligned with the overall premise of this study, which was for teacher leaders to develop and sustain their

leadership identity through structured support; so, I added it as part of the study innovation. I further developed this component of the innovation as delineated in a subsequent section. The peer partners were an extension of the primary innovation, the Teacher Leader Learning Community.

Teacher Leader Learning Community. The central innovation of this project was the formation of a teacher leader learning community (TLC). The teacher leader learning community was implemented during the study period between October 2018 and December 2018. Including the initial convening session, four teacher leader learning community meetings occurred during the study period. Each meeting was 1 hour and 15 minutes in length. I facilitated the initial organizational meeting; teacher leader partners facilitated the remaining three meetings. The teacher leader learning community meeting protocol focused on sharing successes and challenges, conducting an article read on a topic relevant to the participants' work, and discussing the article's content in relation to teacher leadership by using the guiding question developed by the participants, "How/what ways are planting seeds of growth for others?"

To launch the teacher leader learning community on October 1, 2018, participants collaboratively engaged in an organizational meeting. I facilitated this meeting using an agenda created as part of the development of this innovation. An outline of the organizational meeting is found in Appendix C. I reviewed the agenda with the participants at the beginning of the meeting. Consistent with the tenets of mutual engagement, joint enterprise, and shared repertoire (i.e., Wenger's (1998) three essential dimensions of a community of practice), the participants established a common understanding of a learning community and a shared purpose, created a set of collaborative norms, developed the meeting protocol and formed peer partners (See Appendix C). The shared purpose statement grounded the participants in the learning

community. The purpose developed by the participants was, "A progressive group encouraging growth and conversation focusing on fresh perspectives and new ideas in a safe and supportive environment".

As part of how the community established itself as a joint enterprise, in other words, negotiating its shared conditions, resources, and accountability (Wenger, 1998), the meeting protocol was entirely generated and owned by the group. The protocol included a review of the collaborative norms, sharing successes and challenges, and a topic of the month article read on content relevant to teacher leadership. The discussion about the article content was framed by this guiding question, that was created by the participants, "How/what ways are we planting seeds of growth for others?". The meeting concluded with a debrief question (See Appendix J).

As part of how the community co-created Wenger's (1998) dimension of mutual engagement with one another, during the initial organizational meeting, participants established peer partners. The peer partners were established as the second part of the innovation for this project and is detailed below. Once established, the participants used the newly formed partnerships to determine a rotation of meeting roles including leaders, timekeepers and secretaries. The delineation of roles for meetings two through four was established by the participants. Table 3 identifies the teacher leader learning community meeting roles rotation.

Table 3

Teacher Leader Learning Community Meeting Roles Rotation

Meeting	Date	Leaders	Timekeepers	Secretaries
2	10/22/18	Farrah & Nora	Soleil & Mary	Tamaya & Emily
3	11/26/18	Soleil & Mary	Tamaya & Emily	Farrah &Nora
4	12/17/18	Tamaya & Emily	Farrah &Nora	Soleil & Mary

The leaders were responsible for facilitating the meeting and selecting the relevant article for discussion. The timekeepers kept track of the time relative to the meeting protocol. If needed, the timekeepers provided a reminder to the group. The secretaries maintained minutes of the meeting that were housed in a secured shared Google Drive folder accessible only to the study's participants. There was no set minutes structure, the secretaries established their own minute taking format.

Meetings two through four were led by teacher leader partners. The shared purpose, collaborative norms and meeting protocol were posted on the wall during each meeting for easy reference and to keep the meeting on track (See Appendix J). At the beginning of each meeting, the leaders reviewed the purpose and collaborative norms with the group. The leaders followed the meeting protocol, guiding the participants through sharing success and reflecting on challenges; providing participants a mechanism to support and coach each other as they actualized teacher leader identity. The meeting leaders facilitated a discussion around the topic of the month article read. Two examples of such topics were social-emotional development and student mental health. Participants discussed the article's content and its relevance to their work as teacher leaders. A listing of the selected articles is found in Appendix K. The participants generated a guiding question in the initial meeting that was used to frame the content of the article and their work as teacher leaders. The guiding question was, "How/what ways are we planting seeds of growth for others?". Each teacher leader community meeting included the article read and discussion prompt. The learning community meeting ended with a debrief question about the session (See Appendix J).

Two important characteristics of a learning community are trust and respect among the members (Hord, 1997). Co-construction of the learning community design promoted trust and

respect among the members. Each meeting the shared purpose, collaborative norms and meeting protocol were posted for reference. The participants had a sense of ownership about the purpose, collaborative norms and meeting protocol. This was evident in the second meeting, when one of the leaders read the collaborative norms aloud at the beginning of the meeting and the participants followed along. At the beginning of the third meeting, leader Soleil stated, "All right we are going to review our norms" and again, the group followed along. The leaders proceeded to follow the meeting protocol. Each meeting followed the pattern of the meeting protocol; the participants knew what to expect and how to maximize their meeting time.

The teacher leader learning meeting protocol contained a combination of shared dialogue and problem solving about how the work of teacher leadership impacted the participants identity as teacher leaders. The shared successes provided an opportunity for validation of a teacher leader stance in working with colleagues by receiving feedback from others with a similar role. In the second meeting, Nora shared a success she experienced in reaching out to a colleague to ask for assistance for a student. She chose to approach the colleague using a positive frame of reference and communication. The positive response from her colleague reinforced Nora's leadership stance and identity. The learning community further reinforced the positive outcome of the interaction by providing affirming statements such as, "I think that fact that you came from a positive place helped, you complimented the teacher first".

The meeting protocol also provided time for reflection and support when participants felt challenged. During the fourth meeting, Mary asked for assistance in helping a student who was experiencing emotional difficulty. The student's behavior was impacting their relationship with other teachers. As Mary was seeking to help the student and their teachers, through her role in supporting social-emotional skill development, she felt challenged in providing assistance. The

participants responded with specific examples Mary could try. The manner of their response to Mary affirmed her leadership identity as the group shared their confidence in her as she worked with this challenging student.

The participant generated discussion question, "How/what ways are we planting seeds of growth for others?" was the framework for participants to discuss their position within the context of their work. This question was discussed within the context of the selected article reads (See Appendix J). One of the articles read for the third meeting offered suggestions on how to get others to go along with an idea you want to implement. This led to a discussion about how people move into acceptance of change. Participants 1 and 5 discussed the percentage theory (33% accept immediately, 33% need to be convinced and 33% will resist); while Tamaya offered a perspective about community building within a group as part of implementing change. She then described some ideas that were implemented at her building. Mary, who is located in a different building, affirmed the position offered by Tamaya and further stated that she was going to try some of the ideas. In the fourth meeting, Mary reported that, "I took your advice from the last meeting and did something to foster collegiality". The ideas she implemented, with help from others in her building, included a cocoa bar, a "wear something flannel" day, and a "favorite sports team apparel" day. These activities were positively received by her colleagues. There was a risk for Mary to take on the organization and leadership of collegial activities. The positive response from her peers boosted her confidence as a teacher leader, providing her the opportunity to have a positive experience in that leadership role. Tamaya's identity as a teacher leader was also positively affirmed as an idea she offered, was accepted and implemented by a teacher leader colleague.

The formalized structure of the learning community aligned with the three dimensions of a community of practice: mutual engagement, joint enterprise and shared repertoire (Wenger, 1998). The six participants were mutually engaged with one another as teacher leaders, their joint enterprise was focused on the practice of teacher leadership and their shared repertoire was the shared purpose, collaborative norms and meeting protocol (See Appendix J) that framed their work during teacher leader learning community meetings. The premise of the teacher leader learning community innovation was for teacher leaders to develop their skills and identity as teacher leaders.

Peer Partners. The second part of the innovation was the creation of teacher leader peer partners. The purpose of this component was for participants to have a "go-to" colleague for support in-between the teacher leader learning community meetings.

Peer partners were established during the initial organizing meeting. As the facilitator I asked a general question about how the group would like to establish the partners. One suggestion was to draw names; identifying the use of a random method. One member of the group expressed concern about this process, citing her unfamiliarity (at that time) with the other participants. The group made an immediate adjustment and through mutual verbal agreement, identified their peer partners. There was no set established criteria, only verbal dialogue and agreement. Table 4 provides the characteristics of the peer partners.

Table 4

Peer Partner Characteristics

Partners	Grade Levels	Subject/Content Area	Years of Experience in District
Farrah	K-6	Elementary Common Branch	26
Nora	9-12	Special Education	21
Tamaya	6-8	English	10
Emily	9-12	Mathematics	7
Soleil	6-8	English	21
Mary	9-12	English	17

Peer partners supported each other through email, text messaging, phone or face-to-face contact. A minimum of one interaction per week was expected of the peer partners. The partners maintained a simple online log of interaction dates, amount of time, support topics and how the interaction was helpful to them in their leadership work (See Appendix F). The participants self-determined the support they required from their peer partner. I provided the structure for the interaction log and the minimum one time per week interaction expectation. The peer partners determined the topics for support, the type and amount of time required for support. As summarized in Chapter 2, teacher leaders develop their leadership identity through interaction with other teacher leaders (Gonzales, 2004; Sinha & Hanuscin, 2017). One example of a reported support topic was a discussion about strategies for addressing students with challenging needs. The partner identified that the discussion helped her answer similar questions from her colleagues. A second example was support to a teacher leader who was seeking techniques to approach people with "new ideas in an effective and appropriate manner". Two of three peer partner groups logged interactions during the study period of October 2018 and December 2018.

Instruments and Data Collection Procedures

      Instruments. To explore and understand the development of teacher leader identity within the learning community described above, I employed the following data collection instruments: pre-and post- innovation surveys, initial and final semi-structured interviews, observations of teacher leader learning community meetings, peer partner interaction logs and research field notes. Quantitative and qualitative data were collected concurrently, in line with the mixed methods design of the research project.

      Survey. Surveys describe changes or trends in a group's behavior or characteristics (Creswell, 2015). A pre- and post- innovation survey was developed to gather data about self-perceived changes in teacher leader skills and identity attributes as a result of participation in the teacher leader learning community innovation (See Appendix D). Participants were asked to identify the frequency they showed a teacher leader skill or characteristic on fifteen items, using a four-point Likert scale. The scale for the survey was: Consistently (4), Usually (3), Occasionally (2), and Rarely (1). The same survey was administered at the beginning (October 2018) and the end (December 2018) of the study period. The data collected from the survey was used to explore the research question: In what ways does a participation in a teacher leader learning community develop and sustain teacher leader identity?

      The Teacher Leader Identity Development Pre/Post Survey's fifteen items were clustered into three constructs, Knowledge of Self, Relationship with Others, and Collaborative Work. Each construct contained five questions. The Knowledge of Self construct measured participants self-awareness of their own leadership skills and characteristics. This construct included statements about strengths and needs, acting on constructive feedback, setting and monitoring goals, professional development participation and initiative and level of personal

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energy. The Relationship with Others construct rated participants perceived use of interpersonal skills. Items in this construct were comprised of communication, active listening, seeking other's perspectives, creating safe environments and mutual responsibility for colleagues' learning. The third construct, Collaborative Work, assessed participants' skills in working with colleagues to implement a change or action. Items in this construct were skills and characteristics involving colleagues in implementing change, leading others using appropriate structures and processes, delegating tasks, sharing responsibility for the collaborative process and responsibility for the success of a group's goals and outcomes.

Chapter 2 outlined scholarly research on the development of identity as a teacher leader. How you see yourself as a leader, your engagement in leadership actions to influence a broader audience and the feedback and interaction with others all contribute to teacher leader identity (Friedrich & Lieberman, 2011; Ross, Adams, Bondy, Dana, Dodman, & Swain, 2011; Sinha & Hanuscin, 2017; Taylor, Goeke, Klein, Onore & Geist, 2011). Elements from this research were used to develop some of the survey items. Additionally, these elements from the Model Teacher Leader Standards were incorporated: fostering a collaborative culture, promoting professional development and improving outreach and collaboration (Cosenza, 2015).

Participants completed the survey anonymously, using a self-selected four-digit number as an identifier. Three participants completed the pre-innovation survey (n=3). The sample size of participants completing the pre-innovation survey was impacted by the timing of the study. The pre-innovation survey time period was during the first three weeks of the school year. At this time, teachers were engaged in opening school activities and settling into the routine of the school year. Five participants completed the post-innovation survey (n=5).

Semi-structured interviews. Two semi-structured interviews were conducted with each participant of the teacher leader learning community (TLC). The initial interviews were conducted at the beginning of the study period in September/October 2018. A predefined set of questions was asked along with the opportunity for additional questions to add depth or clarity (See Appendix E). The interviews gathered information about participants' perceptions of themselves as teacher leaders, their understanding of a learning community and their expectations and goals for participation in the teacher leader learning community. Interviews were recorded, transcribed, and analyzed. A final semi-structured interview occurred at the end of the study period in December 2018 (See Appendix F). The interview questions were constructed with a reflection orientation and gathered participant's reactions to the teacher leader community experience and the degree to which their perception of themselves as a teacher leader changed as a result of experience with the teacher leader learning community. The questions gathered data about the participants' overall experience with the learning community, perceived changes in leadership capacity, and identification of strategies that participants stated would best support their teacher leadership.

Meeting observations. As a nonparticipant observer, I captured the interactions of the teacher leader members through a structured observation protocol (See Appendix G). Non-participation observation occurs on the periphery of the observed natural phenomenon (Creswell, 2015). My primary motivation for observing as a nonparticipant was my prior and ongoing relationship with the participants as the district's Superintendent. I hoped to minimize the impact of my presence on interactions among the participants during the learning community meetings. Also, as a non-participant observer, I had the advantage of capturing the interactions of the participants as they occurred in real time and in a natural context. Participants

were informed during the first organizational meeting of my role in the observation process. In this capacity I was present at the teacher leader learning community meetings and recorded notes without involvement in the activities of the meeting. The meeting observation protocol I developed (See Appendix E) contained descriptions of activities that occurred during the meeting and researcher comments about the observed activities. At each meeting I captured verbal and visual interactions among the participants, including the physical set up of the room, the sequence of activities in the meeting and the verbal and nonverbal interaction among the participants. I completed the comments section as a reflection activity after each of the learning community meetings. The comments included my thoughts, interpretations and perceptions of what I observed. These observations provided an opportunity to understand the context and substance of the participants' interactions as well as their identity development during the meetings (Rossman & Rallis, 2017). The meeting observations provided data that contributed to the development of some of the final interview questions. For example, I observed that adherence to the meeting protocol occurred at every meeting and was important to the participants. This led to the final interview question, "What aspects of the teacher leader learning community best supported your identity as a teacher leader?". As will be illustrated in Chapter 4, participants offered evidence that the teacher leader learning community meeting protocol was identified as a factor associated with a successful learning community.

I collected verbal and visual data during the four structured observations (Creswell, 2015; Rossman & Rallis, 2017). For example, verbal data consisted of direct quotes and paraphrases of participants' discussions including statements and questions, and guttural utterances and affirming comments such as "hmmm" and "ah". Visual data consisted of participant body language during the meetings including posture, gestures, breathing patterns

and placement of participants bodies relative to the speaker, physical movement during the meeting and eye contact among the participants. I gathered five hours of observed meeting data netting 12 pages of observation notes containing 4497 words. This data was used to explore both research questions.

      Peer Partner interaction logs. As described in the section above, in addition to the teacher leader learning community meetings, each participant had a designated peer partner to provide support between meetings. Participants logged their interactions with their peer partners as they met or communicated between teacher leader community meetings. Appendix H provides the online peer partner interaction log format. The peer partners support was introduced at the initial teacher leader learning community meeting (See Appendix C). There were three peer partner pairs. Table 4 provides a description of the peer partner pairs. Two of three peer partner pairs completed the interaction logs. The logs were housed electronically on the district's secured server and shared with me at the end of the study period in December 2018. I collected a total of eleven peer interactions that constituted 150 minutes of peer partner support. The peer partner interactions provided data that was used to answer both research questions.

      Research journal. Following each interview and meeting observation, I recorded my thoughts and reactions in a research journal. I used NVivo Pro 12 software as the platform to house my research journal entries. As I transcribed and analyzed data, my reactions were also captured in my research journal. For example, in the first journal entry, I wrote about my own excitement starting the research project. Some journal entries, like the first one, contained my affective responses to what was occurring as I implemented my innovation. A second example of notation in my journal was to make explicit my actions as a novice researcher. The journal

entry, following the initial teacher leader community meeting, focused on my own self-observation of word choice and language used in the comments section of the meeting observation protocol. I wanted to make sure I was choosing descriptive words to depict what I was seeing and hearing. At the conclusion of this study, the research journal consisted of nine entries and 1434 words. This journal assisted me with triangulation of the data and to identify any areas of potential researcher bias.

Data Collection. As described above, the quantitative data collection consisted of a pre- and post- innovation survey. The qualitative collection consisted of two semi-structured interviews with each teacher, four observed teacher leader learning community meetings, peer participant interaction logs and research journal entries. In terms of the temporal nature of the project, data from the initial interviews and pre-innovation survey provided the baseline for identifying perceived teacher leader identity. As noted above, observations of teacher leader learning community sessions contributed to the formation of some of the final interview questions. Peer participant logs, research journals and the post-innovation survey added depth and richness to the data gathered in the interviews and observations. Table 5 provides the timeframe and activities of this project.

Table 5

Action Research Project Timeline and Activities

Timeframe	Activities
June 2018	Identified participants
September 2018 - October 2018	Obtained IRB approval: September 14, 2018 Obtained participant permission

	Conducted initial interviews and administered pre-innovation survey
October 2018 - December 2018	Conducted organizational Teacher Leader Learning Community meeting: October 1, 2018 Conduct monthly learning community meetings: October 22, 2018, November 26, 2018; December 17, 2018 Peer partner interactions: October 17, 22, 30, 2018; November 15, 26, 2018; December 5, 11, 14, 2018
December 2018	Completed final interviews and post-innovation survey administration

Data Analysis

The purpose of this action research study was to explore teacher leader identity development. The research questions were:

RQ 1   In what ways does participation in a teacher leader support learning community develop and sustain teacher leader identity?

RQ 2   What are the factors associated with teachers' beliefs about the success and sustainability of a teacher leader support learning community?

The quantitative (survey) and qualitative (interviews, meeting observation research journal and peer interaction logs) data were collected and analyzed separately. To explore the first research

question quantitative and quantitative data were analyzed. Qualitative data only was analyzed to investigate the second research question.

I started the quantitative analysis by determining the level of internal reliability of the survey items and the overall instrument. To establish a measure of internal reliability of the survey instrument, I conducted a Cronbach's Alpha coefficient measure. Using SPSS 24, I analyzed the survey item data to determine if the means scored differed from the pre- to post-innovation administration. I conducted an independent sample t test on the mean scores from the pre- to post- innovation survey

administrations to determine if there was any significant difference in the mean scores.

To conclude the analysis of the survey data, I conducted a paired-sample t test for each survey construct to determine if there was a significant difference in the mean scores that could be attributed to the implementation of the teacher leader learning community innovation.

In terms of the qualitative data, interview and observation data were analyzed using multiple cycles of coding. Initial coding of interview transcripts, meeting observation, peer interaction logs and research journal entries occurred using two coding processes, In Vivo and descriptive coding. Initial coding separates the data into distinct codes and compares them for similarities and differences (Charmaz, 2014; Saldana, 2016). In Vivo coding was selected as the initial coding strategy for the interview transcript. This coding process was selected to evoke a deeper analysis of the data and to give recognition to the participants' voices (Saldana, 2016). In considering the nature of this study, I wanted to honor the participants' voices and words as their words best depict their experiences. In Vivo coding provided that process. Descriptive coding was used for the meeting observations, research journal and peer interaction logs. Descriptive

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coding is a universal qualitative coding method that allows for topics to be identified in the data (Saldana, 2016). The initial coding process yielded a total of 293 codes for all qualitative data sources. Table 6 provides a listing of the qualitative data sources and the number of discrete and overlapping generated codes.

Table 6

Qualitative Data Sources and Codes

Type	Source	Number of Codes
Initial Interviews	Study Participants	119
Final Interviews	Study Participants	119
Meeting Observations	10/1/08, 10/22/18, 11/26/18, 12/17/18	45
Research Journals	Entries 1-9	18
Peer Partner Interaction Logs	Tamaya & Emily Soleil & Mary	7

The initial In Vivo and descriptive coding was extended into a second cycle of pattern coding. Pattern coding was used to group data into similar categories or concepts (Saldana, 2016). All data sets were coded and analyzed separately and then compared for congruence and divergence. The 293 codes were condensed into 15 separate codes with 40 sub codes. Appendix G provides a listing of qualitative codes and sub codes.

Thematic analysis was the final method used for identifying and analyzing patterns (themes) of meaning from a data set. Thematic analysis has broad use in qualitative research and is used within multiple theoretical frameworks (Braun & Clarke, 2008, Rossman & Rallis, 2017). Thematic analysis was selected as the final method of analysis because it supported the constructivist nature of the study's purpose. The steps in conducting thematic analysis include:

collecting and becoming familiar with the data, generating initial codes, searching for themes/patterns in the coded data, reviewing themes, naming themes and subthemes, and constructing valid interpretations based on the themes (Braun & Clarke, 2008; Rossman & Rallis, 2017). This cycle of coding identified three emergent themes about teacher leader identity: structure, community support, and personal engagement. The themes of community support and personal engagement were used to address the first research question. The second research question was addressed using the themes of structure and community support. Table 13 delineates the qualitative data themes codes and data sets used to address the research questions of this study. The complete data analysis results are presented in Chapter 4.

Threats to Reliability and Validity

I identified four main threats to the reliability and validity of this research project: researcher bias, researcher effect, and the Hawthorne effect.

Researcher bias. Researcher bias was a potential area of concern in this study. Through my prior work with the teacher leader participants, I formed my own professional and personal thoughts. As a researcher, I maintained a stance of inquiry and neutrality. I minimized researcher bias by triangulating data through different sources, maintaining an audit trail, and using self-reflection to identify potential biases and assumptions. Self-reflections were noted in my research journal. The research journal contained my reactions, thoughts and planned actions to insure a neutral stance throughout the study. An example from the first entry in my research journal was related to participant consent forms. I hand delivered the consent forms to the participants. I noted in my journal that, "I made sure my delivery was consistent with each participant; I showed them the consent form and asked them to read it".

Member checking was used to ensure accuracy of the teacher leader learning community meeting observations. Participants provided feedback on the content of the discussions while also clarifying speakers and statements made. The meeting observation notes were revised for accuracy based on participant feedback.

Researcher effect. A second area of potential concern was the effect of my position as superintendent of schools on the participants responses and actions. Participants were informed at the beginning of the study that their involvement did not impact their annual performance evaluation. I was present for all teacher leader learning community meetings. Even as a nonparticipant observer, my presence in the room could have influenced participants actions. To help minimize my physical presence, I positioned myself in a corner of the room with full view of the learning community meeting. I also avoided direct eye contact and connection with the participants. Participants had the option to withdraw from the project at any time. No participants expressed any concerned about employment status or their professional relationship with me at any course of the study.

The Hawthorne effect is used by researchers to describe outcomes of a study that may be because the subjects knew they were part of a research project and modified their behavior accordingly (James & Ho, 2012; Merrett, 2007). The participants in this project were volunteers and expressed willingness to participate because of their interest in teacher leadership and their own personal development. This orientation may positively influence participants responses to the study's innovation.

Trustworthiness. The goal of any research project is to produce information and findings that others find believable and can be used to take further action (Rossman & Rallis, 2017). Trustworthiness is accomplished by maintaining a rigorous, systematic process of intentional

decision making. Rossman and Rallis (2017) provide two standards to ensure trustworthiness. The first standard is that the research is conducted "according to the norms for acceptable and systematic research practices" (p.51). The second is that the study followed the appropriate procedures for human subjects. Approval for this study, per federal guidelines, was granted by Arizona State University's Institutional Review Board (IRB) on September 14, 2018.

To address these potential concerns, I employed several strategies throughout the course of the study. Member checking was used to check the accuracy of the meeting observation data. Participants had the opportunity to review the observation notes from each session for accuracy. I analyzed the interview recordings to monitor any potential bias in my presentation and interaction with the interview participant. During the observation of the teacher leader meetings, I maintained a position as a non-participant observer.

Triangulation of data was the second strategy I used to address the possible threats. Triangulation is the process of validating evidence from various individuals or data sources (Plano Clark & Creswell, 2015). The data collection procedures included pre- and post-innovation surveys, initial and final semi-structured interviews, teacher leader learning community meeting observations, peer partner interaction logs and research journal entries. The data collected from these sources was cross-checked and examined to support themes that emerged from the data analysis. These strategies minimized the inherent threats to reliability and validity in this research project.

Summary

This chapter presented the methodology used to study this mixed methods action research project. Teacher leadership has great promise in our schools. Though studied and researched for several years, as the previous chapter indicates, it has yet to establish a

substantial place in the leadership of schools. In this study, I explored the impact of a structured

teacher leader learning community on the identity development of emerging teacher leaders

drawing from multiple qualitative and quantitative data sources. Chapter 4 presents the analysis

results for the quantitative and qualitative data used to address the study's research questions.

Chapter 4

RESULTS

Introduction

This study explored the development of teacher leader identity through participation in a structured learning community. The collected and analyzed data were used to construct the case for structured learning communities as a strategy to support

and sustain identity development of teacher leaders. This chapter provides the results

of the various data collected to address the research questions, which are:

RQ 1   In what ways does participation in a teacher leader support

learning community develop and sustain teacher leader identity?

RQ 2   What are the factors associated with teachers' beliefs about the

success and sustainability of a teacher leader support learning

community?

The mixed method approach to data collection and analysis included pre- and post-innovation surveys, initial and final semi-structured interviews, peer interaction logs, teacher leader community meeting observations and research field notes. More specifically, for the first research question, I examined the descriptive statistics for the pre- and post-survey items and also compared pre-post differences using paired sample

t-tests. The results are presented in the first section. An analysis of qualitative data also supported research question one. Qualitative data only was analyzed to explore the second research question. Those results are presented in the second section. A section summarizing all findings completes this chapter.

Research Question 1 Results: In what ways does participation in a teacher leader support learning community develop and sustain teacher leader identity?

This research question was explored using quantitative data gathered from the pre- and post- innovation survey and qualitative data from participant interviews, meeting observation and research journals.

Quantitative Results. Pre- and post- innovation survey data was analyzed using descriptive statistics and paired sample t-tests for each individual item in the survey. The three survey constructs were Knowledge of Self, Relationships with Others and Collaborative Work. These three constructs captured skill areas related to teacher leadership. Each construct contained five questions. The construct Knowledge of Self, measured participants self-awareness of their own skills and characteristics as teacher leaders including understanding strengths and needs and showing initiative. The second construct, Relationship with Others, rated participants' use of interpersonal skills such as listening and creating safe environments for others. The last construct, Collaborative Work, assessed participants skills in working with colleagues to implement a change or action. Appendix D contains the entire survey.

For data to be reliable, a level of internal consistency among the items is required. I used Cronbach's alpha as a coefficient reliability analysis to determine the reliability of pre- and post-innovation survey instrument and the constructs. Interpretation of the data results can be made with valid and reliable data. Using SPSS 24, the three constructs of the survey and all items were analyzed. Table 7 displays Cronbach Alpha estimates for the pre- and post-innovation survey constructs and overall survey items.

Table 7

Teacher Leader Identity Cronbach's Alpha Estimates of Internal Reliability

Construct	Within Construct Items	Pre-Survey n=3 Coefficient Alpha Estimate	Post-Survey n=5 Coefficient Alpha Estimate
Knowledge of Self	Questions 1-5	.592	.771
Relationship with Others	Questions 6-10	.833	.833
Collaborative Work	Questions 11-15	.625	.727
Overall survey	Questions 1-15	.868	.926

The general rules of interpretation of Cronbach's Alpha suggest that the higher the alpha (α) coefficient the greater the level of internal consistency. Alpha (α) coefficients of between 0.7 and 0.8 are considered Acceptable; coefficients between 0.8 and 0.9 are Good, and coefficients greater than 0.9 are Excellent (George & Mallery, 2003). A coefficient alpha (α) of 0.7 or higher is considered a positive, high level of internal reliability ("SPSS FAQ: What does Cronbach's alpha mean?", n.d.). The highest coefficient was the overall post-innovation survey coefficient (α=.926). The lowest coefficient was the pre-innovation Knowledge of Self construct (α=.592). The alpha coefficients of two of the three constructs (Knowledge of Self, Collaborative Work) and the overall survey increased from pre- to post- innovation survey administration. The alpha coefficient for the Relationship with Others construct remained the same from pre- (α=.833) to post- (α=.833) survey administration.

While the pre-innovation overall survey coefficient was found to be in the "Good" range; two of the subconstructs did not fall within the acceptable coefficient bands, Knowledge of Self (α=.592) and Collaborative Work (α=.625). This data indicated that the pre-innovation survey

items may not reliably measure the construct as intended. It should be noted that the response

size (n=3) may have impacted these results. For the post-innovation survey (n=5) the three

constructs, Knowledge of Self (α=.771), Relationship with Others (α=.883) and Collaborative

Work (α=.727) and the overall survey (α=.926) coefficients were in the Acceptable to Excellent

ranges.

Table 8 presents the descriptive statistics for all individual items collected in the pre- and

post- innovation surveys, which consisted of fifteen items (See Appendix D). Each participant

completed the survey independently and rated the frequency at which they showed the listed

teacher leader behaviors. The item responses were on a four-point Likert scale, with a range of

"Consistently" =4, "Usually" =3, "Occasionally" =2, and "Rarely" =1. Three of six participants

completed the pre-innovation survey. Five of six participants completed the post-innovation

survey.

Table 8

Pre- and Post-Innovation Survey Descriptive Statistics of Each Survey Item

Item	Pre-Innovation n=3		Post-Innovation n=5	
	Mean	SD	Mean	SD
I understand my strengths and needs as it related to a teacher leader role	3.67	.577	3.40	.548
I act on constructive feedback about how I might improve my skills	3.67	.577	3.80	.447
I set goals and monitor my progress towards them	3.00	1.00	3.00	1.00
	3.33	1.15	4.00	0.00

Item	Pre-Innovation n=3		Post-Innovation n=5	
	Mean	SD	Mean	SD
I participate in professional development to continue to grow my skills				
I show the initiative and energy needed to accomplish tasks	3.67	.577	3.60	.548
I communicate honestly with others	3.67	.577	3.60	.548
I seek others' perspectives and thoughts	3.50	.707	3.00	.707
I actively listen to others' viewpoints for understanding	4.00	0.00	3.80	.447
I create a safe environment when working with teacher colleague groups	3.67	.577	3.60	.548
I promote mutual responsibility for colleagues' learning	3.33	.577	3.40	.894
I involve my colleagues in implementing changes in my school	3.00	0.00	3.00	.707
I lead others to complete tasks using appropriate structures and processes	3.00	1.73	3.40	.894
I delegate tasks to other colleagues	2.00	1.00	2.40	.548
I share responsibility to increase the collaborative process	3.67	.577	3.20	.837

Item	Pre-Innovation n=3		Post-Innovation n=5	
	Mean	SD	Mean	SD
I hold myself responsible for the success of the group's goals and outcomes	3.33	.577	4.00	0.00

Note: SD = Standard Deviation. The scale for each item is Consistently = 4, Usually= 3, Occasionally =2, Rarely=1

The mean and standard deviation frequency for each item was computed. Six survey items showed a descriptive increase in mean scores between pre- and post- innovation responses: Act on constructive feedback pre- (Mean = 3.67) and post- (Mean = 3.80), Participates in professional development pre- (Mean = 3.33) and post- (Mean = 4.00), Promotes colleagues' learning pre- (Mean = 3.33) and post- (Mean = 3.40), Leads others to complete task pre- (Mean = 3.00) and post- (Mean = 3.40), Delegates tasks pre- (Mean = 2.00) and post- (Mean = 2.40), and Holds self responsible for success pre- (Mean = 3.33) and post- (Mean = 4.00).

Seven items showed a descriptive decrease in mean score between pre- and post-innovation responses: Understands strengths and needs pre- (Mean = 3.67) and post- (Mean = 3.40), Shows energy and initiative to complete tasks pre- (Mean = 3.67) and post- (Mean = 3.60), Communicates honestly with others pre- (Mean = 3.67) and post- (Mean = 3.60), Seeks others' perspectives pre- (Mean = 3.50) and post- (Mean = 3.00), Actively listens to others' viewpoints pre- (Mean = 4.00) and post- (Mean = 3.80), Creates a safe environment pre- (Mean = 3.67) and post- (Mean = 3.60), and Shares responsibility for collaborative process pre- (Mean = 3.67) and post- (Mean = 3.20). The decrease in the mean scores indicates that the response on the post survey showed less variability. Four of the seven items are part of the Relationship with Others construct (Communicates honestly, Seeks others' perspectives, Actively listen to others, Creates a safe environment). These particular behaviors were most likely impacted by learning

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community participation. The learning community norms of collaboration (see Appendix J) included similar dispositions. It may be that the attention paid to relationships during the learning community meetings impacted the participants' responses at the end of the study period.

Two items showed no descriptive changes in mean score between pre- and post-innovation responses: Sets goals and monitors progress pre- (Mean = 3.00) and post- (Mean = 3.00) and Involves colleagues in implementing change pre- (Mean = 3.00) and post- (Mean = 3.00).

Standard deviation is the measure of the distribution of responses around the mean score. It is the spread of responses around the average score of a data set. Larger values of standard deviation mean that participants' responses varied quite a bit from one another; smaller values mean that participants' responses were similar to one another. The pre-innovation response standard deviations ranged from a standard deviation = 0.00 (Actively listens to others' viewpoints) to a standard deviation = 1.73 (Involves colleagues in implementing change). Eight items (Strengths and needs, Acts on constructive feedback, Shows initiative and energy to accomplish tasks, Communicates honestly with others, Creates a safe environment, Promotes colleagues' learning, Shares responsibility for collaborative process, and Holds self responsible for success) had an identical standard deviation (SD = .577).

The standard deviation of the post-innovation responses ranged from a standard deviation = 0.00 (Participates in professional development, Holds self responsible for success) to a standard deviation = 1.00 (Sets goals and monitors progress). Five items (Understands strengths and needs, Shows initiative and energy to accomplish tasks, Communicates honestly with others, Creates a safe environment, and Delegates tasks) shared an identical standard deviation (SD=.548). The standard deviation range difference for all items in the pre-innovation survey

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was greater (SD=1.73 – SD=0.00 = 1.73) than the standard deviation range difference for the

post-innovation survey (SD=1.00 – SD=0.00 = 1.00), suggesting that after the innovation,

participants had stronger consensus around their perceptions of self-knowledge, as well as their

relationships and collaborations with others.

An independent sample t test was conducted to determine if any of the differences

between the pre- and post- innovation survey means of the previous fifteen items were

statistically significant. None of the independent sample t test results were significant, $t(28)$=-

0.274, p=0.786, at the 95% confidence level. These results may be attributed to the small

response size for the pre- (n=3) and post-innovation (n=5) survey administrations. Table 9 shows

the results of the independent sample t test.

Table 9

Independent Sample Test All Survey Items

	Levene's Test for quality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2 tail)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.008	.928	-.274	28	.786	-.4600	.16795	-.39003	.29803
Equal variances not assumed			-.274	27.74	.786	-.4600	.16795	-.39003	.29817

The results summarized above pertain to each individual survey item. To further explore

the pre- and post- innovation survey data, I also examined descriptive statistics and compared

mean differences with paired sample t-tests for the three overarching constructs that these items

combine to comprise: Knowledge of Self, Relationship with Others and Collaborative Work (See

Table 7 for reliability analyses). Table 10 presents the descriptive statistics for the three survey constructs.

Table 10

Pre- and Post- Survey Construct Descriptive Statistics

Construct	Pre-Survey n=3		Post-Survey n=5	
	Mean	SD	Mean	SD
Knowledge of Self	3.46	.503	3.56	.433
Relationships with Others	3.65	.086	3.48	.502
Collaborative Work	3.03	.723	3.20	.469

Note: SD = Standard Deviation

The means of two, Knowledge of Self (Mean = 3.46 to Mean = 3.56) and Collaborative Work (Mean = 3.03 to Mean = 3.20) showed a descriptive increase from the pre- to post-innovation surveys. The Knowledge of Self construct measured participants self-perceived awareness and skills and characteristics that support teacher leader identity. The Collaborative Work construct measured how participants used skills working with colleagues to implement a change or action. The standard deviations of the Knowledge of Self (SD = .503 to SD = .433) and Collaborative Work (SD = .723 to SD = .469) decreased from pre- to post- innovation survey administration. This indicated that the responses were clustered more closely to the mean in the post-innovation administration than the pre-innovation survey. The participants had more similar responses following participation in the teacher leader learning community.

The pre-innovation Relationships with Others construct presented the highest average (Mean=3.65) and the lowest standard deviation (SD=.086), indicating that even before participating in the innovation, the teacher leaders were relatively more likely to use rapport and

active communication with others. Unlike the other two constructs (Knowledge of Self and

Collaborative Work), the Relationship with Others construct mean decreased from pre- (Mean =

3.65) to post- (Mean = 3.48) innovation survey administration. However, the standard deviation

increased from the pre- (SD = .086) to post- (SD = .502) survey, indicating teacher leaders'

perceptions of their use of rapport and active communication with others varied more after the

innovation compared to before.

A paired-samples t test was conducted to evaluate whether the differences in the three

constructs before and after participation in the teacher leader learning community explained

above were statistically significant. The resultant p-value is an indication of strength of the

relationship between data and to determine the likelihood that a difference occurred by random

chance (Allua & Thompson, 2009). The smaller the p-value the less likely it is that the difference

occurred by random chance. Table 11 presents the pre-innovation survey paired-sample t test

results and Table 12 displays the post- innovation survey paired-sample t test results.

Table 11

Pre-Innovation Survey Paired-Samples t Test of Construct Means
n=3

Constructs	Relationships with Others	Collaborative Work
Knowledge of Self	AD= 0.183 SD= 0.520 p= 0.604 df= 2	AD= 0.433 SD= 0.472 p= 0.253 df= 2
Relationships with Others		AD= 0.616 SD= 0.678 p= 0.256 df= 2

Note: *=significant difference between mean (p ≤ 0.05), AD= absolute difference, SD= standard deviation, p=significance level, df=degrees of freedom

Table 12

Post-Innovation Survey Paired-Samples t Test of Construct Means
n=5

Constructs	Relationships with Others	Collaborative Work
Knowledge of Self	AD= 0.800 SD= 0.303 p= 0.587 df= 4	AD= 0.360 SD= 0.219 p= 0.021* df= 4
Relationships with Others		AD= 0.280 SD= 0.109 p= 0.005* df= 4

Note: *=significant difference between mean (p ≤ 0.05), AD= absolute difference, SD= standard deviation, p=significance level, df=degrees of freedom

Comparison of two constructs between pre- and post- innovation survey administrations showed a significant level (p ≤ 0.05) of difference in the pairs Knowledge of Self/Collaborative Work (Pre p=0.0253 and Post p=0.021) and Relationships with Others/Collaborative Work (Pre p=0.256 and Post p=0.005). This indicates that the results in these paired samples, pre- and post-innovation survey, were not likely due to chance, and there is evidence that a relationship exists between how participants responded to survey questions in these two constructs before and after participation in the teacher leader learning community at the 95% (p ≤ 0.05) confidence level. Conversely, the comparison of the construct Knowledge of Self/ Relationship with Others showed no statistical difference (Pre p=0.604 and Post p=0.587) indicating that the probability is greater that the difference occurred by random chance and there is not enough evidence of a relationship.

Qualitative Results.

The qualitative data analyzed were collected from initial and final interviews, teacher leader learning community meeting observations, peer interaction logs and research field notes. For this project, I used NVivo 12 Pro software to organize the data and the coding process. I also wrote and maintained analytic memos within the software platform. Thematic analysis was used to examine the way participation in the teacher leader learning community supported teacher leader identity. Thematic analysis is a method for identifying and analyzing patterns (themes) of meaning from a data set. Thematic analysis was selected as the final process because it supported the exploratory nature of the study's purpose. As stated in Chapter 3, I conducted initial coding of interview transcripts, meeting observations, peer interaction logs and research notes using two coding processes, In Vivo and descriptive. In Vivo coding was used as the initial coding strategy for the interview transcripts. Descriptive coding was used for the meeting observations, research journals and peer interaction logs. The initial In Vivo and descriptive coding was extended into a second cycle of pattern coding. Pattern coding was used to group data into similar categories or concepts (Saldana, 2016). All data sets were coded and analyzed separately and then compared for congruence and divergence (See Appendix I). Thematic coding was the final coding process and led to the identification of three emergent themes: structure, community support, and personal engagement. These themes, their related codes and the data sources are presented in Table 13.

Table 13

Themes, Codes and Data Sets

Theme	Codes/Subcodes	Data Sets
Structure	Researcher notes	Final interviews
	TL Organizational	Meeting observations

Theme	Codes/Subcodes	Data Sets
	TLC Experiences	Research journal
		Peer Partner log
Community support	Researcher notes	Final interviews
	TL Organizational	Meeting observations
	TL Sustain	Research journal
	TLC Expectations	Peer Partner log
	TLC Experiences	
Personal engagement	TL Definition	Final interviews
	TL Identity	Meeting observations
	TL Sustain	Research journal
	TLC Expectations	
	TLC Experiences	
	Peer Partner Log	

The structure theme provided information about the organization and protocols used in the teacher leader learning community meetings. This included physical set up, establishment of norms and meeting protocols and determination of partners and roles. The community support theme focused on the interactions between the participants in the teacher leader learning community setting. This included support for each other, sharing ideas, brainstorming and problem-solving. The final theme, personal engagement, provided individual responses and reactions to participation in the teacher leader learning community.

Table 14 provides a summary of the themes, theme definitions and quotes from the participants' voices relating to the ways participation in a teacher leader support learning community developed and sustained teacher leader identity.

Table 14

Summary of Themes, Definitions and Participant Voices

Theme	Definition	Participant Voices
Structure	Established norms and protocols that determined	"Going over the norms and then talking about the successes and then having a topic".

Theme	Definition	Participant Voices
	the operations of the learning community	"As long as we maintain and we know what to expect every step of the way, it'll ultimately help us be more successful".
		"Having some format for the meeting set up ahead of time".
		"Increasing your toolkit to share with your students as well as other people is a huge benefit".
Community Support	Participants interactions within the community of teacher leaders that supported their work	"Where you can just enjoy each other's knowledge and pick each other's brains and just thinking that we have someone from each building".
		"I found it very inspiring to know that we can come together and share thoughts, have questions and concerns, to be able to validate each other's thinking, to share ideas, to inspire people to keep moving forward".
		"So, I think it's just a big opportunity to learn, and having people together with a similar philosophy of just wanting to grow".
		"We are now a little community of our own". "The time we have together, the collaboration that we have, I don't think anyone can divide that because I think we are going to become so strong".
		"I'm looking forward to having a safe, judgement-free environment".
		"It's been nice having that core group and a partner".
		"Everyone has a different strength in their leadership part and that the whole group together kind of covers a lot".

Theme	Definition	Participant Voices
Personal Engagement	Engagement as a teacher leader in the community supported participants in developing and sustaining their identity as teacher leaders	"Leaving last night, first of all, the phone starts blowing up with 'Wasn't that awesome?' And we're all like, 'Yes'".
		"I really enjoyed it."
		"Boosted confidence".
		"I found it inspiring".
		"You feel so accomplished".
		"Think outside of the box in terms of what I am capable of doing".
		"I can be a positive role model, not just for my students but for other educators".

To address Research Question 1: In what ways does participation in a teacher leader learning community develop and sustain teacher leader identity, data from the Community Support and Personal Engagement themes were used. Participants shared through the interview process and teacher leader learning community meetings their lived experiences as teacher leaders. They reported teacher leader work as emotionally challenging. Farrah self-reflected that her work with a team was "emotional, exhausting, challenging and frustrating. It's tough to walk the talk". Other statements that supported the challenges of the lived experiences of teacher leaders were, "You have to tip toe and tread carefully when approaching colleagues", "It is hard emotional work. I cry, a lot, less every year. You put yourself out there. You have to toughen yourself up", "They look at your differently", "It's hard when you feel beat down by the people you respect and know", and "I think the biggest challenge is the stigma" [of being a teacher leader]. Through the teacher leader learning community, participants of this project worked together to support themselves and each other in their work as teacher leaders.

Community Support. The theme "community support" provided information about the participant's stated experiences with the teacher leader support learning community. The theme included the activities the participants engaged in and the ways the community supported their teacher leader identity and work.

Being in community with "like" individuals was reported positively by multiple participants during the interview process. Participants indicated that "having a group to share ideas with" and "constantly sharing ideas" was beneficial. Participants shared common struggles and successes within the group and used the group as a sounding board for successes, ideas and problems. Nora reported,

> If you're not with like-minded people and you throw something out there, there's that bigger fear that it's going to be dismissed or it's going to be criticized or whatever. I don't think it would matter who came to the table if they were like-minded.

Farrah noted, "It was so great to have the opportunity to work with people at different buildings and different grade levels. So many of the things we all struggle with are commonalities". Other participant comments were, "Nice to kind of merge our ideas and see some of our similarities and such", "Hearing the common struggles to know you had allies within your cohort", "Validate each other's thinking, share ideas, to inspire to move forward", "Just to have the time where you can almost celebrate what you do, your profession, your choice, your career", and "I expect that we'll have a sounding board that's confidential and that the purpose of that sounding board is to move forward, not just sit and complain".

Equally important was the recognition by participants of their own individual strengths that contributed to the learning community. "Everyone has different strengths in their leadership part and that the whole group together kind of covers a lot. It's not a one-man show at all, it's a

team and everybody's got something." Nora offered this observation of her experience with the learning community:

> Where you can just enjoy each other's knowledge and pick each other's brains and just thinking that we have all different points-of-view on students. It is like you take everyone's experiences and everyone's brain and you multiply it by the number of people in the room. I mean, what a wide variety of experiences we all bring to each other.

Trust and safety within the group were important components of the learning community as expressed by the participants. Soleil shared, "And I think we truly value each other because you have the trust and respect within the group. I feel like our ideas are equally receptive and truly supported by each other". Other participants shared these similar comments, "I hope to have it be a where you have trust, effective communication, the positive open minds" and "I'm looking forward to a having a safe, judgement-free environment where they'll say, 'You know it would really bother me if you did it that way or I like that you're going to do it this way'".

The participants also reported that participation in the teacher leader learning community provided them a "group to grow with" in terms of skills to increase their "toolbox of ideas". Emily stated:

> Having that support in place makes you feel comfortable taking some of the risks you might not necessarily want to take on your own. Because you can talk about it beforehand. And it just gives you the support system. Nobody wants to be on their own on an island trying something.

Soleil offered a similar view:

Having a support group that you have ideas, you have the opportunity to grow, you have

the opportunity to share concerns, and whether it's regrets or mistakes you've made,

because I think being able to admit in a small group that, "I think I screwed up," well

you have a small group that's going to support that, but I don't necessarily believe that

they're going to say, "Yeah you really messed up".

Other participants noted the importance of the learning community to help them with ideas or

initiatives. One participant noted, "So working with other people can let you see new

perspectives on things you were like, 'Oh I never even thought of that'", "So I think it's just a

big opportunity to learn, and having people together with a similar philosophy of just wanting to

grow" and "My favorite part was just the discussion, the learning discussion".

Finally, the participants found that being in a community with other teacher leaders with a

common purpose provided a source of strength and position. Soleil stated during her final

interview about her experience, "So think sharing the connections that I have built when we first

met as a TLC. I think right now the team has learned to reference each other. We are now a little

community of our own". Mary shared the importance of the group from her perspective:

I would like us to be a united front so that we're able to bounce those ideas off one

another. That we're able to sort of – if we are frustrated, we can talk about it, and we can

celebrate positive things, but that we always have each other's back because that's super

important when you're in this position.

Soleil offered a similar position, "I think once you are constantly sharing – and I think that I

look at that as the time we have together, the collaboration that we have, I don't think anyone

can divide that, because I think we are going to become so strong".

Personal Engagement. The theme of personal engagement detailed the ways in which participation in the learning community supported the participants in their identity as teacher leaders. The shared experiences of the participants were reported in terms of their affective and growth responses. Participants shared affective reactions to their participation in the teacher leader learning community using feeling words such as "enjoyment," "comfort and safety" and "excitement". Some examples of these statements were, "So I'm excited to see that we can ultimately develop for people that take risks and want to make some sort of change in their classroom," "I like experiencing people from other realms here and seeing that we're not alone. I really enjoyed that," "Something to look forward to because it is going to be positive," "I enjoyed the common ideas, the efforts everybody put in," and "I enjoyed hearing the things that worked and that didn't work some of the collaborative ideas and the encouragement that went on behind it".

Tamaya stated:

It's been nice having that core group and my partner. That was super helpful because I found a new friendship and connection that has strengthened. And we are able to talk about things, and if she needs a little help and support, she'll reach out to me. And if I need a little help and support, she's always there offering encouraging words. So, I found that was very helpful and supported me throughout the last few months.

Nora shared her experience after the first teacher leader learning community meeting, "And leaving last night, first of all, the phone starts blowing up with, 'Wasn't that awesome?' And we're all like, 'Yes.'" Mary shared similar thoughts about being part of something bigger, "I just enjoy being part of something bigger, and I appreciate the opportunity to do it." Farrah also

shared reactions to the TLC experience with, "And I love being part of a group because I always feel like you're getting things, you know."

Participants also shared experiences of their growth after involvement in the teacher leader learning community. Three participants offered statements about being a role model and leading by example, "And I do enjoy being a role model for people," "I guess, role model through what I do," and "You don't have to be in a leadership role to be a leader." Emily shared how she has grown as a role model, "So it's grown to more than just role modeling. You have to have conversations about what's the best method to handle different situations, and it's that whole confidence build. Now, to be a teacher leader, talk about things." Soleil shared, "And now I think I'm more reflective and open-minded. And because of that I think it's allowed me to see how much farther I can grow, but also the impact you can have on others." Mary offered, "I think that it just makes me realize more that I have the capacity to do things within the school community that take that initiative." These statements supported self-perceived personal growth of the participants in their identity as teacher leaders.

Loneliness and isolation were stated by the participants as some of the challenges they faced in their lived experiences as teacher leaders. Participants experiences in the teacher leader community provided shared experiences to address the loneliness and isolation. Example statements from participant final interviews are, "It's definitely given me a thicker skin," "I've learned not to take it personally," "So long as I have my people, I'm good."

Some participants shared the change they noticed in their experiences as teacher leaders, "I don't find myself so beaten down at the end of the day," "Makes you want to approach people more often," "It's kinds of made me reach out to some people a little more…in a little bit of a nonjudgmental sort of just putting it out there kind of way," "So it's really changed my outlook

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instead of feeling like people are so negative all the time." Emily discussed the change in her communication with colleagues, "So I've been trying more to try to make my positive communication known. I've just tried to really put myself out there and start to communicate as much as I possibly can because early on it was terrifying".

Participants shared emotions and feelings they gained because of their participation in the teacher leader learning community. Participants used words such as "confidence", "validation", "accomplished", "empowered" and "gratification" to describe their individual responses.

Two participants shared specific statements about shifts in their growth. Both participants were part of previous cycles of research leading to this project. Farrah has a formal role as a teacher leader within the district. During her initial interview she stated that she was "unsure" about her personal expectations for participation in the teacher leader learning community. Her response to the question was:

> I'm not sure what my takeaways are going to be yet because if I am going to be honest, I'm not 100% sure really what my role is in this – I mean, I know what I do here, but within the group, I don't know really what my role is yet, so I plan on listening a lot and thinking.

At her final interview, Farrah shared, "I feel like it's given me a platform to help the other teacher leaders that are just starting. So, it helped foster me as leader in the same playing field with people who are other leaders."

Tamaya preferred to think about her work as that of an "influencer" and not a teacher leader. During her initial interview she stated this personal expectation of her participation in the project:

I think what I would really like in June, or at the end of the year from this group is [pause]

you know, I haven't really taken that idea of teacher leadership to heart. So, I guess, at the

end, I really would like to be like, 'Yeah, I am a teacher leader, and I do all these things'.

And then perhaps I'd really like to strengthen my role because, I mean, if I'm already on

the path of it, then I'd really like to strengthen it and really become the resource for my

colleagues if they need anything.

During the final interview, she was asked about sustaining her work over time as an

"influencer". Her word choice in her response is worth noting. She stated, "Sustaining my

leadership, I think that would just be personally just more growth for me."

Research Question 2 Results: What are the factors associated with teachers' beliefs about the success and sustainability of a teacher leader support learning community?

Research Question 2 was explored through qualitative data. The qualitative data sources

included: initial and final interviews, peer partner logs, meeting observation notes and research

notes. As noted above, qualitative thematic analysis was used to investigate this research question.

I used the themes of "structure" and "community support" to identify the factors associated with

success and sustainability of a teacher leader learning community.

Structure

The "structure" theme provided information about how the norms, protocols and

operations of the teacher leader learning community were perceived as factors in the

sustainability of the learning community. Three participants detailed how the structure of the

meetings reinforced the teacher leader learning community. Nora found "comfort in the

protocol" (see Appendix H) because she knew what to expect at each meeting. This participant

also found that "having some format for the meeting set up ahead of time" was useful to the

work of the teacher leader learning community. Farrah expressed an affective statement about the meeting protocol by offering, "I liked the environment and the structure".

Farrah reported that the implementation of the meeting protocol, "going over the norms and then talking about the successes and then having a topic" facilitated "the meeting staying on track". This idea was also expressed by Soleil who stated that the meetings, "always have a goal to look forward to so it [meeting] doesn't become stagnant".

As you will recall from Chapter 3, members of the teacher leader learning community determined that leadership roles would be shared and rotated at each teacher leader learning community meeting. After the first meeting Soleil stated, "I think the coolest thing from yesterday too, was the rotation and sharing of roles". In her final interview Soleil noted again the importance of roles to the teacher leader learning community, "we all have the different roles. That's huge because we kind of go into it and I think everybody feels equal. And I think the rotating of the roles was huge, a really creative idea". The idea of shared leadership within the teacher leader learning community contributed to sustainability of the group as each member could follow the protocol and lead the work of the learning community. This data was mentioned as a factor that supported the sustainability of the teacher leader learning community.

As you will also recall from Chapter 3, the leaders for each learning community meeting determined an article that would be read and discussed as part of the meeting protocol. This choice was made to support learning in the teacher leader learning community. Participants shared their reaction to this type of learning, "I loved that we had an article, so it was specific" and "we are constantly referencing different things that have happened. Or even the articles or the techniques that have been brought about".

Peer partners were established as part of this project. The participants self-selected their partners. From Chapter 3, the project identified peer partners as pairs of teacher leaders that could rely on each other for support and assistance in-between formal teacher leader learning community meetings. Two of three pairs submitted peer partner logs at the end of the study period. Support topics included stress management, communication, social emotional learning support, and student support ideas. These topics were relevant and specific to the work of the individuals in the pairs. The amount of time peer partners spent on support topics varied from ten to thirty minutes. One pair did not submit an interaction log, though informal communication with the pair indicated that they did have contact. Safety and trust among these pairs is high due to their prior relationships; this allowed for difficult and vulnerable conversations.

Information from participant interviews and the peer partner logs provided evidence of this factor in the success and sustainability of the teacher leader community. Nora indicated that, "you don't feel like you're bothering your person when you call them because they're your person". Mary shared, "everybody should have a person in their building and a person can help them. So as long as I have my people, I think I'm good".

Community Support

The "community support" theme provided data from the teacher leader voices about the factors they stated were important to successfully sustain the learning community. Participants shared their thinking about what was needed. One participant noted that, "as long as we maintain and we know what to expect every step of the way, it'll ultimately help us be more successful." Another noted, "Having meetings and having that support group, having that support in place ultimately helps you".

Three participants offered their thinking about the value of the teacher leader learning community meetings, "Continue our meetings and continue having these topics", "continue our meetings so that we have our support system", "continue to have a vision for each meeting", "meeting with the group every now and again would be helpful", "having the support system. That is helpful" and "when you have something set up, you know you're going to recharge". These statements about continuation and having meetings indicate the importance of the meetings to the participants and their work as teacher leaders.

Another participant stated an important consideration for her, "I think that's definitely growing here, the working together, the we're on the same page; the we're all in the same boat kind of thing. The personalities on the team matter". One participant offered a hopeful statement, "So whatever we end up developing, that we create a format that can ultimately withstand if that makes sense". Emily expressed interest in expanding membership of the TLC,

I think it needs to expand. We could have valuable learning experiences from

people we never get to see. You want everybody to be a teacher leader. Because

then everybody is comfortable sharing without the fear of getting ridiculed or the

massive negative feedback.

The notion that some participants were providing future oriented statements and a desire to increase the membership of the learning community is an indication that the participants desire the learning community to continue and even expand.

The concept of resource and idea sharing was a factor for sustaining the teacher leader community. Two participants shared positive statements about this, "increasing your toolkit to share with your students as well as other people is a huge benefit", "We have a toolbox of ideas". This "toolbox or toolkit of ideas" participants accrued was generated from three activities in the

meeting protocol: sharing successes, sharing challenges and the selected article read. Some examples of "tools" participants gained included how to communicate and present information to another colleague using a positive frame of reference, ideas for including colleagues in a change when it needs to occur, using visualization before having a difficult conversation with a colleague and building community with colleagues in non-school related ways. This last suggestion was offered by Tamaya to Mary during the third (11/26/18) teacher leader learning community meeting. The participants are located in different buildings. Mary, along with others in her building, created a week of holiday festivities for staff in the school. Mary reported at the fourth teacher leader learning community meeting (12/17/18) that the response from colleagues was positive.

As noted in the above section, participants agreed that the meeting norms, protocol and schedule and rotation of leadership of the meetings were factors for success and sustainability of the teacher leader learning community.

Summary of Findings.

This chapter presented the findings from the quantitative and qualitative data used in this research project to explore the questions:

RQ 1   In what ways does participation in a teacher leader support

learning community develop and sustain teacher leader identity?

RQ 2   What are the factors associated with teachers' beliefs about the

success and sustainability of a teacher leader support learning

community?

Quantitative and qualitative data were used to address question 1. In terms of the quantitative data, due to the small sample size, I primarily relied on descriptive statistics to identify

variations between a pre- and post- innovation survey. Descriptive analysis of the individual survey items was varied. The pre-test sample of three respondents most likely impacted the results. Descriptive statistics for the three survey constructs: Knowledge of Self, Relationship with Others, and Collaborative Work were more instructive. My descriptive comparisons of pre- and post- innovations surveys showed the means of the Knowledge of Self and Collaborative Work increased along with a decrease in the standard deviation; while the converse occurred with the Relationship with Others.

A paired-sample t-test comparison of the pre- and post- innovation survey constructs showed statistical differences for two construct pairs. The pair of Knowledge of Self/Collaborative Work showed a difference from pre-innovation survey results (p=0.253) and post innovation survey results (p=0.021). The post innovation p value is significant at 95% (p ≤ 0.05) confidence level. The pair of Relationship with Others/Collaborative Work also showed a difference from pre innovation survey results (p=0.256) to post innovation survey results (p=0.005).

Qualitative data was used to explore research questions 1 and 2. Data was collected from initial and final semi-structured interviews, meeting observations, research journals and peer interaction logs. Thematic analysis was used as the final coding process to determine patterns in the data. Three themes emerged: structure, community support and personal engagement. The "structure" theme provided information about the norms, protocols and operations of the teacher leader learning community. The theme "community support" provided information about the interactions among the participants and the ways the community supported teacher leader identity and work. The "personal engagement" theme detailed the ways in which participation in the teacher leader learning community supported the participants' identity as teacher leaders.

The themes of "community support" and "personal engagement" that emerged from the study supported the first research question. The "community support" theme provided evidence that participation in a teacher leader learning community developed and sustained teacher leader identity by providing a network of like-minded individuals with whom you can share ideas, problem-solve and celebrate. The "personal engagement" theme provided details about teacher leaders' affective and skill growth. Participants reported they felt "more confidence", "validated", "accomplished", and "empowered" as they described individual experiences gained.

The themes of "structure" and "community support" provided findings related research question 2, the factors associated with teacher's beliefs about the success and sustainability of the teacher leader learning community. The "structure" theme provided evidence of how the norms, meeting protocols and peer partners contributed to the success of the teacher leader learning community. The "community support" theme provided substantiating information about what the participants identified as key factors to sustaining a teacher leader support learning community.

Chapter 5 concludes this study with a discussion of the results, personal lessons learned, implications for practice, implications for research, limitations and conclusions.

CHAPTER 5

DISCUSSION

Introduction

The purpose of this action research case study was to explore the impact of a structured teacher leader learning community on the development of teacher leader identity and to identify the factors associated with teacher's beliefs about the sustainability of a teacher leader learning community. The problem of practice situated teacher leadership within the Canajoharie Central School District, a small rural school district in upstate New York. Student population decline, community population changes in socio-economic status and increased external requirements from state and federal entities have maximized the leadership capacity of building and district leaders. In order to effectively meet the needs of our students, community, and increasing external requirements, the inclusion of teacher leadership can assist improvement efforts at the school and district levels. For teacher leadership to be an effective part of the change process in the schools, teacher leaders must be supported and support each other in this work. As a reminder, the research questions posed in this project were:

RQ 1   In what ways does participation in a teacher leader support

learning community develop and sustain teacher leader identity?

RQ 2   What are the factors associated with teachers' beliefs about the

success and sustainability of a teacher leader learning community?

The innovation for this project was the implementation of a teacher leader learning community. Quantitative and qualitative data was collected from initial and final semi-structured interviews, pre- and post- innovation surveys, observations of teacher leader learning community meetings, peer partner logs and research journal entries.

The findings from this project will support the work of teacher leaders in the Canajoharie Central School district. The results of this project may also assist other school districts in developing structures that support identified teacher leaders in their own contexts.

Discussion of Results

Research Question 1. Quantitative and qualitative data were used to investigate the first research question. Interpretation of the results of the quantitative data analysis is limited. The survey consisted of fifteen items clustered into three constructs Knowledge of Self, Relationships with Others and Collaborative Work (See Appendix D). The same survey was administered to the participants at the beginning and end of the study time period. Descriptive statistics for all items in the fifteen-question survey contained limited statistically significant information. The pre-innovation survey results were based on a small number of respondents (n=3). Post-innovation survey results were based on a slightly larger number of respondents (n=5). There were no consistent changes to the survey means or standard deviations across all individual items in the sample. Seven items showed a decrease in the mean score (See Table 8). Four of the seven items were in the Relationship with Others Construct (I communicate honestly with others, I seek others' perspectives and thoughts, I actively listen to others' viewpoints for understanding, and I create a safe environment when working with teacher colleagues). The average response to five items increased from pre- to post-innovation. Two items were, on average, unchanged: Sets goals and monitors progress pre- (Mean = 3.00) and post- (Mean = 3.00) and Involves colleagues in implementing change pre- (Mean = 3.00) and post- (Mean = 3.00). The results of an independent sample *t* test indicated none of these changes were statistically significant.

Examining the overall constructs that the individual items collectively captured, I found that, as anticipated, the means for two constructs increased after the innovation concluded.

Participants reported, on average, higher levels of Knowledge of Self, that is, awareness of their own skills and characteristics as teacher leaders including understanding strengths and needs and showing initiative. The construct of Collaborative Work showed the greatest positive average change, suggesting that participation in the learning community was particularly effective in improving teacher leaders' skills in working with colleagues to implement a change or action.

It is important to note, however, that the opposite pattern was observed with the final survey construct, Relationship with Others. These survey results had the highest mean and lowest standard deviation when compared to the other two constructs. The post-innovation survey results demonstrated the inverse. In other words, the learning community participants' self-reported use of interpersonal skills, such as listening and creating safe environments for others, decreased from before to after the innovation. This decrease may be due to participants shift in emphasis from how they interact with others (e.g. communicating honestly and active listening) to how they work with and lead others collaboratively (e.g. involve colleagues, delegate and share responsibility).

A paired-sample t-test comparison of the pre- and post- innovation survey constructs showed statistical differences for two construct pairs: Knowledge of Self/Collaborative Work and Relationship with Others/ Collaborative Work. The Knowledge of Self/Collaborative Work construct pre ($p=0.053$) and post ($p=0.021$) innovation survey result values were significant at the 95% ($p \leq 0.05$) confidence level. The construct pair of Relationship with Others/Collaborative Work pre ($p=0.256$) and post ($p=0.005$) innovation survey results were also significant at the 95% ($p \leq 0.05$) confidence level. The specific survey items in the Collaborative Work construct represent aspects of teacher leadership including involving colleagues in implementing change, leading others, delegating tasks, and sharing responsibility for

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collaborative processes and the success of the group's outcomes. The paired-sample *t*-test values for the construct indicate that is likely that the results are not due to random chance. This finding, involving the Collaborative Work construct, is consistent with the descriptive statistics findings for this construct. The participants' responses on the post-innovation survey and the paired-sample *t* test indicated an increased awareness of their own skills and how to approach collaborative work because of their participation in the teacher leader learning community. Through sharing successes and challenges, and discussing their own leadership work, participants received feedback and support. This feedback and support allowed them to go back to their buildings and continue their teacher leadership work. The collective learning community provided that space and place for the teacher leaders to reflect on and gain support in their leadership work.

The qualitative data analyzed for the first research question included initial and final interviews, meeting observations, peer interaction logs and research journals. Thematic analysis of the data produced three emergent themes: Structure, Community Support, and Personal Engagement. The themes of Community Support and Personal Engagement were used to explore the first research question. The Community Support theme detailed the ways participation in a teacher leader community supported participants in their leadership work. This includes working with "like-minded" individuals and having a support network for participants completing the work of teacher leadership. Ackert and Martin (2014) and Katzenmeyer and Moller (2009) indicated that teacher leaders need ongoing opportunities to network and collaborate on new strategies and to reflect on their work as teacher leaders within their own community. The qualitative data findings support their assertions. The building of community with a like purpose is consistent with the concepts of a community of practice (Wenger, 1998). For this research

project, the participants shared a common interest in the work of teacher leadership. Having a support network that was judgement free and safe was found to be a critical factor in the participants' work as teacher leaders. Their experiences align with Wenger's (1998) community of practice component of joint enterprise. Joint enterprise in a community of practice is the responses of the members to each other and their work. It is their shared experience, outside of external forces, that creates the joint enterprise.

Two studies cited in Chapter 2 (Gonzales, 2004; Lieberman & Friedrich, 2010) asserted we learn together, and through learning and interaction we create our identity, and when that occurs in a joint activity, we develop a community of practice. Gonzales' (2004) study described teacher leader identity as constructed by an individual's interaction with others, including other teacher leaders. Lieberman and Friedrich (2010) postulated that identity was constructed across various social communities and was constantly negotiated. The teacher leader learning community implemented in this study was a social community of individuals with a similar interest. Participants affirmed these findings as they indicated that "having a group to share ideas with" was seen as helpful. Other participant statements that support prior research studies included, "Nice to kind of merge our ideas and see some of our similarities and such", "Hearing the common struggles to know you had allies within your cohort", and "[We]validate each other's thinking, share ideas, to inspire to move forward". The interactions of the members of the teacher leader learning community provided a sense of camaraderie; supporting their identity as teacher leaders.

The innovation of peer partner and the peer partner interaction logs provided some additional support to the notion of a social community of individuals with a similar interest. As you may recall, learning community members established peer partners through mutual

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consensus. The intent of the peer partners was to provide in between the formal learning community meetings. Data submitted on the logs indicated that the peer partners did provide support to each other between meetings on a limited basis. The high level of exiting trust between the peer partners allowed for discussion and problem solving of challenging issues individual participants faced in their work.

The "personal engagement" theme provided details about teacher leaders' experiences and growth as a result of participation in the teacher leader learning community and was used to explore the first research question. The lived experiences of teacher leaders were described by participants as "challenging" and "emotional". Final interview data from participants reported they felt "more confidence", "validated", "accomplished", and "empowered" as they described their experiences with the teacher leader learning community. Studies by Struyve, Meredith & Gielen (2014) and Ross et al. (2011) asserted that the identity of teachers who take on leadership roles changes. Consistent with Struvye, Meredith & Gielen (2014), teacher leaders in this study found that being teacher leaders was a risk as it impacted the social-professional relationships. Participants spoke of feelings of loss and loneliness. The teacher leaders learning community provided them a venue to develop other social-professional relationships and mitigate those feelings. Similarly, Sinha & Hanuscin (2017) stated that teachers developed ways of "being" leaders through position within a social group and interaction and feedback from others. Participants in the learning community shared their successes and challenges and sought feedback from other participants. The participants gained skills and added to their "toolbox" as they continued their work as teacher leaders outside of the meetings, consistent with the findings of Sinha and Hanuscin (2017).

Research Question 2. Qualitative data was used to explore the second research question, which sought to understand the factors associated with teachers' beliefs about the success and sustainability of a teacher leader learning community. The themes of "structure" and "community support" substantiated this research question. The "structure" theme provided information about the organization of and protocols used in the teacher leader learning community meetings. This included physical set up, established collaborative norms, the use of a consistent meeting protocol and the assignment of meeting roles. This attribute was expressed by participants as an essential factor for the sustainability of the learning community. Participants made statements that supported the use of collaborative norms and meeting protocol such as: "comfort in the protocol", "going over the norms and then talking about the successes and then having a topic", having "the meeting staying on track", and "having some format for the meeting set up ahead of time". They further offered that to sustain the teacher leader learning community continuation of the meetings should occur. One participant noted that, "when you have something set up, you know you're going to recharge".

These findings are consistent with work by Wenger (1998) regarding communities of practice. Wenger (1998) identified that the third characteristic of practice as part of community is a shared repertoire. The repertoire of a community includes the ways of doing things such as routines, words, or concepts that the community has produced that have become part of how things are done (Wenger, 1998). In this research project the collaborative norms and meeting protocol were the shared repertoire that the community produced and were the ways in which the teacher leader learning community meetings were conducted. Each leadership partner pair followed the same protocol for conducting the meeting.

The "community support" theme focused on the interactions between the participants in the teacher leader learning community setting. This included support for each other, sharing ideas, brainstorming and problem-solving. These findings are consistent with key components of successful professional learning communities (DuFour & Eaker, 1998; Hord & Sommers, 2008). A successful professional learning community has a strong relationship base with a shared practice around individual and group consciousness. Relationships among members of the teacher leader learning community were seen as a factor for sustainability and success Participants in the study spoke about the importance of the relationships with each other in the learning community, "I think that's definitely growing here, the working together, the we're on the same page; the we're all in the same boat kind of thing. The personalities on the team matter". Participant comments such as, "It's scary to risk like that. Whereas if you have the support in place that if you do fail, that they can pick you back up to give you some more positive feedback," and, "Whatever we end up developing, that we create a format that can ultimately withstand if that makes sense" are consistent with research findings about successful learning communities.

Teachers are our best resource, yet as a profession we have yet to utilize them in significant ways in school improvement. Teacher leadership is not a new concept in our schools; yet systemically the structure for its use is not present throughout the field. This study contributed to the literature on teacher leadership by demonstrating the positive impact of a structured teacher leader learning community on the development of teacher leader identity.

Personal Lessons Learned

As I reflect on the journey of this research process, I consider the amount of learning and challenge presented. The completion of a dissertation as a beginning researcher is much like

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completing a marathon race. The journey is as important as the outcome. The most important lessons I've learned are: remain open to all learning as you go through this process; embrace both quantitative and qualitative data, even if you have a preference; be willing to invest the time and effort in the research process, there is no other way; and enjoy learning about research and investigation along with fellow classmates with whom you can share the learning.

The work of completing an action research dissertation is a compilation of the learning along the way. Throughout this process, learning was continuous. At times it was difficult for me to connect the learning to outcome of this program, completing a dissertation research project. I found that by remaining open to all the learning, and actively creating connections, my learning occurred with more complexity. An example of this is connected to two courses at ASU, Dynamic Contexts of Education and Advanced Qualitative Methods. These courses included reading material that was far outside the educational research and literature I typically consume. It required me to consider varying viewpoints and orientations that I previously had not. In doing so, I developed a more critical eye towards research in the field, a skill I used during this dissertation project.

My natural preference as a novice researcher is the use of words to describe and explain my ideas and thinking, more of a qualitative orientation. My master's degree thesis was a qualitative study. The initial design of my research project was to conduct a qualitative study. The final design of my project included quantitative data and I learned to embrace the numerical data and use it to support my qualitative findings. A mixed methods data collection design provided a more detailed data set to answer the two research questions of this study. The descriptive statistics generated from the pre- and post- innovation survey data provided some numerical evidence that supported the qualitative findings, providing more comprehensive

overall findings. One small frustration in this study were the data collection limitations. The small sample size for the pre-innovation survey (n=3) most likely impacted the quantitative findings. And the missing peer interaction log for one pair, restricted the qualitative interpretation of that data set.

I have used earlier reference about completing this dissertation project as a marathon race. The action research process requires tenacity and persistence. There is no quick shortcut, the best project outcome is because of the effort you, as a beginning researcher, is willing to make. Several difficult personal circumstances, "things of life", occurred during this journey, sometimes making it challenging to commit the needed time. At two points along the way, I had to decide if this journey was worth it. As a marathon runner would do (at least as reported to me by my friends who run marathons), I put my head down and concentrated on completing just the next step. I did not look too far ahead, and I worked to focus on the very next task I had to complete. It was a strategy that worked for me.

One of the great learning joys for me, are the relationships with my fellow classmates. We supported each other, shared ideas and questions, provided feedback on our work and genuinely cared about each other's success. In education we know that relationships matter in the learning process. The relationships I have formed during this process have been the foundation for continuing to persevere; particularly when some difficult personal circumstance occurred.

As a fledgling action-oriented researcher I have appreciated the action research model and have used elements of it to address other areas of need in my district. One example of a project the district is currently engaged in is the revision of the structure of our high school course schedule. A district wide task force is addressing this concern, using action research elements. As you will recall, action research is based in one's own context and used to take

action for improvement. As the district seeks to improve course offerings for students, we have identified the problems around our high school course schedule, gathered information and reviewed best practices, conducted and analyzed our own data through the administration of various surveys and, are now developing the action plan. The action research model provided a clear structure to examine this issue and create actions that will improve our high schedule structure.

In terms of teacher leadership, the admiration I have for teachers in my district and elsewhere, as change agents for their schools has remained constant.

I learned through this process that it is not enough to provide only professional development to teachers who choose to move into teacher leader roles. Schools and districts need to construct intentional structures and processes to support their work on an ongoing basis. Doing so will greatly improve the probability that teachers, as our most valuable school asset, can rise to their individual and collective leadership potential.

The teacher leader learning community at Canajoharie Central School continues. The members have ownership of the community and are intentionally planning how to expand the group and intentionally welcome new teacher leader members.

Implications for Practice

Action research, by design, is intended to address a problem in the local context. The problem of practice addressed in this project was the support of teacher leaders within the Canajoharie Central School District. A structured teacher leader learning community was implemented. This specialized learning community operated with a set of collaborative norms and a meeting protocol. The norms and the protocol were established by the participants, giving ownership to the group from the beginning. The participants of this studied adhered to the

established norms and protocol for each of the teacher leader learning community meetings, positively contributing to the participants' experiences in developing identity as a teacher leader.

An unexpected positive outcome of this project was the self-directed operation of the teacher leader learning community. The participants of this study contributed two additions to the design of the study: peer partners and rotating leadership roles of teacher leader community meetings. In a prior cycle of action research, the participants indicated that having a designated "person" available to provide support in-between meetings would be a valuable addition to the study design. Peer partners, who were selected by participants, were added to the final project design and during the initial teacher leader learning community meeting. After identifying their peer partners, the participants determined the rotation of meeting leadership roles: leaders, timekeepers and note takers.

Though the timeframe for this study has ended, the teacher leader learning community continues in our district. The teacher leader learning community identified as its next development steps to grow the membership of the group and to continue to meet on a regular basis using the meeting norms and protocol they established. As the district leader, I am working to codify the teacher leader structure within district operations and include another administrator to support this work and effort and completing our initiative to establish teacher leaders as part of our overall leadership structure.

Results of this action research study may be beneficial to other schools or districts who decide to implement a support structure for teachers leaders in their local contexts. To begin the process, administrators should determine if the existing leadership structure is ready to implement a distributed leadership model. This may require time spent with administrators learning about teacher leadership and how teacher leaders can support the work of principals or

other school administrators. This foundational condition is rooted in research as a precursor to successful implementation of teacher leadership (Cooper, Stanulis, Brondyk, Hamilton, Macaluso, & Meier, 2015; Danielson, 2006; Katzenmeyer & Moller, 2009). Principals and administrators who have worked in collaboration with teacher leaders, in a community-oriented culture, have supported school improvement efforts (Cooper et al., 2015).

The membership composition of the teacher leader learning community may require some thoughtful attention. If teachers joining the learning community do not have prior working relationships, additional community building work may need to occur. As the teacher leader learning community at Canajoharie schools grows, the community will need to plan for integrating new members so the learning community can continue fulfilling its stated purpose.

During the course of this study, individual and collective responses from the pre- and post- innovation survey were used only to address the stated research questions. Future schools and districts may want to consider using the survey to document individual and group changes and share that information with member of the learning community.

Lastly, I would recommend that a set of collaborative norms and the meeting protocol be used by the teacher leader learning community (Garmston & Wellman, 2013). Collaborative norms helped guide the interactions of the learning community, providing the way the members agree to act with each other in the context of the learning community meeting. The meeting protocol provided consistent expectations for the learning community meetings. Participants knew the sequence of the agenda and could therefore concentrate on supporting each other as teacher leaders. The collaborative norms and meeting protocol were found to be key factors in the success and sustainability of the teacher leader learning community.

In the larger context, the results of this study confirm previous research on teacher leadership. In Chapter 2, a study by Michael Cosenza (2015) sought to affirm the national Teacher Leader Model Standards. As a reminder, the standards identified seven attributes of model teacher leaders: fostering a collaborative culture, accessing and using research to improve practice, promoting professional development, facilitating improvements in instruction, promoting use of assessments and data, improve outreach and collaboration with families and community, and advocating for student learning and the profession. This study supports four of the standards: fostering a collaborative culture, promoting professional development, facilitating improvements in instruction and advocating for student learning and the profession. This study also supports assertions that teacher leaders develop their identity through social interaction and feedback with others in teacher leader roles (Gonzales, 2004; Lieberman & Friedrich, 2010; Sinha & Hanuscin, 2017). In the larger context of teacher leadership, the results of this study supported prior research findings.

Implications for Research

Teacher leadership is a viable strategy for schools to support school improvement efforts. The premise of this research project was that teachers who participated in a structured learning community developed and sustained their identity as teacher leaders. The collected and analyzed data were used to construct the case for structured learning communities as a strategy to support and sustain identity of teacher leaders.

The implications for further research in the field of K-12 education are to replicate the project under different contexts, extend the study timeline to address "sustainability", and conduct longitudinal studies of the persistence of teacher leaders with and without support networks. To address the concept of "sustainability", I recommend the study timeline be

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extended from four months (a partial school year) to ten or eleven months (a full school year in most locales). This would provide an opportunity to collect data over time and analyze the impact of the passage of time on the teacher leader learning community.

Additional research could include various contexts where there are formal or informal teacher leader learning communities and contexts where there is no support available to teacher leaders. Future studies could also include multi-school comparisons. In this study a vertical K-12 teacher leader learning community was appropriate, as the district has a relatively small faculty (n=85). Studies of larger districts with more than one building per grade level may require a different orientation, including the consideration of horizontal teacher leader communities with comparisons across schools. A district's individual school culture and context should be taken into consideration when replicating this study.

Due to the small sample size of this study (pre-innovation n=3, and post-innovation n=6), one cannot determine through statistical analysis that the survey data is useful in exploring teacher leader identity. It is recommended that the study be replicated using a larger sample size. A larger sample size would yield more significant quantitative results. To address potential problems with the survey instrument, I recommend a review of each survey item. While the overall reliability coefficient of the post-innovation survey was Excellent (α=.926), the pre-innovation survey constructs and overall reliability coefficients were not as robust.

This study should be replicated with more heterogeneous groups (inclusive of gender and ethnicity). This study included only Caucasian female participants. Future research should include male voices and the voices of others with varying backgrounds would provide a richer description of teacher leadership.

The participants in this study had prior working and personal relationships. They worked on various groups and committees and have attended professional development conferences together. This prior knowledge facilitated the formation of the teacher leader learning community. Additional research should include where the participants may not have prior relationships in leadership activities.

Data collection in future studies should continue with a mixed methods design, with some consideration for enhancing the application of the quantitative data. As previously mentioned, the quantitative results of the pre- and post- innovation surveys yielded limited information. The survey constructs of Knowledge of Self, Relationship with Others and Collaborative Work complement the definition of teacher leadership as cited by Katzenmeyer & Moller (2009). That definition being, "teacher leaders who lead within and beyond the classroom, identify with and contribute to a community of teacher learners and leaders; influence others toward improved educational practice; and accept responsibility for achieving the outcomes of their leadership" (p. 6). The constructs of Relationship with Others and Collaborative Work most closely align to the definition of teacher leadership used in this study. The Katzenmeyer & Moller (2009) definition does not specifically address personal awareness of skills as represented in the Knowledge of Self construct. However, the constructs of the survey were appropriate within the context of the research questions. Future researchers may choose to use a different definition of teacher leaders. Development of additional survey items would result in a more comprehensive survey. I would further recommend that qualitative data be collected using the initial and final interviews, meeting observations and research journal entries. The peer partner interaction log did not yield the expected data set. Two of three peer partners submitted completed logs. Without participation by each of the peer partner pairs, the data set would be incomplete. If future studies include the

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peer partner interaction log, I would advise establishing clear expectations about peer partner interactions and the use of the log.

Finally, further research should include the context of teachers' subjective feelings and positions as teacher leaders. Most of the research literature focuses on the skills and functions of teacher leadership. This study's focus on the identity aspect of teacher leadership also provided data about teacher's affect and emotions in their lived experience as teacher leaders.

For teacher leadership to have a substantial and lasting impact on school and student improvement, additional studies such as these can help inform the field of structures and designs that develop and sustain teacher leadership.

Limitations

There are five limitations I considered in this action research study: sample size, participant homogeneity, length of study period, familiarity of the participants with each other and my position as an inside researcher. The small sample size (n=6) impacted the quantitative data sample and generalization of the findings. Three of six participants completed the pre-innovation survey and five of six participants completed the post-innovation survey. The small number of respondents completing the survey most likely impacted the statistical analysis.

Participants' demographic backgrounds in this study also present a second limitation. The participants were all female Caucasian teachers from the Canajoharie Central Schools. Three of the six have teaching experience only with the Canajoharie School District. Invitations to be a participant in this research project were extended to male faculty members; none accepted the invitation. While this limitation exists in the context of this study, the real limitation is lack of female representation in educational leadership. As identified in Chapter 2, while women comprise the largest segment of the teaching force, they are underrepresented in the formal

leadership positions of principals and superintendents. In the larger context of educational leadership, it is possible that teacher leadership could provide an avenue for women to be involved in the practice of leadership, giving them a way to build leadership skills and identity. This may be one part of a more comprehensive set of solutions to address the larger limitation in the field – the disparity of females in educational leadership positions.

The third limitation may be the participants prior interaction and familiarity with each other. Five of the six attended a national conference as part of a district-wide team. Three work together on a district-level curriculum standards team. The three high school level teachers are members of the building leadership team. While familiarity with each other facilitated group formation and cohesion of the participant sample, in the future this could impede new members of the teacher leader cohort from becoming full participating members of the teacher leader community.

Within the context of this study I functioned as an insider researcher. While I do not have supervisory responsibility for any of the study participants, my position as superintendent of schools is a possible fourth limitation. I tried to mitigate any potential impact by remaining neutral and maintaining a stance of observer during the teacher leader learning community meetings. During the initial and final interviews, I asked the pre-determined questions and only asked follow-up questions that were pertinent to information provided by the interviewees. Pre- and post- innovation surveys were completed using four-digit unique identifiers.

The second research question included the concept of sustainability. The fifth limitation of gathering data to support sustainability is the timeframe of this study. The study period was September to December 2018. A four-month timeframe is not enough time to address the

question of sustainability. As noted in the recommendations above, a longer study period would better address the question of sustainability.

Conclusion

Transformation of schools to meet the needs of today's students requires a different leadership structure. The traditional model of a single leader at the helm will not produce the changes needed to support improved student outcomes. Teacher leadership is one model of distributed leadership practice in schools that can support the needed changes. Teacher leadership has been a part of the body of education research since the early 1980's (York-Barr & Duke, 2004). And yet the time for teacher leadership as a systemic strategy in schools continues to be elusive (Barth, 2013).

The purpose of this action research project was to understand the impact of a structured teacher leadership learning community on the development of teacher leader identity in one school district. The findings of this study suggest that teacher leader identity is supported by participation in a structured teacher leader learning community. The findings also suggest that meeting norms and protocols benefit the work of the teacher leaders in the learning community.

The basic premise offered by Katzenmeyer and Moller in 2009, and that is still relevant today, is that "By helping teachers recognize that they are leaders, by offering opportunities to develop their leadership skills, and by creating school cultures that honor their leadership, we can awaken this sleeping giant of teacher leadership" (p. 3). Indeed, teacher leadership in our schools will assist Canajoharie Central Schools in becoming the learning place our children in the 21st century need.

REFERENCES

Ackerman, R. & Mackenzie, S. (2006). Uncovering teacher leadership. *Educational Leadership*, *63*(8), 66-70.

Ackerman, R. & Mackenzie, S. (Eds) (2007). *Uncovering teacher leaders: Essays and voices from the field.* Thousand Oaks, CA: Corwin Press.

Ackert, N. & Martin, B. (2012). The role of teacher leaders in school improvement through the perceptions of principals and teachers. *International Journal of Education 4*(4), 284-299.

Ado, K. (2016). From pre-service to teacher leader: The early development of teacher leaders. *Issues in Teacher Education, 25*(1), 3-21.

Allua, S. & Thompson, C.B. (2009). Inferential statistics. *Air Medical Journal, 28*(4), 168-171. doi:10.1016/j.amj.2009.04.013

Angelle, P. & DeHart, C. (2011). Teacher's perceptions of teacher leadership: Examining differences by experience, degree, and position. *NASSP Bulletin, 92*(2), 141-160.

Angelle, P. & Teague, G. (2014). Teacher leadership and collective efficacy: Teacher perceptions in three US school districts. *Journal of Educational Administration, 52*(6), 738-753.

Angelle, P. S. & DeHart, C. A. (2016). Comparison and evaluation of four models of teacher leadership, *Research in Educational Administration & Leadership, 1*(1), 85-119.

Avolio, B., Walumbwa, F. & Weber, T. (2009). Leadership: Current theories, research and future directions. *Annual Review of Psychology,* 60, 421-449. DOI:10.1146/annurev.psych60.110707.163621.

Barth, R. (2001). Teacher leader. *Phi Delta Kappan, 82*(6), 443-449.

Barth, R. (2007). The teacher leader. In Ackerman, R. & Mackenzie (Eds.) *Uncovering teacher leadership: Essays and voices from the field.* Thousand Oaks, CA: Corwin Press.

Barth, R. (2013). The time is ripe (again). *Educational Leadership, (71)*2, 10-16.

Brady, L. & Johnson, L. (2015). *Transforming ice age schools: A practical guide for schools.* Lanham, MD: Rowman & Littlefield.

Bradley-Levine, J. (2011). Using case study to examine teacher leader development. *Journal of Ethnographic & Qualitative Research, 5*, 246-267.

Brink, H. (1993). Validity and reliability in qualitative research. *Curationis, 16*(2), 35-38. doi:**https://doi.org/10.4102/curationis.v16i2.1396**.

Braun, V. & Clarke, C. (2008). Using thematic analysis in psychology. *Qualitative Research in Psychology, (3)*2, 77-101.

Caine, G. & Caine, R. (2000). The learning community as a foundation for developing teacher leaders. *NASSP Bulletin, 84*(616), 7-14.

Camburn, E., Rowan, B. & Taylor, J. (2003). Distributed leadership in schools: The case of elementary schools adopting comprehensive school reform models. *Educational Evaluation and Policy Analysis, 25*(4), 347-373.

Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Coggins, C. & McGovern, K. (2014). Five goals for teacher leadership. *Phi Delta Kappan, 95*(7), 15-21.

Cooper, K., Stanulis, R., Brondyk, S., Hamilton, E., Macaluso, M. & Meier, J. (2016). The teacher leadership process: Attempting change within embedded systems. *Journal of Educational Change,* 17, 85-113. DOI: 10.1007/s10833-015-9262-4.

Cortez-Ford, E. (2008). *Constructing a teacher-leader identity: A narrative inquiry of elementary school teachers* (Doctoral dissertation). Retrieved from UMI Dissertation Publishing (UMI 3448113).

Cosenza, M. (2015). Defining teacher leadership, Affirming the teacher leader model standards. *Issues in Teacher Education, 24*(2), 79-99.

Creswell, J. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (5th ed.). Boston, MA: Pearson.

Criswell, B. A., Rushton, G. T., McDonald, S. P., & Gul, T. (2017). A clearer vision: Creating and evolving a model to support the development of science teacher leaders. *Research in Science Education*, 1-27. DOI: 10.1007/s11165-016-9588-9

Danielson, C. (2006). *Teacher leadership that strengthens professional practice.* Alexandria, VA: Association for Supervision and Curriculum Development.

Dempsey, R. (1992). Teachers as leaders: Towards a conceptual framework. *Teaching Education, 5*(1), 113-122.

Donaldson, G. (2007). What do teachers bring to leadership? *Educational Leadership, 65*(1), 26-29.

Dozier, T. (2007). Turning good teachers into great leaders. *Educational Leadership, 65*(1), 54-58.

DuFour, R., DuFour, R., Eaker, R., & Karhanek, G. (2004). *Whatever it takes: How professional learning communities respond when kids don't learn.* Bloomington, IN: Solution Tree.

DuFour, R. & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement.* Bloomington, IN: Solution Tree.

Fulton Montgomery Regional Chamber of Commerce. (2011). *Regional business plan for Fulton and Montgomery Counties.* Retrieved from: http://www.fultonmontgomeryny.org/pages/RegionalBusinessPlan.

Garmston, R. & Wellman, B. (2013). *The adaptive school: A sourcebook for developing collaborative groups.* Lanham, MD: Rowman & Littlefield Publishers, Inc.

Gary, L. (2005). Ronald Heifetz: The challenge of adaptive leadership. *New Zealand Management, (52)*7, 46-48.

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference* (4th Ed.). Boston, MA: Allyn & Bacon.

Gonzales, L. (2004). *Sustaining teacher leadership: Beyond the boundaries of an enabling school culture.* Lanham, MD: University Press of America, Inc.

Green, S. & Salkind, N. (2014). *Using SPSS for Windows and Macintosh: Analyzing and understanding data.* Upper Saddle River, NJ: Pearson Education.

Grimshaw, D. (2017). *Individual research project: Defining teacher leadership.* Unpublished manuscript. Arizona State University.

Guha, R., Hyler, M. E., & Darling-Hammond, L. (2017). The teacher residency. *Education Digest*, *83*(2), 38-45.

Hargreaves, A. & Fullan, M. (2012). *Professional capital: Transforming teaching in every school.* New York, NY: Teachers College Press.

Harris, A. (2002). Distributed leadership: Leading or misleading? *Management in Education, 16*(5), 10-13.

Heifetz, R. (1994). *Leadership without easy answers.* Cambridge, MA: Harvard University Press.

Heifetz, R. & Linsky, M. (2003). A survival guide for leaders. *Business Credit, 105*(3), 44-52.

Helterbran, V. (2010). Teacher leadership: Overcoming "I am just a teacher" syndrome. *Education, 131*(2), 363-370.

Herr, K. & Anderson, G. (2015). *The action research dissertation: A guide for students and*

faculty (2nd ed). Thousand Oaks, CA: Sage Publications, Inc.

Hord, S. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin, TX: Southwest Educational Development Laboratory.

Hord, S. & Sommers, W. (2008). *Leading professional learning communities: Voices from research and practice.* Thousand Oaks, CA: Sage Publications, Inc.

Huggins, K., Lesseig, K., & Rhodes, H. (2017). Rethinking teacher leader development: A study of early career mathematics teachers. *International Journal of Teacher Leadership 8*(2), 28-48.

Ingersoll, R., Merrill, L. & Stuckey, D. (2018). The changing face of teaching. *Educational Leadership, 75*(8), 44-49.

Ivankova, N. (2015). *Mixed methods applications in action research: From methods to community action.* Thousand Oaks, CA: Sage Publications, Inc.

Judkins, M. (2014). *Narrating teacher leader identities: Voices from the field* (Doctoral dissertation). Retrieved from http://hdl.handle.net/10150/325229.

Katzenmeyer, M. & Moller, G. (2009). *Awakening the sleeping giant: Helping teachers develop as leaders.* Thousand Oaks, CA: Corwin.

Knapp, M. (2017). An autoethnography of a (reluctant) teacher leader. *The Journal of Mathematical Behavior,* 46, 251-266.

Lambert, L., Collay, M. Dietz, M., Kent, K., & Richert, A. (2002). Teaching as leading. In Ackerman, R. & Mackenzie, S. (Eds.), *Uncovering teacher leadership: Essays and voices from the field* (pp 107- 129). Thousand Oaks, CA: Corwin Press.

Lieberman, A. & Friedrich, L. (2010). *How teachers become leaders: Learning from practice and research.* New York, NY: Teachers College Press.

Lortie, D. (2002). *Schoolteacher* (2nd ed.). Chicago, IL: University of Chicago Press.

Margolis, J. & Doran, A. (2012). The fundamental dilemma of teacher leader-facilitated professional development: Do as I (kind of) say, not as I (sort of) do. *Educational Administration Quarterly, 48*(5), 859-882.

Mayers, R. S., Zepeda, S. J., & Benson, B. (2002). *Call to teacher leadership*. Retrieved from https://ebookcentral-proquest-com.ezproxy1.lib.asu.edu

Merrett, F. (2006). Reflections on the Hawthorne effect. *Educational Psychology, 26*(1), 143-146. DOI: 10.1080/01443410500341080.

Mertens, D. M. (2015). *Research and evaluation in education and psychology* (4th ed). Thousand Oaks, CA: Sage Publications, Inc.

Mertler, C. (2014). *Action research: Improving schools and empowering educators* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.

Muijs, D. & Harris, A. (2003). Teacher leadership - Improvement through empowerment: An overview of the literature. *Educational Management & Administration, 31*(4), 437-448.

Muijs, D. & Harris. A. (2007). Teacher leadership in (in)action: Three case studies of contrasting schools. *Educational Management Administration & Leadership, 35*(1), 111-134.

Muir, D. (2011). *Leader identity development: A case study* [Doctoral dissertation]. Retrieved from ProQuest Dissertations and Theses database (UMI No. 3457800).

Nappi, J. (2014). The teacher leader: Improving schools by building social capital through shared leadership. *Principal's Research Review, 9*(6), 1-6.

Neumerski, C. (2012). Rethinking instructional leadership, a review: What do we know about principal, teacher, and coach instructional leadership, and where do we go from here? *Educational Administration Quarterly, 49*(2), 310-347.

New York State Department of Education. (2012). *2011-2012 School report card.* Retrieved from: https://data.nysed.gov/files/reportcards/archive/2011-12/RC-2012-270301040000.pdf

New York State Department of Education (2019). *2017-2018 School report card.* Retrieved from: https://data.nysed.gov/profile.php?instid=800000049948

Nicholson, J., Capitelli, S., Richert, A., Bauer, A., & Bonetti, S. (2016). The affordances of a using a teacher leadership network to support leadership development: Creating collaborative thinking spaces to strengthen teachers' skills in facilitating productive evidence informed conversations. *Teacher Education Quarterly*, *43*(1), 29-50.

Oswald, M. & Engelbrecht, P. (2013). Leadership in disadvantaged primary schools: Two narratives of contrasting schools. *Educational Management Administration & Leadership, 41*(5), 620-639.

Plano Clark, V. & Creswell, J. (2015). *Understanding research: A consumer's guide* (2nd ed.). Boston, MA: Pearson.

Randall, L. & Coakley, L. (2007). Applying adaptive leadership to successful change initiatives in academia. *Leadership and Organizational Development Journal, (28)*4, 325-335.

Reeves, D. (2008). *Reframing teacher leadership to improve your school.* Alexandria, VA: ASCD.

Ross, D., Adams, A., Bondy, E., Dana, N., Dodman, S., & Swain, C. (2017). Preparing teacher leaders: Perceptions of the impact of a cohort-based, job embedded, blended teacher leadership program. *Teaching and Teacher Education,* 27, 1213-1222.

Rossman, G. & Rallis, S. (2017). *An introduction to qualitative research: Learning in the field* (4th ed.). Thousand Oaks, CA: Sage Publications Inc.

Salkind, N. J. (Ed.) (2010). *Encyclopedia of research design* Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781412961288

SPSS FAQ: What does Cronbach's alpha mean? (n.d.). *UCLA Statistical Consulting Group.* Retrieved September 24, 2017, from: https://stats.idre.ucla.edu/spss/faq/what-does-cronbachs-alpha-mean/

Sanchez, J. & Thornton, B. (2010). Gender issues in K-12 educational leadership. *Advancing Women in Leadership Journal, 30*(13). Retrieved from: http://advancingwomen.com/awl/awl_wordpress/

Saldana, J. (2016). *The coding manual for qualitative researchers.* Thousand Oaks, CA: Sage Publications Inc.

Sinha, S. & Hanuscin, D. (2017). Development of teacher leadership identity: A multiple case study. *Teaching and Teacher Education, 63,* 356-371.

Smith, P., Hayes, M., & Lyons, K. (2017). The ecology of instructional teacher leadership. *The Journal of Mathematical Behavior,* 46, 267-288.

Sperandio, J. (2015). Knowing the community: Women planning careers in educational leadership. *Planning and Change, 46*(3/4), 416-427.

Spillane, J. (2009). *Engaging practice: School leadership and management from a distributed perspective.* In Hargreaves, A. & Fullan, M. (Eds.), Change Wars, (201-219). Bloomington, IN: Solution Tree.

Struyve, C., Meredith, C. & Gielen, S. (2014). Who am I and where do I belong? The perception and evaluation of teacher leaders concerning teacher leadership practices and micropolitics in schools. *Journal of Educational Change,* 15, 202-230.

Superville, D. (2016). Few women run school districts. Why?. *Education Week, 36*(13), 1-13.

Taylor, M., Geoke, J., Klein, E., Onore, C., Geist, K. (2011). Changing leadership: Teachers lead the way for schools that learn. *Teaching and Teacher Education, 27,* 920-929.

Torres, R., Reeves, M. & Love, C. (2013). Adaptive leadership. In Clark (Ed.) *Own the future: 50 ways to win.* Boston, MA: Boston Consulting Group. Retrieved from: http://ebookcentral.proquest.com

Turner, J., Christensen, A., Kacker-Cam, H., Fulmer, S., Trucano, M. (2018). The development of professional learning communities and their teacher leaders: An activity systems analysis. *Journal of the Learning Sciences,* 27, 49-88.

Wagner, T. & Dintersmith, T. (2015). *Most likely to succeed: Preparing our kids for the innovation era.* New York, NY: Scribner.

Warren, L. (2017). Innovative practices that promote teacher leader identity and development of teacher leadership in professional development schools. *International Research in Higher Education, 2*(4), 9-17.

Wenger, E. (1998). *Communities of practice: Learning, meaning and identity.* Cambridge, UK: Cambridge University Press.

Wenner, J. & Campbell, T. (2017). The theoretical and empirical basis of teacher leadership: A review of the leadership. *Review of Educational Research, 87*(1), 134-171.

Woods, P., Bennett, N., Harvey, J. & Wise, C. (2004). Variabilities and dualities in distributed leadership: Findings from a systematic literature review. *Educational Management Administration & Leadership 32*(4), 439-457.

York-Barr, J. & Duke K. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational Research, 74*(3), 255-316.

Yost, D., Vogel, R. & Rosenberg, M. (2009). Transitioning from teacher to instructional leader. *Middle School Journal, (40)*3, 20-27, DOI 10.1080/00940771.11495583.

Yukl, G. & Mahsud, R. (2010). Why flexible and adaptive leadership is essential. *Consulting Psychology Journal: Practice and Research, (62)*2, 81-93.

APPENDIX A

PARTICIPANT RECRUITMENT LETTER

Dear Teachers:

I am asking for your help and assistance in exploring the development of teacher leader identity through participation in a community of practice. Your assistance would involve *completion of a pre/post study survey, participation in two individual interviews lasting approximately 30 minutes each and joining a teacher leader community of practice which will meet four times, for one hour each, between September and December 2018. Teacher partners will complete an online interaction log to note their interactions. The total time investment of participants is expected to be approximately six hours.* Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty whatsoever.

The benefit to participation is the indication of success such that we will have an established group to support teacher leaders during work in our district. There is the potential to impact the experience of other schools and districts by participating in this project. There are no foreseeable risks or discomforts to your participation.

Your responses will be confidential. Results of this study may be used in reports, presentations, or publications but your name will not be known. You will be asked to supply the last 4-digits of your phone number as an identifier for the data.

If you have any questions concerning the research study, please contact me at 673-6302. If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board through the ASU Office of Research Integrity and Assurance at (480) 965-6788.

Thank you,

Deborah P. Grimshaw

Teacher Leader Identity, Fall 2018

APPENDIX B

STUDY CONSENT FORM

Title of research study: ***Developing Teacher Leader Identity through Community of Practice***
Investigator: *Molly Ott, Ph.D., Deborah Grimshaw, Doctoral Student*

Why am I being invited to take part in a research study?
We invite you to take part in a research study because of your interest in teacher leadership within the Canajoharie Central School District.

Why is this research being done?
Teacher leaders add to the fabric of school leadership. Working with colleagues, teacher leaders support the implementation of school improvement initiatives. The Canajoharie Central School District seeks to develop a structure to support teachers in the development of their identity as leaders.

How long will the research last?
We expect that individuals will spend four months (September – December 2018) participating in the proposed activities.

How many people will be studied?
We expect about 7 people will participate in this research study. Study participants are full time teachers employed by the Canajoharie Central School District. The researcher and the teachers have established professional relationships; all work within the district. The researcher has no direct supervisory authority over the participants. Potential participants will be informed that participation is voluntary and is not connected to district supervisory or evaluation processes.

What happens if I say yes, I want to be in this research?
Participants in this research will complete a pre/post study survey, participate in two individual interviews lasting approximately 30 minutes and join a teacher leader community of practice which will meet four times, for one hour each, between September and December 2018. Teacher partners will complete an online interaction log to note their interactions. The total time investment of participants is expected to be approximately six hours. Participation in this research project is voluntary. There is no impact on your employment with the district. You are free to decide whether you wish to participate in this study.

What happens if I say yes, but I change my mind later?
You can leave the research at any time it will not be held against you.

Will being in this study help me in any way?
We cannot promise any benefits to you or others from your taking part in this research. However, possible benefits include increased leadership skills, personal confidence as a teacher leader, increased effectiveness in the classroom, increased effectiveness working with other colleagues.

What happens to the information collected for the research?
Efforts will be made to limit the use and disclosure of your personal information, including research study records, to people who have a need to review this information. To help facilitate confidentiality of your information, you will be asked to provide the last 4-digits of your phone number as an identifier to use with the survey, interview and peer partner log data. We cannot promise complete secrecy. Organizations that may inspect and copy your information include the University board that reviews research who want to make sure the researchers are doing their jobs correctly and protecting your information and rights. The data will be stored on a password protected computer or in a locked filing cabinet in the researcher's office. The data will be stored for three years. Only the researcher will have access to the data. After three years, the data will

be deleted from the computer and paper documents shredded and destroyed. Any audio recordings will be deleted upon transcription; any identifiers will be removed in the transcript.

Who can I talk to?

If you have questions, concerns, or complaints, talk to the research team:

Dr. Molly Ott, molly.ott@asu.edu

Deborah Grimshaw, dpgrimshaw@gmail.com or 518-673-6302

This research has been reviewed and approved by the Social Behavioral IRB. You may talk to them at (480) 965-6788 or by email at research.integrity@asu.edu if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research participant.
- You want to get information or provide input about this research.

Participants in this study must be 18 years of age or older.

Your signature documents your permission to take part in this research.

Signature of participant	Date

APPENDIX C

OUTLINE OF ORGANIZATIONAL TEACHER LEADER LEARNING
COMMUNITY MEETING

I. Welcome
   a. Provide agenda for the meeting
   b. Review agenda with participants
II. Definition of a learning community
   a. Ask participants to provide their definition of a learning community
   b. Synthesize the information into a definition that all members agree to
III. Establish a shared purpose
   a. Ask participants to discuss and answer these questions
       i. Why are we here?
       ii. What do want to be?
   b. Synthesize the information into an agreed upon purpose statement
IV. Establish collaborative norms
   a. Ask participants to identify the parameters they would like to set for their interactions during the teacher leader learning community meeting
   b. List the collaborative and then come to consensus on a final set of collaborative norms
V. Identify a meeting protocol
   a. Schedule
   b. Agenda creation
   c. Meeting roles
   d. Meeting de-brief
VI. Communication skills
   a. Giving and receiving feedback
VII. Establish first teacher leader learning community meeting agenda
VIII. Establish peer partners
   a. The group self-determines the manner to establish peer partners
   b. Introduce peer partner interaction online log

APPENDIX D

TEACHER LEADER IDENTITY DEVELOPMENT PRE/POST SURVEY

Directions: Please rate each item in terms of how frequently you show the described teacher leader behavior.

Item	Consistently	Usually	Occasionally	Rarely
Knowledge of Self				
I understand my strengths and needs as it relates to a teacher leader role				
I act on constructive feedback about how I might improve my skills				
I set goals and monitor my progress towards them				
I participate in professional development to continue to grow my skills				
I show the initiative and energy needed to accomplish tasks				
Relationships with Others				
I communicate honestly with others				
I seek others' perspectives and thoughts				
I actively listen to others' viewpoints for understanding				
I create a safe environment when working with teacher colleague groups				
I promote mutual responsibility for colleagues' learning				
Collaborative Work				
I involve my colleagues in implementing changes in my school				
I lead others to complete tasks using appropriate structures and processes				
I delegate tasks to other colleagues				
I share responsibility to increase the collaborative process				
I hold myself responsible for the success of the group's goals and outcomes				

APPENDIX E

INITIAL INTERVIEW QUESTIONS

1. Please tell me about your work as a teacher. Why did you decide to be a teacher and what is your experience as a teacher?
2. What does being a teacher mean to you? How would you describe your professional identity as a teacher?
3. Why and how did you become interested in moving into a teacher leader or influencer role?
4. In what ways has being a teacher leader impacted your professional identity as a teacher?
5. What are the positives and challenges for you in thinking about your professional identity as a teacher leader?
6. What is your experience working collaboratively with teachers in a learning community setting?
7. Part of this work is to develop a teacher leader community. What ideas do you have about how that would work and what would you expect from participating in this group?

APPENDIX F

FINAL INTERVIEW QUESTIONS

1. Please share with me a summary of your overall experience with the teacher leader learning community?
2. What are some ways that your leadership capacity has changed because of participation in the teacher leader learning community?
3. What aspects of the teacher leader learning community best supported your identity as a teacher leader?
4. Based on your experiences in the teacher leader learning community, what are some ways your definition of teacher leadership may have changed? What are some ways your definition was confirmed?
5. Share an example of a leadership action you engaged in with your peers and their receptivity to your leadership.
6. What do you believe bests supports and sustains your leadership identity over time?
7. From an organizational perspective, what needs to happen to sustain this teacher leader learning community?

APPENDIX G

MEETING OBSERVATION PROTOCOL

Meeting Date:
Participants:

Description	Researcher Comments

APPENDIX H

TEACHER LEADER PEER PARTNER INTERACTION LOG

(TEMPLATE FOR ONLINE LOG)

Peer Partner: _____

Date	Amount of Time	Support Topic	This helped me ….

APPENDIX I

TEACHER LEADER IDENTITY QUALITATIVE DATA CODEBOOK

Code Name/ Sub Code	Description
Not Applicable	Ancillary information that was not used

Researcher notes
  Structures
  Common Alike Orientation
  Researcher Reactions
	Information that the researcher noted in a journal

Teacher identity
  Change, Grow, Willingness
  Teacher Role with Colleagues
  Teacher Role with Students
	Interview information about how teachers viewed their identity as professionals

Organizing Structures
  Activities
  Organization
  Strategy Experiences
  Structures
	The structure of the teacher leader community meetings including activities and strategies

Teacher Leader Definition
  Confirmed
  Definition Changed
  No Change
	Participants reported definition of teacher leader as confirmed, changed or no change

Teacher Leader Identity
  Identity Confirmation
  Identity Expectations
  Identity Stance
	Participants statements related to identity as a teacher leader

Teacher Leadership
  Confidence
  Helping Others
  Challenges
  Positives
  Strategies
	Teacher leadership statements that were positive, challenges, changes, strategies and confidence

Teacher Leader Lived Experiences
  Emotional Challenges
  Isolation Lonely
	Reported examples of the lived world of teacher leaders

Learning Community Organizational
  Activities
  Group Interactions
  Organizing Structures
	Organizational structures of the teacher leader learning community including group interactions

Teacher Leader Support
  Emotional Support
  Partner
	Participants' examples of ways to support teacher leaders

Teacher Leader Sustainability
  Personal Growth
  Relationships
	Evidence of ways to sustain teacher leader identity and work

Learning Community Expectations
  Group Expectations
  Personal Expectations
	Expectations of the participants at the start of the study

Learning Community Experiences
  Group Experiences
  Personal Experiences
  Strategy Experiences
	Stated experiences of the participants at the end of the study

Why be a Teacher?
  Role Model
  Helper
  Identity
	Reasons participants stated for becoming a teacher

Why be a Teacher Leader?
  Growth
  Teacher Helper
	Reasons participants stated for becoming a teacher leader

APPENDIX J

TEACHER LEADER LEARNING COMMUNITY PURPOSE, NORMS,

MEETING PROTOCOL

Purpose of the Teacher Leader Learning Community
A progressive group encouraging growth and conversation focusing on fresh perspectives and new ideas in a safe and supportive environment.

Norms of Collaboration
>Come with an open mind
>Agree to respectfully disagree on ideas
>Try to see through the lens of the speaker
>Have positive growth intention (not just complaining)
>Commitment to confidentiality of the meetings
>Encourage everyone to speak and participate

Meeting Protocol
>Welcome
>Review collaborative norms
>Sharing what worked well – small successes
>Reflection – what didn't work as well, opportunities to learn
>Topic of the month
>How/what ways are we planting seeds of growth for others?
>End of session debrief questions (examples listed below)
>>How was this session helpful to you?
>Share one example of leadership action in another setting

APPENDIX K

TEACHER LEADER LEARNING COMMUNITY ARTICLES

Meeting	Leaders	Article(s)
2	Participants 1 & 4	Orlans, M. (2013). *Do you know the difference between punishment and consequences?* Retrieved from: https://www.linkedin.com/pulse/do-you-know-difference-between-punishment-michael-orlans/
3	Participants 3 & 6	Woerkom, M. (2018). *Building community with restorative circles.* Retrieved from https://www.edutopia.org/article/building-community-restorative-circles Jones, D. (2015). *How to convince coworkers to adopt your idea.* Retrieved from http://fortune.com/2015/10/15/coworkers-adopt-new-idea/
4	Participants 2 & 5	NPR (2016). *A silent epidemic.* Retrieved from http://apps.npr.org/mental-health/