

ABSTRACT

KENJARSKI, MARK RICHARD. Defining Teacher Leadership: Elementary Teachers' Perceptions of Teacher Leadership and the Conditions Which Influence its Development. (Under the direction of Dr. Matthew Militello).

Teacher leadership is used to describe a variety of phenomena in the educational arena. Formal leadership roles, informal leadership roles, leadership styles, personal characteristics, improvement processes, professional development, and other assorted activities are associated with teacher leadership. Clarity is needed in this area so teacher leadership may be advanced as a legitimate vehicle for improving schools and the teaching profession. Using teachers' viewpoints, this study sought to identify the essential elements of teacher leadership and the factors which foster or inhibit its development. A literature review on teacher leadership was conducted. Q-Methodology was utilized to study forty-three public elementary school teachers' perceptions of teacher leadership. Participants sorted forty-two statement cards about teacher leadership based on their level of agreement with them. The statements were drawn from the teacher leadership literature and polling. The card sorts were statistically analyzed using PQMethod. Five individual or focus group interviews provided further qualitative follow-up through participant explanation, interpretation, and clarification of the sorts. Data analysis yielded three significant factor viewpoints: teamwork and continuous learning for the classroom, widespread leadership of others for change, and guiding leadership which bridges organizational levels. Based on the study findings, teacher leadership activities focusing in classroom, professional learning community, and school-wide contexts were examined using a role orientation and scope of influence perspective. A framework for defining teacher leadership and the success conditions which influence its development is presented.

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Defining Teacher Leadership: Elementary Teachers' Perceptions of Teacher Leadership and
the Conditions Which Influence its Development

by
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DEDICATION

I dedicate this to my wife, Sue, who encouraged me to begin this voyage and supported me throughout it. This would not have been possible without her.

BIOGRAPHY

Mark Kenjarski holds a Bachelor of Science degree in Elementary and Special Education from the State University of New York, College at Geneseo, Master of Arts degree in Literacy Instruction from the College of William and Mary, and Master of School Administration from North Carolina State University. He began his career teaching first grade and has experience teaching all elementary grades. While teaching, he became certified as a mentor teacher for beginning teachers and earned Nation Board Certification from the National Board of Professional Teaching Standards. Following teaching, he became a school administrator serving first as an assistant principal and then as a school principal.

As a teacher and administrator, Mark has a variety of experiences with teacher leadership activities and is passionate about this topic. He believes teacher leadership is invaluable in building teacher capacity as instructional practitioners and champions of education. He further believes teacher leadership may greatly increase a school organization's ability to adapt and improve. He credits his own participation in teacher leadership activities as instrumental in helping him to become a better practitioner inside and outside of the classroom.

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Chapter One: Introduction

The purposes and goals of American public schooling have changed over the past one hundred fifty years. During this time, schools were expected to accomplish diverse needs such as provide a future workforce, educate the citizenry in sustaining a democratic government, maintain social stratifications, and promote social mobility (Labaree, 1997). Not all of these purposes required high academic student achievement. With the passage of the No Child Left Behind Act of 2001, schools were expected to achieve educational success for all students. Where students may have been overlooked in the past, the notion of academic success for all students became front and center. As front line implementers, teachers bore the burden for much of the responsibility in ensuring the success of all students in their classrooms. Education advocates viewed better teaching practices as prerequisites to better learning. "There is no solution that can skirt the fact that teaching has to improve if learning is to follow" (Darling-Hammond, 2010, p.98). Teachers were thusly challenged with finding ways to improve their teaching performance (Darling-Hammond, 2010).

The heightened expectation for every student to be successful motivated educational policy makers and leaders to look for ways to renew efforts to overhaul and improve the current educational system. Student testing, school choice, curricular reform, teacher evaluation, merit pay procedures, career ladders, and funding a variety of initiatives were considered as methods for improving the educational system (Finn, 1991; Vergari, 2007; Weber & McBee, 1990; Yeh, 2007). Teachers are becoming engaged in activities outside of direct teaching as part of their professional responsibilities. This increased responsibility and

more active involvement in the educational process helps to cultivate the perception of teachers as educational leaders. The concept of teacher leadership thus becomes associated as one method for obtaining improvements in instructional practice and student achievement.

Background of the Study

Public education in North Carolina faced similar pressures to those described above. Standardized testing, a focus on test scores for all students and student groups, the elimination of achievement gaps, and high school graduation rate comparisons all became topics of conversation in professional, political, and public arenas. Individual schools received recognition designations and teachers received bonuses based on student testing performance. Annual individual school report cards were created to provide the public with information about student test scores, student discipline data, teacher certification, and teacher experience levels. North Carolina established a biennial Teachers' Working Conditions Survey where teachers provided feedback on a wide range of topics outside of standard teaching responsibilities: community engagement and support, teacher leadership, school leadership, managing student conduct, use of time, professional development, facilities and resources, instructional practices and support, and new teacher support. Survey results are then shared publically by school for review. Appendix A lists the survey questions related to teacher leadership.

Prior to the 2010-2011 school year, teachers in North Carolina were evaluated using a system based primarily on administrator observations of teaching performance in classroom instruction. Teachers were measured on eight major functions which evaluated how well a

teacher could present instructional content and manage the operation of a classroom during a lesson. It was a mastery model which measured whether teachers were proficient or not. This system was in place for an entire generation of teachers and did not capture the growing expectations placed upon teachers.

In the 2010-2011 school year, the state of North Carolina implemented a vastly different new teacher evaluation system. The new system was based on a new vision representing shifts in North Carolina and set forth what teachers needed to know and do to be able to teach students in the 21st Century. While still containing an administrative observation component, the new appraisal system moved away from the old classroom instruction centric measures in favor of a more global approach to teacher responsibilities. In addition to considering a teacher's ability to implement an effective classroom lesson, the new evaluation system sought to consider and evaluate teacher activities outside of classroom instruction. Teachers were tasked with gathering artifacts demonstrating their participation and abilities in these different areas. This new model was more aligned with the changing roles of teachers. The new appraisal system was designed to be a growth model and featured five teacher standards (Appendix B). Under this perspective, continuous teacher improvement is the goal.

The new model evaluated teachers on activities outside of the classroom setting for the first time. The first standard rated teachers on demonstrating leadership. The standard focused on the idea of teacher leadership in classroom, school, and other professional settings. The teacher leadership standard was comprised of five elements: A. teachers lead in

their classrooms; B. teachers demonstrate leadership in the school; C. teachers lead the teaching profession; D. teachers advocate for schools and students; and E. teachers demonstrate high ethical standards (*North Carolina teacher evaluation process*, 2009). For the first time, teachers were evaluated on professional activities in addition to classroom instruction. For teachers accustomed to the old teacher evaluation system and new teachers wishing to improve, this new approach was very different and presented the question, what is teacher leadership and how is it developed?

Statement of the Problem

The phrase “teacher leadership” is a very idiosyncratic term with varied usage which makes it difficult to define. The phrase is used to describe a variety of roles and activities in this realm. Resource provider, instructional specialist, curriculum specialist, classroom supporter, learning facilitator, mentor, school leader, and data coach are some of the roles attributed to teacher leadership (Harrison & Killion, 2007). The development of teachers performing these roles illustrates the increased responsibilities of teachers in the present educational environment. Teacher leadership roles range from formal ones such as membership on a school committee or serving as an assigned mentor to another teacher to more informal ones such as sharing lesson materials and incorporating new professional learning into instructional practice (Darling-Hammond, Bullmaster, & Cobb, 1995; York-Barr & Duke, 2004). The phrase teacher leadership is used to describe activities teachers engage in to affect change. Leading instructional improvements, advocating for students and the teaching profession, and making decisions in school governance are examples of teacher

leadership activities which do not require appointment to a formal leadership role. The phrase teacher leadership is used to conceptualize the nature of teacher involvement in different school organizational structures. Teachers are involved in the operation of a school in numerous ways. They assist with decision making, policy adoption, professional development, school improvement, and communication.

Since the phrase teacher leadership is used to describe a wide range of roles, activities, and structures, it is used as the label for a wide variety of school phenomena. This makes it difficult to define exactly what teacher leadership is and what it looks like in practice. Clarity is needed in this area so teacher leadership may be advanced as a legitimate vehicle for improving schools and the teaching profession.

Purpose of the Study

The purpose of this study was to explore the concept of teacher leadership from teachers' perceptions. The desired outcome was to reduce the multitude of definitions of teacher leadership to a more narrow set of viewpoints. This study sought to capture how teachers conceptualize teacher leadership and identify what fosters or inhibits the development of teacher leadership. The resulting findings were used to represent teachers' viewpoints and provide guidance for future decisions in policy and practice regarding teacher leadership.

Research Questions

The research questions sought to study several components of teacher leadership.

1. What do teachers believe are the essential elements of teacher leadership?

2. What fosters or inhibits the development of teacher leadership?

Definition of Terms

For the purposes of this study, the author broadly defined teacher leadership activities as any activities which take place outside of traditional teacher to student classroom instruction. This view encouraged a more inclusionary approach to data collection for this study by capturing the various nuances associated with teacher leadership.

The author created the terms success conditions, scope of influence, and role orientation to explain aspects of teacher leadership. The term success conditions contended with how teachers are selected for teacher leadership roles and how effective they are in these roles. The four conditions were the teacher's willingness to participate in teacher leadership activities, the selection process for the role, the teacher leader's leadership abilities and opportunities to practice them, and the teacher leader's personal characteristics and skills.

Scope of influence described the target audience of teacher leadership activities. The impact ranged from small to very large. It may be an individual classroom, school-wide, the community, or the entire teaching profession.

Role orientation referred to teacher leadership role typology and outcomes. Teacher leadership roles may be formal or informal; and instructional or managerial in nature. These roles make take place at any of the scope of influence contexts (classroom, school, or community / profession).

Significance of the Study

This study may be significant in a number of ways. Starting at the teacher level, this study defined teacher leadership through teacher perceptions. With an enhanced definition from this study, teachers may gain a better understanding of what it means to be a teacher leader and be able to grow their abilities in this area. This growth area directly aligns with the first standard of the North Carolina teacher evaluation system and could increase the number of teachers earning advanced ratings for this standard.

This study may be used to help in the design of teacher support programs for beginning and career teachers. Greater amounts of teacher support may be implemented to assist more teachers in engaging in teacher leadership activities. This may help with future teacher retention and teacher job satisfaction efforts. This study's definition of teacher leadership and the factors which influence its development could lead to increased teacher instructional effectiveness and contribute to a positive effect on overall student performance on academic measures. Since improvement in student performance is the desired goal of many federal and state governmental school accountability measures, teacher leadership activities may align with the overall directives for school improvement.

This study may be important for school building and central office administrators. This study helped to conceptualize how teachers define teacher leadership. The findings of this study may help administrators promote teacher leadership responsibilities across the school and provide better leadership themselves. It may help school administrators better evaluate teachers in teacher leadership domains. This information will be helpful for

administrators to use in creating supportive school organizational structures and providing more appropriate professional development opportunities to teachers with varying levels of experience. These efforts could increase teacher participation in leadership activities in schools, school districts, and the educational profession.

Educational policy makers may find the information from this study helpful in designing policies in this arena. This study conceptualized how teachers define teacher leadership. This information may be used to represent teachers' viewpoints to policy makers. Teacher evaluation systems may be adjusted after consultation with the findings of this study to increase alignment between teacher perceptions and evaluative expectations. In addition, future initiatives and funding decisions regarding teacher leadership at the district, state, and national levels may be influenced by the results of this study.

Finally, this study sought to advance the body of knowledge in the area of teacher leadership by providing a more detailed conceptualization of what effective teacher leadership looks through the viewpoints of teachers. This front line perspective may help colleges and universities design teacher and administrator education programs which prepare future teacher and administrator practitioners for a more realistic understanding of what it means to be a teacher leader. This knowledge may promote a more career ready program graduates who are able to more quickly engage in and support teacher leadership activities and behaviors.

Overview of Research Methodology

Q-methodology was used to answer the research questions in this study by gathering and organizing teacher perceptions of what teacher leadership is. Q-methodology has been used in the social sciences to study the understanding of participants' viewpoints and beliefs (Durning, 1999; Militello & Benham, 2010). Researchers used this methodological approach to construct theories about larger populations based on the data gathered while studying individual members of the group (Brown, 1980).

Q-methodology studies have aspects which are qualitative and quantitative in nature and are carried out through five stages: 1) building a collection of statements called a concourse; 2) developing a representative sample of statements from the concourse called a Q-sample; 3) selecting participants called a P-sample; 4) facilitating data collection through card sorts called a Q-sort; and 5) analyzing and interpreting the results through factor analysis (Van Excel & De Graaf, 2005).

Organization of the Study

Chapter one provided the background of the study, statement of the problem, purpose of the study, and the study's research questions. Definitions of terms were explained and the significance of the study as it relates to various education stakeholders was described. A brief overview of the study's research methodology was given. Chapter two includes a synthesis of the research and current literature on the importance of teacher leadership, teacher leadership definitions, examples of teacher leadership practice, existing teacher leadership models, and presents a framework for studying teacher leadership. Chapter three provides a detailed

description of the methodology and methods used to answer the research questions. Chapter four presents the study's findings as a result of data collection and analysis. Chapter five contains a discussion of the study's findings in relation to the teacher leadership literature and teacher leadership framework. Study implications and suggestions for future research are also presented in chapter five.

Chapter Summary

Educational legislation over the past twenty years dramatically changed how public schools measure success. The expectation placed on schools was for all students to meet proficiency standards. Teacher leadership was increasingly mentioned as a strategy for improving instructional practice and student achievement. This was evidenced by the redesign of the North Carolina teacher evaluation system to include a standard focused on teacher leadership. The purpose of this study was to explore the concept of teacher leadership using teachers' perceptions. The desired outcome was to reduce the multitude of definitions of teacher leadership to a more narrow set of viewpoints. This study sought to capture how teachers conceptualize teacher leadership and identify what fosters or inhibits teacher leadership development. Teacher leadership activities were broadly defined in this study as any teacher activities taking place outside of direct teacher to student instruction. The additional key terms of success conditions, sphere of influence, and role orientation were defined in this chapter. Q-methodology study design was used to explore the topic of teacher leadership. This research approach is useful in understanding the viewpoints and developing theories about populations.

This study may help to advance the knowledge base around teacher leadership. This will in turn support the growth of teachers, administrators, policy makers, and teacher and administrator preparation programs in this area. Teacher leadership policies, professional development opportunities, funding priorities, and further initiatives in this area may be more aligned and contribute to increased student performance based on the findings of this study.

Chapter Two: Literature Review

Chapter Introduction

New forms of leadership are required with the increased demands placed on schools (Howey, 1988). Teacher leadership is an area of rising notoriety in the education profession and is one form of educational leadership (Katzenmeyer & Moller, 2001). However, the phrase teacher leadership is defined and used in a variety of ways in the literature (York-Barr & Duke, 2004). This makes it difficult to legitimize in the leadership field (Harris, 2003). It is described as a criterion for teacher evaluations, a means for professional development, a stop gap for programs eliminated due to limited resources, a description for any duties outside of instruction, an approach for educational reform, and more (Danielson, 2006; *North Carolina Professional Teacher Standards*, 2009; Schmoker, 2005; White, 1992). Consequently, there is a wide variety of interpretation in what teacher leadership is and how it is implemented. When the phrase “teacher leadership” is used to describe a multitude of activities and school phenomena, it is difficult to determine a coherent definition for it.

A research literature review is a systematic method for evaluating and synthesizing the work of researchers, scholars, and practitioners (Fink, 2010). The purpose of this literature review is to consolidate the relevant discoveries from the literature in an attempt to strengthen a definition for what teacher leadership is and how it is implemented. In addition, this literature review will seek to identify areas where teacher leadership benefits the educational arena. This chapter will discuss the importance of teacher leadership, how teacher leadership is conceptualized, defined, and implemented; previously created models

for understanding teacher leadership, and present a framework for exploring teacher leadership. This represents a two pronged approach which will examine how teacher leadership is defined (theory) and how it is implemented (practice) in the literature.

The Importance of Teacher Leadership

The empirical evidence for teacher leadership in the literature is mixed (Harris, 2005). This may be the result of the wide ranging definitions expressed in the literature (Appendix C). Assessments which seek to measure teacher leadership cannot be developed until greater clarity is made regarding the definition of teacher leadership (Jackson, et al., 2010). Teacher leadership can play an important role in school reform. A five year longitudinal study suggested schools with higher participation in teacher leadership activities were more likely to have instructional and student test score improvements (Smylie, Lazarus, & Brownlee-Conyers, 1996). Principals need to create a clear vision of school reform and situate the teacher leader's work within this vision (Weiner, 2011). In a study of a teacher career ladder program, the author found alignment between the formal teacher leadership roles and the instructional values of the school (Hart, 1994). The nature of teacher leadership activities is important to consider when thinking about school reform. When student learning was the focus of teacher leadership activities, influence on instruction, classroom management, and teaching practices was observed (Taylor & Bogotch, 1994; Ryan, 1999). When teacher leadership activities do not place student learning at the forefront, school reform efforts may not be as effective. In a study of teacher involvement in decision making focused on areas outside of the classroom (student evaluation, curriculum frameworks, and behavior policies),

a lack of effect on teacher practices within the classroom was observed (Griffin, 1995). A national study of teacher leaders agreed with this notion by suggesting teacher leadership was not effective for improving student performance when the leadership activities were managerial in orientation and when there was a lack of security for remaining in the leadership role (Wasley, 1991).

Collaborative approaches to professional learning such as professional learning communities can promote school change beyond individual classrooms (Gutierrez & Bryan, 2010). Professional learning communities are the best, least expensive, and most professionally rewarding means for increasing instructional practices through the sharing of information (Schmoker, 2005). Professional learning communities are able to do this through an emphasis on learning for all, collaborative culture, focus on results, assessment for learning, self-efficacy, commitment to the goal, and widespread leadership responsibilities (DuFour, 2005; DuFour, Eaker, & DuFour, 2005). The professional learning community concept relies on leadership to be widely dispersed throughout the school organization. It is imperative for leadership capacity to be developed in all staff members (DuFour, Eaker, & DuFour, 2005). Teacher leadership is an important ingredient for facilitating the growth of professional learning communities. Successful learning community construction may occur through teacher leadership activities such as constant teamwork, rotating of leadership roles, and articulation of a shared vision (Fennell, 1999). Schools with principals who are supportive of teacher leadership and seek to build shared leadership form collaborative and inclusive school cultures with higher degrees of readiness for forming professional learning

communities (Moller, 2006). Principals who provide opportunities for teachers to work in self-managed teams to improve instruction may reduce the need for close supervision and inspection of these teachers (Schmoker, 2005).

Teacher leadership can play an important role in the overall school culture and teacher retention. Teacher leadership may accomplish this through the establishment of a healthy school culture, professional development oriented toward work related difficulties related to student learning, and shared decision making by many (Moller, Childs-Bowen, & Scrivner, 2001). Joint principal and teacher leadership activities were positively associated with school effectiveness and teacher retention in a study of fifty-seven schools (Pounder, Ogawa, & Adams, 1995). In a separate study, teachers reported affinity for participation in leadership activities and did not wish to go back to fewer decision making opportunities (Weiss, Cambone, & Wyeth, 1992).

While teacher leadership in the literature is generally seen as a positive contributor for school growth, the literature does suggest some limits to its effectiveness. In a study of students and teachers, teacher leadership did not have a statistical effect on student engagement (Leithwood & Jantzi, 1999). In the same study, principal leadership was significant, but weak, on student engagement and school conditions (Leithwood & Jantzi, 1999). These results were replicated by the same researchers the following year (Leithwood & Jantzi, 2000). This suggests teacher leadership needs to be framed around instructional practice and not student engagement outcomes.

Conceptualizing Teacher Leadership

At its core, teacher leadership is a vehicle for accomplishing the multi-layered work of schools. Teacher leadership is about aligning the organization of schools around common goals and working within professional networks to improve teacher practice (Lave & Wenger, 1991; Lieberman & Grolnick, 1999; Little, 1999).

A school organizational structure which supports teacher learning should emphasize individual and collective responsibility for student achievement; organize time and teacher work responsibilities to allow teacher learning opportunities within and outside of the school; employ staff development practices which increase teachers' abilities to make well-informed selection of ideas, materials, and colleagues; conduct teacher and program evaluations in a manner consistent with teacher learning; and embrace an ethos conducive to teacher development (Little, 1999). Individual and collective teacher responsibility for student achievement and well-being provides unity of purpose and goal focus. Inquiry into student learning should be at the forefront of teacher activities and professional development (Little, 1999). To this end, teacher work should be structured in ways which provide opportunities for teaching and learning to take place for both students and teachers (Little, 1999). Teachers should develop networks which encourage the sharing of ideas which when coupled with effective professional development, allow teachers to develop sound instructional selection practices in choosing what to implement in their classrooms with their particular students (Little, 1999). Teacher and program evaluation should be structured in a way which supports and encourages teacher learning making it safer for teachers to take risks in learning new

skills while improving their teaching practice (Little, 1999). All of these organizational structures and activities must be supported by a school ethos which is supportive and makes it safe for learning to occur. Little (1999) argued these practices are at odds with traditional school organizational structures. Teacher leadership is a vehicle which may bridge the gap between traditional school structures and the implementation of these desired practices for improvement.

A second key idea for teacher leadership is the notion it exists in an environment where multiple people interact around a particular issue or goal through a professional community. Networks or professional learning communities are structures which organize the work around a particular problem or goal. Networks or communities of practice provide a venue for shared repertoire, joint enterprise, and mutual engagement (Wenger, 1999). Information may be spread rapidly and effectively among people with different levels of expertise in situations where the circulation of knowledge is possible (Lave & Wenger, 1991). In a study of over sixty networks organized for educational improvement, five key factors were noted in successful networks: a strong sense of commitment to the organization, a sense of shared purpose, a mixture of information and psychological support, an effective facilitator, and voluntary participation and equal treatment (Parker, 1977). In a separate work, other common network organizational themes advanced Parker's findings: purpose and direction; collaboration, consensus, and commitment; activities and relationships; leadership; and funding (Lieberman & Grolnick, 1999). Networks provide a venue for teaching and absorbing newcomers into a community of practice where they build expertise and become

trusted by other experienced members of the network (Lave & Wenger, 1991). Networks are formed around a common purpose or goal. However, Lieberman and Grolnick (1999) found the initial goals of network organizers provided room for further exploration through learning, teaching, shaping, and inventing. This nuance allows the network to grow, adapt, and sustain around a central priority as it develops. This ability is supported by the ability of the network to build collaboration, consensus, and commitment among its members. Strong networks are ones where great power and energy is derived from a membership with a voice in the work of the network and where professional identities are valued. The nature of the activities and relationships in networks are important to the work and success of the network. Networks which provide an opportunity for the free exchange of ideas which may then be adapted to members' individual environments contribute to the continued viability of the network. Lieberman and Grolnick (1999) suggested leadership is the key component in stimulating and keeping the network moving forward. Network leadership activities include brokering, facilitating, and keeping network values visible both onstage and behind the scenes in the development of collaborative arrangements and activities. The funding of a network plays a role in its organization and operation. Aspects of a network such as its name, priority placed on certain goals, and program evaluation directives may be requirements instituted by the organizations which provide funding to the network. The concept of teacher leadership provides a framework for how teachers interact within networks and professional learning communities.

Defining Teacher Leadership

Teacher leadership is defined in a variety of ways conceptually and empirically in the literature (Appendix C). Teacher leadership definitions may vary based on shifts in policy and educational reform goals (Little, 2003). Teacher leadership is perceived differently by teachers according to their experience, their degree, and whether the teacher holds a leadership position (Angelle & DeHart, 2011). Teacher leadership is practiced in a number of ways through formal and informal positions, roles, and channels of communication daily in schools (York-Barr & Duke, 2004). Teacher leadership may also be explored through several key factors: how the leadership role is defined by the teacher and other teachers, the teacher leader's personal capacities, and the organizational environment of the school (Frost & Harris, 2003). Table 2.1 summarizes the variations in teacher leadership definitions found in the literature at the end of this section.

Perhaps the most concrete definition of teacher leadership occurs when teachers assume additional, formal roles outside of normal classroom teaching duties. Teacher leadership has traditionally been defined as the assignment of formal roles in a hierarchical organizational structure (Fitzgerald & Gunter, 2008). In this view, teacher leadership is something which is separate from regular teaching responsibilities and is often tied to policies and initiatives created by non-teachers (Little, 2003). Examples of these roles include instructional or curriculum specialist, professional development liaison, teacher educator, teacher mentor, school committee member, data coach, and learning coach (Darling-Hammond, Bullmaster, & Cobb, 1995; Harrison & Killion, 2007). Under this

definition, teacher leadership is an additional responsibility to the job of the teacher.

Therefore, these formal roles often include additional compensation and release time from classroom teaching responsibilities (Helterbran, 2010). Finding time for this form of teacher leadership to take place is important in this view. Vail & Redick (1993) found split teaching assignments where time was divided between classroom teaching and leadership responsibilities increased the amount of teacher leadership activities undertaken. Under this view of formal roles, teacher leadership may be defined as having a specific leadership title and a designated time to perform the tasks associated with it.

Formal teacher leadership roles contend with different aspects of school operation by providing managerial support and communication links between teachers and district leaders (Doyle, 2000). Directly improving classroom instruction is not necessarily the primary goal under this definition of teacher leadership. Larger, whole school and departmental concerns are considered by teacher leaders. In one study of teacher leadership, the researchers found teachers in leadership formal roles spent more time in committee meetings than working with other teachers on instructional issues (Dierks et al., 1998). Another study examined teacher leader involvement in different school areas. The study found high amounts of involvement in budget decisions, curriculum decisions, and staffing decisions (White, 1992). Formal leadership roles may be further explored by their level of collaboration and scope of influence within a school. Departmental teacher leaders work within a department on curricular, assessment, and intradepartmental collaboration. Conversely, whole school leaders shape the professional mores, culture, and work of the school (Brooks, Scribner, &

Eferakorho, 2004). This suggests teacher leaders in formal roles may work with smaller groups of similar teachers on a narrow range of issues as a department chair or with a larger, more diverse group of staff on a school leadership team working on school-wide issues.

Increased responsibility for leadership roles arises from a willingness to commit more time, provide intensified effort, accept broader responsibilities within the community, engage in more difficult and risky tasks, and develop an increased sense of identity as a master practitioner (Lave & Wenger, 1991). Teachers rise to formal teacher leadership roles in a variety of ways. Teachers may be appointed to these positions by school administrators, nominated by peers, or self-select themselves (Helterbran, 2010). Teacher skill proficiency in certain areas helps teachers ascend to formal leadership roles. Teacher leaders often enter leadership roles with significant teaching experience, knowledge of the curriculum, strong administrative and organizational skills, time management abilities, and excellent interpersonal skills (Lieberman, Saxl, & Miles, 1988). The degree in which teachers view themselves as leaders also plays a role in obtaining formal leadership positions. In one study of a teacher leadership professional development program, teachers who viewed themselves as teacher leaders were more likely to be nominated by their peers for formal leadership positions (Ross et al., 2011). Teacher leaders may need help in engaging in leadership behaviors. A separate study found principals may not expect teachers to automatically start practicing teacher leadership even if they are interested in doing so (Angelle & DeHart, 2011). In instances where teachers did seek out leadership roles, principal supports were needed for them to fulfill their promise as leaders (Berry, Daughtrey, & Wieder, 2010).

A second conception of teacher leadership contends not with formal leadership roles, but in terms of leadership through specific teacher qualities and behaviors (Gonzales & Lambert, 2001). Under this perspective, teacher leadership is practiced not through formal roles, but through teacher behaviors. This perspective of teacher leadership focuses on a collegial, collaborative, and open approach (Huth, 2002). The literature presents a long list of behaviors which fall under this conceptualization of teacher leadership. Gonzales and Lambert (2001) suggested teacher leadership is exemplified by teachers who are effective teachers, experts in their subject matter and pedagogy, effective classroom managers, lifelong learners, and change agents who bring action to their classrooms and throughout the school. This definition of teacher leadership focuses on instructional proficiency at the classroom level. Teacher leaders viewed as expert instructors in their classrooms earn credibility based on their skills (Snell & Swanson, 2000). When teacher leadership is defined through personal characteristics, numerous examples are found in the literature. Teacher leaders are defined as collaborators, courageous risk takers, participants in school level decision making, action researchers, relationship builders, role models, innovators, hard workers, confident, flexible, perseverant, open-minded, reflectors, creative, humorists, communicators, lifelong learners, having a global perspective, and problem solvers (Danielson, 2006; Darling-Hammond, et al., 1995; Dauksas & White, 2010; Jackson, Burrus, Bassett, & Roberts, 2010; Krisko, 2001; Mackiewicz-Wolfe, 2013; Middlebrooks, 2004; Silva, Gimbert, & Nolan, 2000; Waters, Marzano, & McNulty, 2004; Wilson, 1993; York-Barr & Duke, 2004). In a Q-methodology study of fifty-six educators, six factors associated with teacher roles reflected leadership

skills: emergent leadership, teacher authority, empowerment of others, student relationships, task participation, and instructional openness (Lynch & Strodl, 1991). These leadership skills contend with representing others in decision making, promoting teachers' viewpoints, supporting and encouraging teachers and students to take more ownership in school operations, building positive relationships, and involving others in curriculum planning and implementation. A separate study presented similar conclusions regarding teacher leadership: building personal relationships, sharing leadership and decision making, accepting the leadership challenge, holding peer teachers to high standards, and dealing with conflicting demands (Ault, 2009).

Teacher leaders are strategic and reflective leaders who seek to make improvements as change agents without a formal role. Teachers exert significant influence on student performance, other teachers, and school leaders (Reeves, 2008). Teacher leaders play an important role in promoting and sustaining a vision for change (Heller & Firestone, 1995). They understand the larger perspective, think about the impact of their decisions, develop social networks of influence, and seek to make changes (Acker-Hocevar & Touchton, 1999). In one study of teachers, the most important leadership skill perceived by the participants was the ability to maintain professional relationships (Stoops, 2011). Little (1998) suggested teacher leaders are exemplars of these types of rigorous, rewarding professional relationships. When teacher leadership is defined through teacher qualities and behaviors, a teacher leadership profile may be developed.

Teacher leadership may also be defined as a targeted action process where a specific improvement or reform is the desired outcome. In this definition, teachers are the driving force in reaching a specific objective. Teacher leaders are student advocates who challenge the status quo in effort to achieve better learning outcomes (Collay, 2011; Silva, et al., 2000). In this conceptualization of teacher leadership, teachers demonstrate leadership in the specific actions they take around an improvement process. Teacher leaders use evidence and data in decision making; recognize opportunity and take the initiative in mobilizing people around a common purpose; marshal resources and take action; monitor progress and adjust the approach as conditions change; sustain the commitment of others and anticipate negativity; and contribute to a learning organization (Danielson, 2006). This teacher leadership view provides a credible professional development source for other teachers. One study suggested teachers were more likely to be influenced by the professional practices and action research of peers than journal articles and college coursework (Reeves, 2008). Teacher leaders are likely to be viewed as experts by colleagues, provide formal presentations and informal support and be approached for assistance (Brown, Fouts, & Rojan, 2001). Teacher leadership may be used to help developing teachers successfully navigate educational trends such as accountability and student results, personalization and differentiation of student learning, and digital learning needs (Reason & Reason, 2011).

Teacher leadership is also defined by the outcomes of the leadership activities. Under this definition, there are three aspects of teacher leadership: leadership of other students or other teachers, leadership of operational tasks, and leadership through decision making or

partnership (Katzenmeyer & Moller, 2001). Leadership of other students or teachers may take place in formal or informal roles such as coach, mentor, trainer, curriculum specialist, engaging and modeling new approaches, or as a leader of a study group. Operational task leadership contends with keeping the school organized and moving towards its goals through roles like department head, action researcher, or task force member (Katzenmeyer & Moller, 2001). Leadership through decision making or partnership includes membership on committees, initiating business partnerships, or involvement with parent-teacher associations (Katzenmeyer & Moller, 2001).

Given the formal and informal roles of teacher leadership, it is important to consider the nature of teacher leadership. Teachers bring expertise and credibility when it comes to making instructional leadership decisions. The idea of teacher expertise in instructional decisions is supported in the literature. Instructional leadership focuses on the behaviors of teachers as they engage in activities directly affecting the growth of students (Leithwood & Duke, 1999). Teachers have front line knowledge of classroom issues and school cultures in need of improvement (Paulu & Winters, 1998). In a study Texas principals, the principals felt teacher involvement was very important for evaluating instructional programs (Gates & Siskin, 2001).

Teacher leadership falls within four conceptions of leadership which are inclusive of both formal and informal leaders: participative leadership, leadership as an organizational quality, distributed leadership, and parallel leadership (York-Barr & Duke, 2004). Participative leadership emphasizes the decision making processes of the group where it is

believed involvement in this process will increase organizational effectiveness through democratic values (Frost & Durrant, 2003; Leithwood & Duke, 1999). In a study involving teachers at participative leadership schools, the teachers rated the benefits of involvement greater than the costs (Duke, Showers, & Imber, 1980). In a separate study of teacher leaders, the teachers perceived increased morale, knowledge of school and district operations, teacher communication within and between schools, and student motivation (White, 1992). Teacher engagement is crucial to long-term sustained school improvement efforts and helps to increase teacher retention (Frost & Durrant, 2003). In a study involving school restructuring, teacher involvement in the process resulted in positive teacher attitudes, collegial and change oriented faculty, and a student centered orientation (Ruscoe & Whitford, 1991). It is important to note the focus of the leadership activities is important for positively affecting overall school outcomes. In a study where teacher empowerment played a role in teachers' efforts to improve their sense of self-efficacy regarding their own learning, it did not directly cause increases in student achievement (Marks & Louis, 1997).

Leadership as an organizational quality contends with how leadership is encouraged and practiced within an organization. Teacher leadership provides another level of expertise to school decision-making processes. The leadership roles and methods for resource allocation throughout an organization make teacher leadership important to school organizational health (Ogawa & Bossert, 1995). Principals need to evaluate how the allocation of resources may affect teacher leader effectiveness (Weiner, 2011). Teacher leadership structures need to be supported if it is to flourish in a school organization.

Distributed leadership is a third type of leadership associated with teacher leadership. At the school level, principals are the lynchpin for teacher leadership flourishing (Helterbran, 2010). Effective principals cultivate teacher leadership by identifying key informal teacher leaders who are successful and respected, involve teacher leaders in decision making, and involve teacher leaders in school improvement and reform efforts (Whitaker, 1995). In a study of Florida teacher of the year recipients, Acker-Hocevar and Touchton (1999) found teachers with the greatest ability to affect positive change had empowering principals and school cultures. This is captured through distributed leadership. In distributed leadership, decision making must be shared between the principal and teachers for participative leadership to be successful. Principals who share responsibility with teachers as often as possible and help develop collaborative problem solving skills will develop strong distributed leadership staffs (Dauksas & White, 2010; Ghamrawi, 2010). Principals wishing to establish improvements in teaching and professional learning communities may turn to teacher leadership as a way to support these improvements (Ackerman & Mackenzie, 2006; Boykin, Scrivner, & Robbins, 2004). As a result of distributed leadership, student achievement is likely to improve when teachers are empowered to make instructional improvements (Harris, 2003).

The final leadership conception, parallel leadership, is important due to the dual leadership structures found in schools: teacher and administration. Parallel leadership is concerned with the collective action by teacher leaders and school administrators to build upon school capacity (Crowther, Kaagan, Ferguson, & Hann, 2002). This allows the two

levels of school leadership to function concurrently to benefit the school organization. An example of this concurrent action is principal responsibility for strategic leadership and resource alignment and teacher leader responsibility for improving instructional practice (Crowther, et al., 2002). Distinctions exist between teacher leadership and administrative power (Fay, 1992). Teacher leadership is about shared influence and an ability to make an impact on decision making (*Teacher leadership in high schools: How principals encourage it how teachers practice it*, 2008). Parallel leadership between principals and teacher leaders may have different dynamics. Anderson (2004) suggested three models of influence between teacher leaders and principals: buffered, interactive, and contested. In the buffered model, teacher leaders surround and isolate the principal and act as foot soldiers carrying out directives. The interactive model represents more of a participative leadership structure where the principal interacts with all staff and involves all staff in decision making opportunities. In the contested model, teacher leaders attempt to take decision making control away from the principal (Anderson, 2004). For a dual leadership structure to be successful, communication and collaboration between teachers and principals are critical for determining direction, defining roles, and decreasing organizational stress (Brooks, et al., 2004).

The combination of these types of leadership serves to build the overall leadership capacity of teacher leaders and school organizations and suggests several improvement goals: the development of all adults in the school community, achievement of steady and lasting improvement in student achievement, and the construction of schools which are sustainable organizations (Lynch & Stodl, 1991).

Table 2.1

Teacher Leadership Definitions

Researcher	Year	Teacher Leadership Definition
Fitzgerald and Gunter	2008	Traditionally defined as a formal role in a hierarchical organizational structure
Darling-Hammond, Bullmaster, and Cobb	1995	By role: mentor, teacher educator, curriculum developer, problem solver, change agent, researcher
Harrison and Killion	2007	By role: resource provider, instructional specialist, curriculum specialist, classroom supporter, learning facilitator, mentor, school leader, data coach, catalyst for change, learner
Helterbran	2010	Formal roles with additional compensation and release time from classroom teaching responsibilities
Doyle	2000	Assist with school operation by providing managerial support and communication links between teachers and district leaders
Gonzales and Lambert	2001	Leadership provided through specific teacher qualities and behaviors demonstrating instructional proficiency at the classroom level who bring action to their classrooms and throughout the school

(continued)

Table 2.1 Continued

Researcher	Year	Teacher Leadership Definition
Reeves	2008	Strategic and reflective leaders who seek to make improvements as change agents without a formal role
Jackson, Burrus, Bassett, and Roberts	2010	Personal characteristics: work ethic, teamwork, leadership, openness, vision, positive affect, risk taking
Krisko	2001	Personal attributes: intrapersonal sense, interpersonal skills, finds humor, takes risks, creative, flexible, efficacious/effective, lifelong learner
Acker-Hocevar and Touchton	1999	Development of networks of influence and seeking to make changes
Silva, Gimbert, and Nolan	2000	Navigation of school structures, nurture relationships, model professional growth, help others with change, and challenge the status quo for students
Brown, Fouts, and Rojan	2001	Provide professional development through formal presentations and informal support

(continued)

Table 2.1 Continued

Researcher	Year	Teacher Leadership Definition
Katzenmoyer and Moller	2001	Three types of leadership activities: leadership of other students and teachers, leadership of operational tasks, and leadership through decision making or partnership
York-Barr and Duke	2004	Teacher leadership is comprised of four types of leadership: participative, leadership as an organizational quality, distributed, and parallel
Leithwood and Duke	1999	Teacher expertise in instructional decisions directly affecting the growth of students

Teacher Leadership In Practice

Since the definition of teacher leadership is varied in the literature, a practical examination of how teacher leadership is implemented may provide a more complete understanding (Appendix C). This section discusses how teacher leadership is implemented and encouraged or inhibited. The literature suggests teacher leadership must be actively supported at the top of the school organization. Principals prefer active support for teacher leadership from their superintendents (Wells, Maxfield, Klocko, & Feun, 2010). In one study, districts with greater principal support had superintendents who spoke publically about teacher leadership importance, encouraged principals to develop teacher leaders, and provided teacher leader recognition (Wells, et al., 2010). Likewise, teacher leadership thrives

in school environments where teacher and principal interests in this form of leadership are publically demonstrated and honored through verbal and concrete actions (Bonduris, 2011; Crowther, et al., 2002; Jackson, et al., 2010; Lashway, 1998; Little, 1988). In a quantitative study of eighty schools, faculty trust of each other and school administration played an important role in faculty engagement in teacher leadership activities (Tschannen-Moran, 2009).

Principal understanding and support of teacher leadership may vary based on several factors. Principals tend to define teacher leadership through ideal qualities and roles; cultivate it through building capacity, and draw from their previous experiences as teacher leaders (Boyd, 2011). In a study of principal support of teacher leadership, the authors found principals with knowledge of teacher leadership and interactions with teacher leaders had a link with principal support (Mangin, 2007). In the same study, it was suggested principal levels of support for teacher leadership may be positively influenced by increasing district communications about these roles (Mangin, 2007).

Teacher leadership development programs have been created to increase leadership activities. These types of programs experience more success when the teacher leadership activities are connected to instruction and what occurs in the teachers' own classrooms (Mackiewicz-Wolfe, 2013). In a study of one cohort-based, job embedded program, the researchers found the participants entered formal leadership roles and practiced leadership activities to examine teaching skills (Ross, et al., 2011). Teacher preparation programs may also be a source for developing future teacher leaders. A study of secondary school

administrators, teachers, and students suggested teacher preparation programs which include leadership development, content knowledge, and pedagogical skills prepared candidates for future leadership roles (Middlebrooks, 2004).

Teacher leadership activities can help shift the focus from individual to communal responsibility for student learning (Ross, et al., 2011). For teacher leadership to be effective and targeted, active steps must be taken to constitute leadership teams and provide teachers with leadership roles in an environment with trust, collaboration, clear management structures, and a means for evaluating progress (Muijs & Harris, 2007; Quigley, 2011). The existence of a shared vision is important when teacher leaders engage in school-wide initiatives (DeMeulle, 1999). Skillful leaders address barriers, provide clarity, and engage the school community in continuous dialogue (Sparks, 2005). Teacher leaders take strategic actions to form study groups to enhance student learning, take ownership of school issues, and see themselves as part of the solution (Dauksas & White, 2010). In a study of six schools, teacher leaders formed learning communities to build consensus around curriculum interpretation and implementation (Fennell, 1999).

When established teacher leadership programs are not available, teacher leadership may be fostered through the careful hiring of new teachers, helping seasoned teachers see themselves and others as leaders, and modeling learning and collegiality (Helterbran, 2010). It is important for the administrators and teachers involved in the hiring process to have a clear vision of teacher leadership and the skills needed to fulfill the role. One study which examined how principals and teacher leaders viewed teacher leadership found neither group

had a clear knowledge of the prerequisite skills needed for effective teacher leaders (Weiner, 2011). Administrators should seek out teacher education programs which are aligned to widely accepted standards as a source for accomplished teaching (Lieberman, 2002). Principals wishing to identify teacher leaders on staff should look for teachers who are trustworthy and maintain confidentiality, are sensitive to the needs of others, can see beyond their own classrooms, are resourceful and persist to find solutions, admit their mistakes, and are willing to grow and change (Dauksas & White, 2010).

Professional development is a way to increase teacher leadership while also providing a benefit to all staff. Teachers learn best from other teachers rather than outside experts (Schmoker, 2005). In a study of professional development provided by teacher leaders, the authors found the participants had generally positive experiences with the content, enjoyed seeing their peers present, and fostered teacher togetherness and collaboration (Hickey & Harris, 2005). School administrators wishing to encourage the growth of teacher leaders should identify teacher strengths, match teacher strengths to professional development needs, develop professional development programs with these strengths and needs in mind, provide time for teachers to prepare, provide opportunities for teacher leaders to practice beforehand, and provide time throughout the year for collaborative follow-up opportunities (Hickey & Harris, 2005).

Programmatic initiatives are another method for developing teacher leadership practices. Mentor teaching programs, career ladder programs, and shared governance structures are examples of these endeavors undertaken in the 1980's (York-Barr & Duke,

2004). Mentoring programs match the expertise of experienced teachers with new teachers while shared governance structures provide experienced teachers with an avenue to provide input on school district policies and procedures (Hart, 1995). Shared governance structures also provide an ability to capitalize on teacher expertise for instructional, classroom, and organizational decisions (Hart, 1995). Career ladders recognize, support, and reward varying degrees of teacher expertise.

The literature suggests a number of reasons for lack of participation in teacher leadership activities. Two big obstacles to teacher leadership development are schools not being organized for teacher leadership and the need for leadership training (*Leadership for student learning: Redefining the teacher as leader*, 2001). To address these needs, school administrators must move away from a hierarchical governance structure to a shared governance structure while developing teacher team building, conflict resolution, and collaboration skills (Lashway, 1998).

The method for defining teacher leadership roles may determine the amount and effectiveness of teacher participation. When teachers are not given the opportunity to provide input in designing teacher leadership roles, they are less likely to participate in them (Brooks, et al., 2004). Conversely, if teachers see the importance in teacher leadership activities, they are more likely to engage in them (Vail & Redick, 1993). In one research review, the researchers found teachers preferred to be more active in instructional decisions than managerial decisions, but still preferred to have the ability for input in both areas (Conley, 1991).

It is important to support teacher leadership activities and understand the challenges teacher leaders face. Teacher leaders may experience stress and anxiety from increased leadership duties while maintaining teaching responsibilities (Lashway, 1998; Ovando, 1996; Smylie & Denny, 1990). Interpersonal relationships may play a role in teacher leadership participation. In a study of thirty-two teacher leaders, a lack of time and resistance from other teachers were viewed as barriers (Stoops, 2011). This finding was supported in a separate study of elementary, middle, and high school teacher leaders who reported the challenges of being viewed by colleagues as both leaders and peers (Stone, Horejs, & Lomas, 1997). In a high school study, Little (1995) reported tension rose when teacher leaders needed to exert authority over their peers. A separate study reported teacher leaders believed they made the most impact through collaboration and strong relationships with their peers (LeBlanc & Shelton, 1997). There are differences between teacher leaders and their peers in the value both groups place on certain characteristics. In a study of elementary and secondary teachers, the teacher leaders preferred decision making and administrative characteristics over the collegiality characteristics their colleagues preferred (Conley & Muncey, 1999). Successful teacher leaders are able to overcome their difficulties in these areas and navigate egalitarianism, seniority, and administrative gate keeping while performing their roles (Sanocki, 2013).

Models of Teacher Leadership

The examination of teacher leadership has led to the development of several teacher leadership models. While each model presents at least one aspect of teacher leadership, no

one model accurately captures the majority of the aspects of teacher leadership found in the literature. The models are summarized in Table 2.2 at the end of this section.

Smylie (1992) studied four areas of decision making (personnel, curriculum and instruction, staff development, and general administration) with four factors (principal-teacher working relationship, norms influencing working relationships among teachers, teachers' perceived capacity to contribute to decisions, and teachers' sense of responsibility and accountability in working with students). While Smylie's model suggested a relationship between all the factors, the principal finding of the study was the relationship teachers have with their principals had the greatest influence on teachers' willingness to participate in teacher leadership activities (Smylie, 1992). While this model sought to explain the degree in which teachers participate in leadership activities, it did not explore the differing teacher leadership roles.

A model which did consider some of the various teacher leadership roles was offered by Wallace, Nesbit, and Miller (1999). The authors examined teacher leadership through two factors: sphere of influence (classroom, school, or district level) and level of proactivity (degree in which teachers generate support from other teachers to bring about school change). The resulting Six Leadership Models for Professional Development in Science and Mathematics identified teacher leadership roles as classroom teacher, school facilitator, resource manager, instructional manager, change agent, and leadership choice (Wallace, Nesbit, & Miller, 1999). This model sought to address the various nuances in teacher leadership roles, but it did not provide any guidance in how teacher leaders develop.

An attempt to conceptualize the development of teacher leadership and influence was captured in a pyramidal model (Riel & Becker, 2008). In this model, informal, less skilled, and locally based activities were at the bottom of the pyramid and progressed upward to more outward, formal leadership activities with widespread impact. The first level was based on classroom practice where a teacher functions and learns in his or her immediate classroom. The second level consisted of teachers in the same school collaborating and sharing responsibility for student achievement. The third level involved the use of professional networks where teacher leaders interact and share ideas outside of the school building. The fourth and final level consisted of knowledge building where teacher leaders make contributions to the teaching profession on a grand scale. This model sought to describe some of the characteristics of teacher leaders, but its brevity did not capture the complexity of skills and characteristics effective teacher leaders possess.

A second developmental model explored the idea of teacher leadership progression using the lenses of role and desired activity outcomes. Silva, Gimbert, and Nolan (2000) presented a three wave model for defining teacher leadership. In the first wave of teacher leadership, the teacher implements other teacher leaders' decisions. These decisions are made through formal roles such as department heads and union representatives and serve more of a managerial purpose for increasing school operations. In the second wave, there is a greater emphasis on the instructional expertise of teacher leaders. This wave leads to the development of teachers as staff developers, mentors, and curriculum leaders. The third wave utilizes informal teacher leadership roles where teachers become leaders and influencers by

carrying out their normal duties without formal leadership positions as a means of reculturing schools. This wave emphasizes an organizational inquiry-based culture which supports collaboration and continuous job-embedded learning in school improvement activities (Henning, Trent, Engelbrecht, Robinson, & Reed, 2004). This wave also views teachers as the primary creators of school culture. In study of seventy-six principals, teacher leadership was suggested to play a major role in the professional culture of schools (*Teacher leadership in high schools: How principals encourage it how teachers practice it*, 2008). A fourth wave was proposed to further develop this model. In the fourth wave, teachers employ transformational leadership qualities which lead to the perception of them as exemplary teachers by their peers (Pounder, 2006). This type of recognition allows teachers to be viewed as teacher leaders without occupying formal leadership roles. This last wave redefines teacher leadership from a person with power through a formal role to a person in an informal role who assumes responsibility for initiating improvements in the school organization through collegial conversation (Gonzales & Lambert, 2001). This fourth wave of teacher leadership suggests teacher leadership activities may be initiated and led at a grass roots organizational level by exemplary teachers seeking to make improvements to the school community without the power of a formal leadership role.

A fifth model of teacher leadership relies on four factors to describe teacher leadership: sharing expertise, sharing leadership, supra-practitioner, and principal selection (Angelle & DeHart, 2010). Sharing expertise is concerned with teachers sharing information and instructional support with other teachers. Sharing leadership considers teachers'

willingness to engage in leadership activities and the school principal's willingness to offer leadership opportunities. Supra-practitioner describes teachers' willingness to exceed the expectations of their roles. Principal selection examines the degree in which principals control which teachers are able to participate in leadership activities. This model sought to explain the nature of teacher leadership activities, how teachers become engaged in leadership activities, and the willingness of teacher leaders to fulfill their leadership roles.

Perhaps one of the more inclusive and recent approaches to teacher leadership is the work of the Teacher Leadership Exploratory Consortium. The consortium is made up of teachers, school administrators, policy organizations, leaders in higher education, and union representatives. The consortium took a different approach to teacher leadership by seeking to develop standards for teacher leadership through the creation of seven domains which encapsulate the many aspects of teacher leadership. The resulting *Teacher Leader Model Standards* were intended to codify, promote, and support teacher leadership as a vehicle for transforming schools to meet the needs of 21st-century learners (*Teacher leader model standards*, 2012). The domains were organized into 1. fostering a collaborative culture to support educator development and student learning; 2. assessing and using research to improve practice and student learning; 3. promoting professional learning for continuous improvement; 4. facilitating improvements in instruction and student learning; 5. promoting the use of assessments and data for school and district improvement; 6. improving outreach and collaboration with families and community; and 7. advocating for student learning and the profession. This effort represented a standards based approach to teacher leadership. The

breadth of the standards represented the varied perspectives of the stakeholders involved. The first four domains are instructionally focused and mirror the research described above. These domains place value on teacher leaders working collaboratively, supporting their colleagues' development, using a systematic inquiry approach, job embedded professional development, and alignment to school goals. The final three domains assume a wider view of teacher leadership taking place outside of typical school operations. They focus on the use of assessments to drive district improvement efforts, promoting systematic collaboration with the greater community to expand student learning opportunities, and advocating for educational policy improvements. While this approach is helpful to the practitioner in identifying the activities of a teacher leader, its broad focus is indicative of the wide ranging definitions of teacher leadership found in the literature.

A standards based approach for teacher leadership has been adopted at the state level. North Carolina included teacher leadership as one of its six Professional Teaching Standards. These standards are used to evaluate North Carolina teachers annually. The teacher leadership standard is comprised of five elements: A. teachers lead in their classrooms; B. teachers demonstrate leadership in the school; C. teachers lead the teaching profession; D. teachers advocate for schools and students; and E. teachers demonstrate high ethical standards (*North Carolina teacher evaluation process*, 2009). Similar to the Teacher Leader Model Standards, the North Carolina standard represented the different levels of teacher leadership influence through its five elements. Within each element, a progression of

proficiency levels is displayed in a rubric fashion. This approach acknowledged the various spheres of influence and continuum of skills associated with teacher leadership.

Table 2.2

Teacher Leadership Models

Researcher	Year	Model Description
Smylie	1992	Studied four areas of decision making with four factors to examine teachers' willingness to engage in teacher leadership activities
Wallace, Nesbit, and Miller	1999	Used sphere of influence and level of proactivity to identify six teacher leadership roles
Riel and Baker	2008	Four level pyramidal model which sought to describe a continuum of teacher leadership activities
Silva, Gimbert, and Nolan	2000	Described the evolving nature of teacher leadership development from the implementation of others' decisions to the leading of others through organizational change
Angell and DeHart	2010	Four factor model: sharing expertise, sharing leadership, supra-practitioner, and principal selection

(continued)

Table 2.2 Continued

Researcher	Year	Model Description
Teacher Leader Model Standards	2012	Sought to codify teacher leadership through the creation of seven domains
North Carolina Teacher Evaluation Process	2009	Used a rubric to describe teacher leadership along five elements

A Framework for Defining Teacher Leadership

The models above approach teacher leadership from different perspectives and represent the varied understandings found in the literature of what teacher leadership is. The models overlap in some cases and in others, do not. Smylie (1992) and Angelle and DeHart (2010) considered the motivation and selection of teachers for participation in teacher leadership activities. Angelle and DeHart (2010) further considered personal characteristics of teacher leaders. Wallace, Nesbit, and Miller (1999) and Riel & Becker (2008) modeled teacher leadership through a scope of influence perspective. Here, teacher leaders engage in activities with varying degrees of audience sizes. They range from an individual classroom to the much greater education profession. Wallace, Nesbit, and Miller (1999), Silva, Gimbert, and Nolan (2000), and Angelle and DeHart (2010) conceptualized teacher leadership through differing leadership roles, activities, and their outcomes. *The Teacher Leader Model Standards* (2010) and *North Carolina Professional Teacher Standards* (2009) presented a standards based approach to teacher leadership through a listing of leadership behaviors.

None of these models sufficiently present a comprehensive view of teacher leadership as described in the literature. The literature and these models suggest a study of teacher leadership should have two key components: its definition and the conditions surrounding its implementation. Teacher leadership may be encouraged or restrained based on how it is implemented. Therefore, an inclusive teacher leadership framework should be an amalgamation of the literature and these models. Figure 2.1 presents a framework developed from the literature for studying teacher leadership.

Teacher leadership is defined through a combination of role and activity and refers to this study's first research question: What do teachers believe are the essential elements of teacher leadership? Role orientation and scope of influence represent the varied roles and levels of influence found with teacher leadership in the literature. They are represented by the expanding circles in the framework (Figure 2.1). Role orientation contends with the purposes and desired outcomes of teacher leadership roles. Leadership roles may be managerial or instructional in nature and formal or informal. Doyle (2000) cited teacher leadership as managerial in orientation while Gonzales and Lambert (2001) and Leithwood and Duke (1999) noted an instructional orientation. Fitzgerald and Gunter (2008) and Helterbran (2010) argued teacher leadership takes place through formal roles. Jackson, Burrus, Bassett, and Roberts (2010) and Krisko (2001) described teacher leadership through informal roles driven by the personal attributes of teacher leaders.

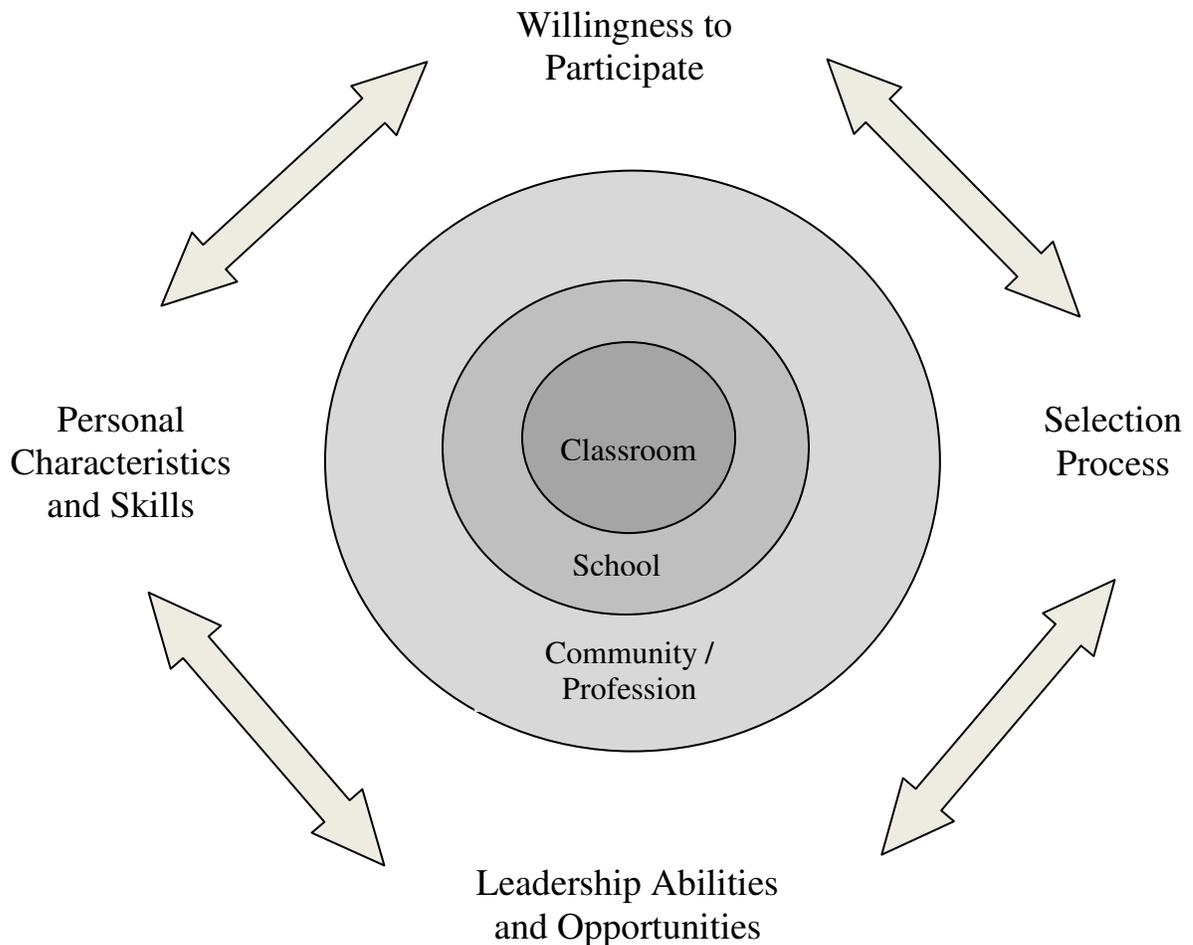


Figure 2.1. A Framework for Defining Teacher Leadership: Role Orientation, Scope of Influence, and Success Conditions.

Darling-Hammond, Bullmaster, and Cobb (1995) and Harrison and Killion (2007) suggested teacher leadership is a combination of formal and informal roles. Others define being a change agent and advocate for improvement as teacher leadership (Collay, 2011; Reeves, 2008). Teacher leadership may take place in an individual classroom, school, or community / profession settings.

Scope of influence considers the audience impacted by teacher leadership activities. The teacher leadership models of Riel and Becker (2008) and Silva, Gimbert, and Nolan (2000) represent the different teacher leadership activity audience levels. Acker-Hocevar and Touchton (1999) and Lieberman and Grolnick (1999) discussed how networks of influence within and across levels are created to support improvement efforts. Role orientation and scope of influence are represented on the framework by the circles and seek to address the multi-orientation and multi-level nature of teacher leadership.

The second component to teacher leadership considers the conditions which surround how it is implemented. The next portion of the teacher leadership framework, the success conditions, contends with how teacher leaders are selected for the leadership roles and their ability to be successful in these roles (Figure 2.1). The success conditions are represented by the content on the outside of the circles. The arrows represent the interconnectedness of the success conditions. This part of the framework considers this study's second research question: What fosters or inhibits the development of teacher leadership? The success conditions play a role in the extent of participation and the degree of success for teacher leadership actions. The four conditions are the teacher's willingness to participate in teacher leadership activities; the selection process for the role; the teacher leader's leadership abilities and opportunities to practice them; and the teacher leader's personal characteristics and skills. These four conditions influence each other in fostering or inhibiting the development of teacher leadership.

Teacher leaders may be motivated to participate in teacher leadership activities through an intrinsic desire to make improvements, advocacy for students, relationships with their principal and colleagues, or through the selection process (Pounder, 2006; Smylie, 1992; Stone, Horejs, & Lomas, 1997; Stoops, 2011). The degree to which teachers are willing to participate in leadership activities will impact the quality of the outcomes.

The nature of the selection process impacts teacher leadership. Was the teacher leader selected based on their expertise, previous leadership activities, by their colleagues, or their principal? How a teacher leader is selected could have varied results in terms of the expertise level of the leader and his or her willingness for participation in the role. The nature of the selection may also impact the degree of support a teacher leader receives from peers and the school administration (Bonduris, 2011; Crowther, et al., 2002; Jackson et al., 2010; Lashway, 1998; Little, 1988; Tschannen-Moran, 2009).

The leadership abilities of a teacher leader will contribute to the degree of success in the role. York-Barr and Duke (2004), Katzenmoyer and Moller (2001), and Silva, Gimbert, and Nolan (2000) all considered the leadership abilities needed for successful teacher leadership. The leaders' ability to garner support and align resources around specific improvements will be influenced in part by how they were selected, their willingness to participate, and their personal characteristics and skills. Opportunities to practice leadership activities must be present for teacher leadership to occur. Teachers will not be able to develop and practice their leadership skills unless school structures are in place providing opportunities to do so. Schools must be organized to provide shared governance structures

for teacher leadership to thrive (Katzenmoyer & Moller, 2001; Lashway, 1998; York-Barr & Duke, 2004).

Finally, the personal characteristics and skills of teacher leaders will have an impact on the success of teacher leadership. Teacher leaders often enter leadership roles with significant teaching experience, knowledge of the curriculum, strong administrative and organizational skills, time management abilities, and excellent interpersonal skills (Lieberman, Saxl, & Miles, 1988). Teacher leaders who are collaborators, relationship builders, role models, innovators, hard workers, confident, flexible, perseverant, open-minded, humorists, communicators, have a global perspective, and are problem solvers will be more likely to experience success (Danielson, 2006; Darling-Hammond, et al., 1995; Dauksas & White, 2010; Jackson, Burrus, Bassett, & Roberts, 2010; Krisko, 2001; Mackiewicz-Wolfe, 2013; Middlebrooks, 2004; Silva, Gimbert, & Nolan, 2000; Wilson, 1993; York-Barr & Duke, 2004). Teacher leaders with strong personal characteristics and skills may also have strong leadership abilities which make them preferred and willing candidates for selection to teacher leadership roles.

Chapter Summary

Teacher leadership may be the basis for school improvement in the future. As experts in the field of education, teacher leaders are uniquely qualified at identifying learning difficulties and seeking solutions, providing professional development to developing colleagues, and providing guidance to the school community. When properly supported by school administration, teacher leadership may help construct a healthy school climate and an

aligned learning community focused on improving student achievement. Teacher leadership may support teacher retention efforts for effective teachers by giving teachers a voice in decision making, providing career advancement options, and giving opportunities for professional growth. In a time where increased accountability demands are being placed on schools and teachers, the development of effective teacher leaders may be an important answer for positively affecting school performance.

Teacher leadership may provide some additional benefits to the educational environment. It provides a structure for instructional and student study. It may increase teacher ownership of the school community and increase teachers' willingness to assume communal responsibility for school issues. Finally, teacher leadership may contribute to the overall school culture and assist in teacher retention by giving teachers more of a role in the operation of the school.

The concept of teacher leadership may be broadly defined as a way to assist with school organization and provide a framework for participation in professional networks in an effort to improve teaching practices and student achievement. Specific teacher leadership activities are defined in a variety of ways in the literature. Traditionally, teacher leadership consists of holding formal roles where teachers are given additional responsibilities outside of their normal teaching duties. These formal roles are sometimes created by policymakers, have more of a managerial focus, and do not have a direct impact on classroom instruction. A second definition of teacher leadership examines teacher leadership through informal roles and teacher behaviors. This perspective presents teacher leadership from a grassroots level

where teacher leaders are considered experts in their classrooms, have positive relationship building skills, and operate as change agents. Teacher leadership may be viewed as a developmental model where teacher leaders practice leadership through formal roles before advancing to informal roles while still exerting influence. The literature also examines teacher leadership through forms of leadership: participative, organizational, distributed, and parallel. This approach seeks to explain the unique demands of teacher leadership in school organizational culture.

Lacking a clear definition of teacher leadership, an understanding of it may be gathered by an analysis of how it is implemented and supported. In order to be successful, teacher leadership must be supported by school administration in active, open ways. Teacher leadership is cultivated in different ways. Specific leadership and teacher preparation programs seek to develop future leaders. Job embedded activities such as professional development opportunities and special committees are used to develop teacher leadership.

Teacher leadership has several key components which should be considered in its study. Teacher leadership is an organizational and interpersonal concept. The scope and nature of the activities teacher leaders engage in is important. Collaborative, focused efforts toward a specific goal of improving student achievement should be at the core. Teacher leaders acting in a variety of informal and formal roles are organizers and change agents who build support, marshal resources, and guide other teachers in an aligned manner. Teacher leaders are communicators who share expertise and promote instructional improvements with their colleagues on a variety of levels. Teacher leaders use a variety of leadership styles to

accomplish their goals. Teacher leaders go through a development process where they gain credibility and recognition through their own teaching proficiency and relationship building. Similarly, there is a progression in scopes of influence. Teacher leaders may progress from a single classroom or grade level of influence to activities which influence the entire teaching profession on district, state, or national levels.

Several models have been created to describe teacher leadership. However, due to the complexity of teacher leadership in the literature, each model has gaps. The literature and these models suggest a study of teacher leadership should have two key facets: its definition and how it is supported through implementation. A framework for defining teacher leadership was presented using role orientation, scope of influence, and success conditions for teacher leadership. This framework served as a guiding lens for this teacher leadership study.

Chapter three will provide details regarding study methodology. The development of the concourse theory and Q-sample will be shared. Participant selection procedures will be explained. Information regarding data collection and analysis will be presented. Finally, other study methodology issues will be discussed.

Chapter Three: Methodology

Chapter Introduction

The purpose of this study was to understand teachers' perceptions of the essential elements of teacher leadership and to explore the factors which foster or inhibit its development. Q-methodology research design was used as the primary tool for collecting data. This chapter will explain Q-methodology and the methods, data collection, and analysis procedures used in this study.

Q-Methodology

William Stephenson developed Q-methodology in 1935 as a mixed methods approach for scientifically studying and quantifying human subjectivity (McKeown & Thomas, 1988). It is an approach which allows a researcher to study and quantify participant perceptions through factor analysis (Watts & Stenner, 2012). Q-methodology has been used in the social sciences to study the understanding of participants' viewpoints and beliefs (Durning, 1999; Militello & Benham, 2010). Q-methodology was used in this study to answer the research questions by gathering and organizing teacher perceptions of what teacher leadership is and the factors which influence its development. Perceptions are subjective impressions people use to describe their points of view. Q-methodology design makes it difficult for any viewpoint to be missed in analysis (Brown, 2006). Since teacher leadership is an idiosyncratic term with a variety of definitions, Q-methodology is an ideal method to guide this study.

Q-methodology studies have aspects which are qualitative and quantitative in nature and are carried out through five stages: 1) building a collection of statements called a concourse; 2) developing a representative sample of statements from the concourse called a Q-sample; 3) selecting participants called a P-sample; 4) facilitating data collection through card sorts called a Q-sort; and 5) analyzing and interpreting the results through factor analysis (Van Excel & De Graaf, 2005).

Concourse Theory Used to Develop the Q-Sample

In Q-methodology, the concourse theory is a collection of subjective statements focused on the topic of study. The statements may be gathered from many sources such as books, journals, interviews, media reports, and other documents. For this study, the concourse theory developed from a literature review and brief interviews for a total of one hundred thirty-five statements. The statements were reviewed and duplicate statements from multiple sources were combined with the sources noted to create the concourse theory table in Appendix D. This process resulted in fifty-seven statements. Stratified, purposeful sampling provides the researcher with the opportunity to represent subgroups (Creswell, 2007). Elementary teachers and administrators were asked to define what the phrase “teacher leadership” meant to them. In an effort to capture a broad perspective, the researcher approached respondents with a variety of experience levels and professional responsibilities. The teachers and administrators had varying levels of professional experience ranging from probationary (less than four years of experience) to retirees. The teachers surveyed occupied a variety of teaching roles including classroom, academically gifted, English as a Second

Language, special education, and physical education. Fourteen statements were collected until data saturation was reached when no new definitions were collected.

It is not feasible or practical for the participants to sort all of the statements in the concourse. The Q-sample is the collection of statements presented to the study participants during the Q-sort phase of data collection. It is therefore important to make sure the statements selected for the Q-sample are representative of the entire concourse. To develop the Q-sample, the concourse statements were reviewed for alignment with the research questions; and for similarity and clarity.

The research questions for this study were:

1. What do teachers believe are the essential elements of teacher leadership?
2. What fosters or inhibits the development of teacher leadership?

The Q-sort explored the first research question by having the participants sort the Q-sample statements representing elements of teacher leadership. Procedures were implemented to ensure the Q-sample was representative of the varied definitions of teacher leadership. The researcher printed each statement of the concourse (Appendix D), cut them out, and spread them out on a table. The researcher grouped the statements by common teacher leadership definition themes to check for representativeness. The themes identified were formality of role, providing support, instruction, improvement efforts, teacher leader characteristics, targeted action, decision making, outcomes, principal's role, and selection. These themes were mirrored in the literature review and were supported by the interviews completed while

building the concourse. The second research question was explored through a questionnaire participants completed after the Q-sort and through post-sort interviews.

The researcher then reviewed the concourse theory statements for similarity to one another (Appendix D). Statements which were similar to another were either rewritten into one statement or only one of the statements was included in the Q-sample. For example, statement 15: “Teacher leadership is the ability to develop positive relationships” was compared to statement 33: “Teacher leadership is having excellent interpersonal skills.” In this case, the author decided to include statement 33 in the Q-sample as it was a little broader in describing the concept of interpersonal activities within the teacher leader characteristics theme.

The concourse statements were then reviewed for clarity. Statements were reviewed and rewritten as needed to assist the participants in understanding them. For example, statement 1 originally stated, “Teacher leadership is having a titled position in a school’s organizational structure.” This statement was rewritten to say, “Teacher leadership is having a titled leadership position.”

Following these steps, the Q-sample of forty-two statements was selected. Triangulation may be used to strengthen validity and reliability issues in research studies (Merriam, 1995). Q-sample statement selection was supported through the triangulation of the interview statements with the literature review findings and teacher statement feedback. To test the clarity and representativeness of the Q-sample, the researcher asked four teachers for feedback on the Q-sample statements. One teacher from each of the following experience

ranges was approached: 0-4 years, 5-9 years, 10-14 years, and 15 or greater years. The teachers read each statement and were asked to answer the four questions listed below.

1. Is the wording in the statements clear? If not, what changes do you suggest?
2. Are there any statements that are similar in nature and should be combined?
3. Are there any statements that you would remove from the list?
4. Are there any statements that you would add to the list?

The teachers suggested several changes to the Q-sample statements presented to them. Teachers 1, 3, and 4 all expressed a desire for Q-sample statement 15, “Teacher leadership is good classroom management,” to be reworded. The revised statement reads “Teacher leadership is having a well-run classroom with strong classroom management.” All four teachers commented on Q-sample statement 25. It originally read “Significant teaching experience is required for teacher leadership.” While they all felt teaching experience is necessary for teacher leadership, they felt the word “significant” should be removed as teachers with little teaching experience may engage successfully in teacher leadership activities. The remaining Q-sample statements were accepted by the four teachers. The teachers did not feel any statement should be removed from the list. They also commented on the comprehensiveness of the statements and did not feel additional statements needed to be added to the Q-sample. The resulting Q-sample statements are listed in Table 3.1.

Table 3.1
Q-Sample Statement Cards

No.	Statement	Source	Theme(s)
1	Teacher leadership is holding a titled leadership position	Fitzgerald & Gunter, 2008 Interviews 3, 9	Formality of Role
2	Teacher leadership is being a mentor to another teacher	Gonzales & Lambert, 2001 Helterbran, 2010 Darling-Hammond, Bullmaster, & Cobb, 1995 Katzenmeyer & Moller, 2001	Providing Support Formality of Role
3	Teacher leadership is about developing curriculum	Darling-Hammond, Bullmaster, & Cobb, 1995 Katzenmeyer & Moller, 2001	Instruction
4	Teacher leadership is being a change agent	Darling-Hammond, Bullmaster, & Cobb, 1995 Gonzales & Lambert, 2001 Danielson, 2006	Improvement Efforts Formality of Role
5	Teacher leadership is being an exemplary teacher	Gonzales & Lambert, 2001 Pounder, 2006 Lieberman, Saxl, & Miles, 1988 Katzenmeyer & Moller, 2001 Interviews 7, 8, 14	Teacher Leader Characteristics
6	Teacher leadership occurs outside of teaching responsibilities	Helterbran, 2010 Little, 2003	Setting
7	Teacher leadership is communication between teachers and district leaders	Doyle, 2000	Targeted Actions

(continued)

Table 3.1 Continued

No.	Statement	Source	Theme(s)
8	Teacher leadership is leading improvements without a holding leadership position	Reeves, 2008 Pounder, 2006 Interview 11	Formality of Role Improvement Efforts
9	Teacher leadership is having a high work ethic	Jackson et al., 2010	Teacher Leader Characteristics
10	Teacher leadership is risk taking	Jackson et al., 2010 Dauksas & White, 2010	Teacher Leader Characteristics
11	Teacher leadership is being open to new ideas and approaches	Jackson et al., 2010 Lynch & Strodl, 1991 Katzenmeyer & Moller, 2001	Teacher Leader Characteristics
12	Teacher leadership means being a team player	Jackson et al., 2010 Interview 9	Teacher Leader Characteristics
13	Teacher leadership is providing professional development	Brown, Fouts, & Rojan, 2001 Harrison & Killion, 2007 Hickey & Harris, 2005 Interviews 2, 3, 4, 5, 9	Providing Support
14	Teacher leadership is having shared responsibility with school administration for making school-wide decisions	York-Barr & Duke, 2004 Childs-Bowen & Scrivner, 2001 Ault, 2009 Katzenmeyer & Moller, 2001 Anderson, 2004 Interviews 1, 6	Decision Making
15	Teacher leadership is having a well-run classroom with strong classroom management	Ryan, 1999 Interviews 2, 10, 14	Teacher Leader Characteristics Setting

(continued)

Table 3.1 Continued

No.	Statement	Source	Theme(s)
16	Teacher leadership is important for professional learning communities	Fennell, 1999 Danielson, 2006 Ackerman & Mackenzie, 2006 Boykin, Scrivner, & Robbins, 2004	Outcomes
17	Teacher leadership is about forming collaborative school cultures	Moller, 2006 Silva, Gimbert, & Nolan, 2000 Teacher Leader Model Standards, 2012 Interviews 9, 13	Targeted Actions
18	Teacher leadership is being able to organize and lead others on a particular issue	Lieberman & Grolnick, 1999 Ault, 2009 Danielson, 2006 Interview 13, 14	Improvement Efforts
19	Teacher leadership is participating in budget decisions	White, 1992	Decision Making
20	Teacher leadership is participating in staffing decisions	White, 1992	Decision Making
21	Teacher leadership positions are appointed by the principal	Helterbran, 2010	Selection
22	Teacher leadership positions are appointed by peers	Helterbran, 2010	Selection
23	Teacher leadership positions are self-appointed by teachers	Helterbran, 2010	Selection

(continued)

Table 3.1 Continued

No.	Statement	Source	Theme(s)
24	Teacher leadership is having excellent interpersonal skills	Lieberman, Saxl, & Miles, 1988 Krisko, 2001	Teacher Leader Characteristics
25	Teaching experience is required for teacher leadership	Lieberman, Saxl, & Miles, 1988	Teacher Leader Characteristics
26	Teacher leadership is promoting and sustaining a vision for change	Heller & Firestone, 1995 Danielson, 2006	Improvement Efforts
27	Teacher leadership is challenging the status quo for better student learning outcomes	Collay, 2011 Silva, Gimbert, & Nolan, 2000	Instruction Improvement Efforts Targeted Actions
28	Teacher leadership is conducting action research	Katzenmeyer & Moller, 2001 Teacher Leader Model Standards, 2012	Targeted Actions
29	Teacher leadership is improving instructional practice	Crowther et al., 2002	Instruction
30	Teacher leadership is making instructional decisions	Leithwood & Duke, 1999	Decision Making
31	Teacher leadership is being motivated to keep learning	Dauksas & White, 2010 Interviews 2, 3, 4, 5, 8, 9	Teacher Leader Characteristics
32	Teacher leadership is providing outreach and collaboration with families and the community	Teacher Leader Model Standards, 2012	Targeted Actions Setting

(continued)

Table 3.1 Continued

No.	Statement	Source	Theme(s)
33	Teacher leadership is advocating for educational policy improvements	Teacher Leader Model Standards, 2012	Targeted Actions Setting
34	Teacher leadership is being a role model for others	Gonzales & Lambert, 2001 York-Barr & Duke, 2004 Interviews 7, 8	Teacher Leader Characteristics Formality of Role
35	Teacher leadership is helping to implement decisions made by others	Pounder, 2006 Anderson, 2004	Decision Making
36	Teacher leadership is having a broader perspective and understanding the impact of decisions	Acker-Hocevar & Touchton, 1999	Teacher Leader Characteristics
37	Teacher leadership is using data as the basis for decision making	Danielson, 2006 Teacher Leader Model Standards, 2012 Interview 13	Decision Making
38	Teacher leadership needs to be supported by the principal	Weiner, 2011 Acker-Hocevar & Touchton, 1999 Wells et al., 2010	Principal's Role
39	Teacher leadership shifts responsibility for student learning from individual to communal responsibility	Ross et al., 2011	Outcomes

(continued)

Table 3.1 Continued

No.	Statement	Source	Theme(s)
39	Teacher leadership shifts responsibility for student learning from individual to communal responsibility	Ross et al., 2011	Outcomes
40	Teacher leadership is something all teachers can engage in	Teacher Leader Model Standards, 2012 North Carolina Teacher Evaluation Process, 2009	Improvement Efforts Instruction Targeted Actions
41	Teacher leadership is about demonstrating high ethical standards	North Carolina Teacher Evaluation Process, 2009	Teacher Leader Characteristics
42	Teacher leadership is having expertise in subject matter and pedagogy	Gonzales & Lambert, 2001 Pounder, 2006 Lieberman, Saxl, & Miles, 1988 Katzenmeyer & Moller, 2001	Teacher Leader Characteristics

The Q-sample statements were each written on a business size card and presented to the study participants during the Q-sort. Each card had a unique identification number written on it for recording its location in each participant's Q-sort.

Participants: P-Sample Selection

Since the research questions for this study focused on teachers' perceptions of the essential elements of teacher leadership and the conditions which affect its development, the participants, or P-sample, for this study were teachers. Q-methodology studies seek to establish the existence of particular viewpoints, explain them, and compare them (Brown, 1980). Large numbers of participants are not required for a quality Q-methodology study

(Watts & Stenner, 2012). Forty to sixty participants are a common guideline in the literature. However, some Q-methodology researchers suggest the number of participants may be smaller than the Q-sample and still provide good study findings (Watts & Stenner, 2012). In this study, forty-three teachers participated in the Q-sort.

Q-methodology study participants are selected based on their ability to have a viewpoint on the topic of study while avoiding a homogeneous sample (Watts & Stenner, 2012). Teacher leadership is perceived differently by teachers according to their experience, their level of degree attainment, and whether the teacher holds a leadership position (Angelle & DeHart, 2011). Teachers with a variety of experience levels and professional responsibilities were recruited for this study. The nature of teacher responsibilities and activities vary by school level (elementary, middle, and high). This presents the possibility where the essential elements of teacher leadership may be similar at one level, but differ from another. Consequently, a study which seeks to identify the essential elements of teacher leadership may need to analyze the data by level to reach a clearer definition. To address this issue, this study focused on teachers at the elementary level.

Convenience sampling is used to quickly gain access to participants while saving time, money, and effort (Miles & Huberman, 1994). Strategic, non-random sampling techniques were used to recruit the P-sample. The researcher's school district is one of the largest in a southern state with over one hundred fifty thousand students and over one hundred elementary schools. This population contains teachers with a variety of experience levels and teaching responsibilities. The researcher used connections with other elementary

school administrators in the researcher's school district to approach teachers for inclusion in this study.

Data Collection Overview

Data collection for this study took place in two phases. In the first phase, the Q-sort, study participants sorted the Q-sample cards and completed a post-sort questionnaire. The data was analyzed using PQMethod (version 2.35), a statistical program, to identify factors for study. In the second phase, post-sort interviews, the researcher interviewed selected participants based on Phase I data analysis to build upon the results of the Q-sort. The interviews were recorded using a digital recording device and analyzed. Specific information regarding data collection and analysis for both phases may be found in the next sections of this chapter.

Data Collection: Phase I – The Q-Sort

In the first phase of data collection, the Q-sort, each participant was given the stack of business size cards containing the Q-sample. Each card had one statement written on it. Each card also had a unique identification number written on it. Prior to sorting, each participant received and signed a consent form (Appendix E). An identification number was written on the consent form. This same number was written on the post-sort questionnaire to match the participant with his or her sort. Participants were given written instructions for completing the Q-sort (Appendix F). Participants were then asked to place each card in a specified Q-sort distribution grid (Figure 3.1). Participants were given as much time as they needed to complete the Q-sort. When the participants finished sorting the cards, they recorded each

card's location on a paper copy of the Q-sort distribution grid using the identification number written on the card (Appendix F).

Following the Q-sort, participants were asked to complete a written questionnaire to explain their rationale for card placement under the columns (“Strongly Disagree -4” to “Strongly Agree +4”) on the distribution grid (Figure 3.1). Participants had an opportunity to identify any important teacher leadership statements they felt were missing from the Q-sample cards and where they would place the statement in the Q-sort. This step helped to further reach data saturation. Additional questions were used to obtain a deeper understanding of participants' perceptions, backgrounds, and their experiences with teacher leadership (Appendix F).

was created to represent how similarly participants sorted the cards. PQMethod identified eight factors to explain the study variance. Eigenvalues describe a factor's statistical strength and explanatory power and were used to assist in identifying useful factors for further exploration (Watts & Stenner, 2012). The number of participants loading significantly on each factor was examined. Based on this information, three factors were selected for study.

Factor rotation analysis was applied to the data set. Factor rotation helps the researcher to use the Q-sorts to create a representative estimate of each factor's viewpoint (Watts & Stenner, 2012). The varimax method for factor rotation was used. Varimax factor rotation is objective, reliable, and is the preferable choice if the majority of viewpoints of the group are a priority (Watts & Stenner, 2012). Q-sorts which load significantly on a specific factor occur because they show similar sorting patterns to other Q-sorts (Watts & Stenner, 2012). The significance level for this study was at the 99% confidence interval. The standard error equation was $1/\sqrt{N}$ where N equaled the total number of statements (42). The significance level at the 99% confidence interval equaled 0.3981 and was determined by multiplying the standard error by 2.58. The standard deviation was $p < .01$. Z-scores were determined to create a model Q-sort for each of the three studied factors while illustrating high positive and high negative statements. This provided a method for using the participants' viewpoints to understand each factor. This study sought to identify the essential elements of teacher leadership so it was important to consider the data from this group perspective.

Data Collection: Phase II – Post-Sort Interviews

The second phase of data collection sought to support and build upon the quantitative statistical results gathered during Phase I through the addition of qualitative data. Participants were selected for post-sort interviews based on the Phase I factor analysis. Higher loadings suggest a closer approximation of the particular factor's viewpoint with loadings below 0.6000 considered a cut-off point for factor estimative value (Watts & Stenner, 2012). Participants loading greater than 0.6000 on a specific factor of study were contacted for Phase II qualitative data collection. Five individual or focus group interviews were conducted. All participants in each interview significantly loaded on the same factor. The purpose of the interviews was to help the researcher understand the participants' viewpoints as expressed in the Q-sorts. A second purpose of the interview was explore the second research question, what fosters or inhibits the development of teacher leadership? Qualitative interviews may be structured where specific questions are asked or unstructured where the interview is more like a conversation (Bogdan & Biklen, 2007). The researcher used a moderately structured interview approach where a list of questions was prepared prior to the interview (Appendix G). However, additional follow-up questions were asked based on the interviewees' responses. The model sort for the factor was presented at the start of each interview. A model sort is a statistical representation of a factor's viewpoint and displays the statement cards in the distribution grid. Model sorts will be discussed further in chapter four. The participants were asked to explain their thinking with regard to how they sorted the statement cards during the Q-sort and to share their perceptions regarding what encourages or

restrains the development of teacher leadership. Following each interview, each participant was asked to create the cover art and title for a book they would write about teacher leadership based upon their viewpoint. After completing their cover art, the participants were asked to explain what they created and why they included it. This activity assisted with triangulation as it provided the researcher with a third method for confirming what the participants considered to be the essential elements of teacher leadership. Cover art examples for each factor are found in Appendix H.

Data Analysis: Phase II

Data analysis was undertaken based on the research questions and the framework for defining teacher leadership presented in chapter two (Figure 2.1). Patterns may be determined when they are observed to occur across data points (LeCompte, 2000). Similar interview statements were looked for to support the factor's viewpoint of teacher leadership. Data analysis while continuing to collect data helped the researcher to identify potential gaps with respect to answering the research questions and to adjust data collection accordingly. This approach led to data saturation where the continuing analysis confirmed previous findings (Miles & Huberman, 1994).

Study findings and interpretations which come from multiple data sources are stronger than those from fewer data sources (Yin, 2011). The quantitative data analysis from Phase I combined with the qualitative data analysis from Phase II formed the findings of this study.

Subjectivity Statement

A researcher's background and experiences often shape how a study may be interpreted. Sharing this information provides context to how the researcher approaches and describes the information garnered. This subjectivity statement provides specific details regarding the researcher's experiences with teacher leadership.

Prior to becoming a teacher, the researcher earned a Bachelor of Science degree in Elementary and Special Education and Master of Arts degree in Literacy Instruction. The researcher began his career teaching first grade at a large, suburban elementary school of approximately six hundred students in one of the largest school districts in a southern state. During his first year, he engaged in formal and informal teacher leadership roles. Formally, he served as a member of several school committees in addition to his teaching responsibilities. Informally, the researcher and some of the other first grade teachers met weekly to share ideas and plan upcoming instructional units and lessons. The first grade team was also a source of support in solving grade level challenges.

Following his first year of teaching, the author transferred to a smaller, urban elementary school of approximately three hundred students in the same district. This school was brand new and the researcher transferred at the suggestion of the principal who was also moving to the new school. The new school was formed with strong staff based management and a high degree of collaboration. School-wide decisions were often made not by the school's administrators, but by the teachers. Teachers were expected to work closely with their colleagues on their grade level and throughout the school to plan and implement

engaging, instructional lessons. Parents and students were actively encouraged to become involved in the educational process through an open door visitation policy, a volunteering requirement, frequent parent-teacher conferences, and personalized education plans for all students. Given the small size and limited personnel resources of the school, school staff needed to participate in a variety of activities outside of normal teaching responsibilities. For example, teachers needed to fill formal support roles such as technology contact, literacy contact, mentor teacher, and grant writer.

While teaching at the school, the author taught a kindergarten and first grade multi-age class, first grade, third grade, and was the Instructional Resource Teacher (provider of instructional support to other teachers). The author also completed the school district's mentor teacher training program and earned National Board Certification. The researcher was selected to join a Master of School Administration cohort degree program sponsored by the school district. Members of this cohort were teachers selected by the school district for training to become future school administrators. Following graduation, the researcher was appointed assistant principal at the school before being named principal there three years later.

The researcher has had a variety of experiences with teacher leadership activities and is a proponent for them. He believes they may be invaluable in building teacher capacity as instructional practitioners and champions of education. He further believes teacher leadership may greatly increase a school organization's ability to adapt and improve. The author's personal teacher leadership experiences have ranged from formal roles to informal ones. The

outcomes of these activities have been varied. They have been instructional, operational, and managerial in nature. Some teacher leadership activities the author engaged in were specifically designed to improve student achievement. Others were undertaken to establish the school's vision, set policy, and guide the operation of the school. Some activities were managerial in nature. The author believes participation in teacher leadership activities helped him to become a better practitioner and develop a broader perspective on schooling.

When the North Carolina Department of Public Instruction decided to revamp its teacher evaluation tool, it created a standard for teacher leadership. As the school principal, the author was tasked with presenting the new evaluation system to the school's teachers and then evaluating them using it. It was through these professional development sessions, teacher discussions, subsequent evaluations, and the researcher's own previous experiences which lead the researcher to notice far-reaching and varied viewpoints regarding the definition of teacher leadership and what it looks like in practice. The author became further intrigued how teacher leadership develops or is restrained based on its wide-ranging description and implementation. The author felt further exploration and clarity was needed in this area.

Ethical Issues

Human participants were used in this study. Participants were asked to sort cards based on their viewpoint of what teacher leadership is and answer questions about what fosters or inhibits teacher leadership. There were minimal risks for participation in this study. The steps below provide information on how the participants were protected.

- The study was submitted to the Institutional Review Board at North Carolina State University for approval prior to any research being conducted.
- The study was submitted to the researcher's school district for approval prior to initiating the study.
- Participants signed an informed consent letter before participating in the study (Appendix E).
- Participants were able to end their participation in the Q-sort or interviews at any time. They were able to withdraw from the study at any time.
- All data was coded to remove names and identifying participant information.
- All data was maintained on a password protected computer only available to the researcher. Access to any data back-ups using an external storage device were kept in a locked filing cabinet only accessible to the researcher.
- All printed materials were kept in a locked filing cabinet only accessible to the researcher.

Study Limitations

Researchers may use Q-methodology to construct theories about larger populations based on the data gathered while studying individual members of the group (Brown, 1980). However, this must be done cautiously. This study was limited by the small number of participants, non-random selection process, and the small geographic area the P-sample was drawn from. The participants in this study were selected based on their accessibility to the

researcher and may not be representative of teachers in other schools or geographic areas.

Additional research will be required to generalize the findings of this study to other contexts.

The participants were selected based on their accessibility to the researcher and may not be representative of teachers in other schools or geographic areas. With the exception of one school where two Q-sort times were offered, participants needed to attend the sort meeting at their particular school. Teachers with scheduling conflicts (such as participation in other teacher leadership activities) were not able to participate. The researcher wanted to make sure all Q-sorts were completed correctly using the distribution grid so the author did not advertise an opportunity for participants to complete the sort independently. These actions limited the number of teachers able to participate.

Participant self-concept may be a limitation for this study. The study was advertised to potential participants as one about teacher leadership. This was done to answer curiosity questions and encourage participation. Participants were asked if they considered themselves to be a teacher leader on the post-sort questionnaire. Forty-two out of forty-three participants considered themselves to be teacher leaders. The lone participant who did not consider herself a leader wrote “no, not yet.” This suggested this participant plans to be a teacher leader in the future. It is possible teachers who felt they were not teacher leaders believed they had little to offer and chose not to participate. A future study which avoids convenience sampling and does not advertise the research topic could access additional participants’ viewpoints which were not captured in this study.

A second type of limitation to the study is the researcher. The author is a novice researcher who has spent the majority of his professional career as a teacher and school administrator. While the researcher has successfully completed graduate level coursework in research design and methodology, decisions and interpretations made in this study may not be as nuanced as an expert researcher conducting the same study.

Chapter Summary

In this chapter, Q-methodology is described and the rationale for its selection for this particular study was provided. The methodology for this study was outlined and included the concourse theory used to develop the Q-sample, data collection procedures, and data analysis procedures. A subjectivity statement was provided and ethical issues were presented. Finally, study limitations were shared.

Q-methodology is a mixed-methods approach used to scientifically study and quantify human subjectivity. It uses factor analysis to study participants' viewpoints and beliefs. Q-methodology was used in this study to answer the research questions by gathering and organizing teacher perceptions of what teacher leadership is and the conditions which influence its development. Since teacher leadership is an idiosyncratic term with a variety of definitions, Q-methodology was an ideal method to guide this study.

A concourse theory of statements was developed through a literature review and brief interviews. The concourse theory was refined and reduced to a representative sample of statements called the Q-sample. The Q-sample was reviewed for clarity and representativeness. The reviewed Q-sample was presented to study participants to sort into a

Q-sort distribution grid during Phase I data collection. Following the Q-sort, the participants were asked to complete a questionnaire to gain a better understanding of their perceptions, backgrounds, and experiences with teacher leadership. The data from the Q-sorts was analyzed using PQMethod software to conduct a factor analysis. Factors explaining the variance in participants' sorting patterns were identified. Additional data collection occurred during Phase II post-sort interviews. Participants were selected based on the factor analysis completed in Phase I. Participants who represented a particular factor of study were approached for a post-sort interview. The purpose of the interview was to seek understanding of their viewpoints and explore what conditions encourage or restrain the development of teacher leadership. The post-sort interviews were analyzed to generate themes and build upon the quantitative outcomes generated during Phase I data analysis. The combined analyses from Phases I and II were used to generate the findings for this study.

A subjectivity statement was shared by the author detailing his professional background and experiences with teacher leadership. The author's own experiences with teacher leadership combined with the use of teacher leadership as a current teacher evaluation criterion provided the motivation for this study. Additional ethical issues were provided to address how participants were protected in this study. There were minimal risks for participants in this study. This study was reviewed by the Institutional Review Board at North Carolina State University and the researcher's school district for approval prior to any research being conducted. Participants signed a consent form prior to participation and were able to withdraw from the study at any time. All data and printed materials associated with

this study were either password protected or locked in locations where only the researcher had access.

Study limitations were shared in this chapter. This study was limited by the small number of participants, non-random selection process, and the small geographic area the P-sample was drawn from. Additional research will be required to generalize the findings of this study to other contexts. Almost of of the participants considered themselves to be teacher leaders. This may reflect a sampling omission which does not consider the viewpoints of teachers who do not consider themselves to be leaders. The study was limited by the experience level of the researcher. The author is a novice researcher and may not make the same nuanced decisions an experienced researcher would.

Chapter four will present the findings of this study. Quantitative and qualitative data will be provided to present the teachers' perceptions of teacher leadership and the elements which foster or inhibit its development.

Chapter Four: Findings

Chapter Introduction

The purpose of this study was to explore the concept of teacher leadership from teachers' perceptions. The desired outcome was to create a teacher-centered set of viewpoints about leadership. Additionally, this study sought to identify what fosters or inhibits the development of teacher leadership.

Q-methodology was used to study teacher leadership. Forty-three teacher participants sorted forty-two statements on the -4 (strongly disagree) to +4 (strongly agree) distribution grid depicted in Figure 3.1. The resulting sorts were entered into the PQMethod statistical computer program (version 2.35) for analysis. PQMethod provided a variety of data analysis tools including correlations, factor determination and rotational analysis, Eigenvalues, variances, factor loadings, factor Q-sort statement values, z-scores, consensus statements, and distinguishing statements. Following this quantitative analysis, participants loading significantly on a particular factor were approached for further qualitative follow-up. This qualitative follow-up provided further participant explanation, interpretation, and clarification on the Q-sort data. This chapter will discuss the findings of this study.

Q-Sample

A Q-sample is the collection of statements presented to study participants for sorting. The Q-sample was drawn from a concourse theory of one hundred thirty-five statements about teacher leadership. The concourse theory was created through a literature review and through polling teachers and school administrators with varied experience levels for their definitions of teacher leadership. The resulting statements were reviewed for clarity and

duplication by the researcher. The statements were then presented to one teacher from each of the following experience ranges: 0-4 years, 5-9 years, 10-14 years, and 15 or greater years for review and feedback. The remaining forty-two statements comprised the Q-sample and are listed in Table 3.1. The Q-sample was presented to the study participants during the Q-sort phase of data collection. The participants sorted the statement cards based on their agreement with them and recorded the location of each card in a Q-sort distribution grid using the unique identification number written on each card (Figure 3.1).

P-Sample

Forty-three teachers from five elementary schools participated in the Q-sort data collection phase. The teachers were from five elementary schools in the researcher's school district. Twenty-three of the participants were classroom teachers, fourteen were in instructional support positions (academically gifted, special education, technology facilitator, instructional resource, etc.), and six were specialists who taught a specific specialty content area (art, music, etc.). All teachers earned a bachelor's degree while an additional seventeen earned a master's degree. The participants had a variety of experience levels. Nine had 0-4 years of experience, seven had 5-9 years of experience, seven had 10-14 years of experience, and twenty had 15 or more years of experience. Nine of the teachers had worked in one school, seven had worked in two schools, fourteen had worked in three schools, and thirteen had worked in four or more schools over their careers. Ten of the teachers had earned National Board Certification and fifteen had successfully completed the school district's

mentor teacher training program. Demographic information for the P-Sample is summarized in Table 4.1.

Table 4.1
P-Sample Demographic Information

Participant	Teaching Position	Years of Experience	Highest Earned Degree	National Board or Mentor	No. of Schools Worked In
01	Classroom	0-4	Bachelor		1
02	Classroom	5-9	Master	NB	3
03	Classroom	5-9	Master		3
04	Instructional Support	15+	Bachelor	NB & M	2
05	Specialist	10-14	Master	NB	3
06	Classroom	15+	Bachelor	M	4+
07	Classroom	10-14	Bachelor		4+
08	Specialist	5-9	Master		4+
09	Instructional Support	15+	Bachelor		4+
10	Classroom	15+	Bachelor (2)		4+
11	Instructional Support	15+	Master		2
12	Specialist	15+	Master		4+
13	Instructional Support	10-14	Master	M	3
14	Classroom	0-4	Bachelor		1
15	Classroom	0-4	Bachelor		2
16	Classroom	10-14	Bachelor	NB & M	4+
17	Classroom	0-4	Bachelor		1
18	Classroom	0-4	Master		1
19	Classroom	10-14	Bachelor	M	1
20	Classroom	0-4	Bachelor		2
21	Classroom	0-4	Master		2
22	Classroom	15+	Bachelor		4+

(continued)

Table 4.1 Continued

Participant	Teaching Position	Years of Experience	Highest Earned Degree	National Board or Mentor	No. of Schools Worked In
23	Classroom	15+	Bachelor		3
24	Classroom	15+	Bachelor		1
25	Classroom	15+	Bachelor	NB & M	2
26	Specialist	0-4	Bachelor		4+
27	Instructional Support	10-14	Bachelor	M	4+
28	Classroom	15+	Bachelor	NB	2
29	Instructional Support	5-9	Bachelor	NB	3
30	Instructional Support	15+	Master		3
31	Instructional Support	15+	Master	M	4+
32	Instructional Support	10-14	Master	NB & M	1
33	Classroom	0-4	Bachelor		1
34	Instructional Support	15+	Bachelor	NB & M	3
35	Instructional Support	5-9	Master	M	3
36	Classroom	5-9	Master	NB & M	1
37	Specialist	15+	Master	M	3
38	Specialist	15+	Bachelor		3
39	Instructional Support	15+	Master	M	4+
40	Classroom	5-9	Master		3
41	Classroom	15+	Bachelor		3
42	Instructional Support	15+	Bachelor		4+
43	Instructional Support	15+	Master	M	3

The size of the five schools ranged from approximately five hundred students to one thousand students. The schools were located in urban and suburban areas with differing

overall student socioeconomic populations. The schools varied in program offerings such as having a magnet theme, Title I, or science, technology, engineering, and math (STEM) focus. The principals' administrative experience at each school ranged from less than five years to over ten years. The principals' tenure at each school ranged from less than five years to over ten years.

Correlation Matrix

A structured series of analyses were performed using PQMethod on the participants' Q-sorts. To begin, a correlation matrix was generated using principal component analysis. A correlation matrix is a necessary first step in analysis. The correlation matrix statistically represented the viewpoints of all the participants in this study and allowed the researcher to examine the extent of agreement between one participant's Q-sort to all of the other Q-sorts in the study (Watts & Stenner, 2012). The correlation matrix is based on the number of study participants ($n=43$) and measures 43×43 for this study. The matrix displays correlation coefficients which could range from -1.0 to +1.0. A coefficient of +1.0 represents a perfect match between two Q-sorts in the study where all statement cards are placed in the same location in the distribution grid. A coefficient of -1.0 represents a perfect disagreement where cards are placed in the exact opposite positions between two Q-sorts. For example, participants 01 and 41 were closely related (coefficient of 0.59) to each other while participants 03 and 43 were not (coefficient of -0.23). There were no identical or perfect disagreement sorts in this study. Table 4.2 provides a truncated view of the correlation matrix comparing the study's Q-sorts to each other.

Table 4.2
Correlation Matrix between Sorts (truncated)

Participant	01	02	03	...	41	42	43
01	1.0	.09	-.07	...	.59	.36	.53
02	.09	1.0	-.01	...	.08	.28	-.05
03	-.07	-.01	1.0	...	.26	-.06	-.23
...
41	.59	.08	.26	...	1.0	.34	.47
42	.36	.28	-.06	...	.34	1.0	.48
43	.53	-.05	-.23	...	.47	.48	1.0

Factor Analysis

Factor analysis was the next step undertaken in data analysis. PQMethod presents the participants' sorts in a matrix of eight unrotated factors. A factor is created when highly similar sorts are grouped together. Factor analysis allows the researcher to examine groups of participants who have sorted the statement cards in a similar manner (Watts & Stenner, 2012). Each factor represents a group of participants who may have similar viewpoints on teacher leadership. Using the unrotated factor matrix, the number of factors to study may be determined (Watts & Stenner, 2012). Eigenvalues, explained variance, number of participants significantly loading on one factor, and the correlations between factors were

used to determine the factor rotation solution for this study. Factor rotation solutions of two, three, and four were considered for this study and are summarized in Table 4.3.

Eigenvalues illustrate a factor's statistical strength and explanatory power (Watts & Stenner, 2012). The Eigenvalues created in the unrotated factor matrix ranged from 13.98 to 1.50. Watts and Stenner (2012) suggest the cut-off point for factor extraction and retention is 1.00. Since all eight factors have Eigenvalues greater than 1.00, a scree plot was constructed (Figure 4.1). A noticeable bend occurred in the graph after the third factor representing a drop off in Eigenvalues for factors four through eight. This suggested a three factor rotation solution.

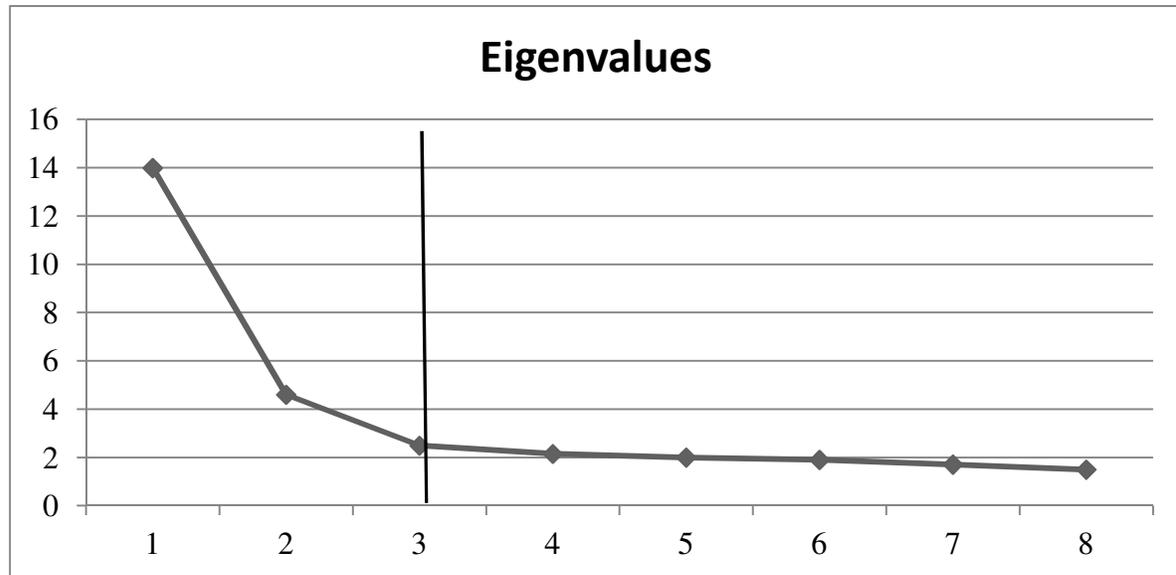


Figure 4.1: Eigenvalues Scree Plot. The x axis represents the eight unrotated factors and the y axis represents the Eigenvalues.

The explained variance for two, three, and four factor solutions was next considered. Explained variance represents the full range of meaning and variability in a study with higher variance values preferred (Watts & Stenner, 2012). For this study, a two factor solution had an explained variance value of 43%, a three factor solution value of 50%, and a four factor solution value of 54%. The number of participants significantly loading on one factor for each rotation solution was also considered. Q-methodology seeks to include as many participant viewpoints as possible (Watts & Stenner, 2012). Higher numbers of loadings mean more participant viewpoints may be included. A two factor solution resulted in 41 out of 43 participant loadings, a three factor solution resulted in 36 out of 43 participant loadings, and a four factor solution resulted in 35 out of 43 participant loadings. Finally, the

correlations between factors were considered. Factors represent participants' viewpoints. Factor solutions should select factors which relate to each other, but not to the extent of being too similar (Watts & Stenner 2012). A two factor solution presented a 0.48 correlation between factors, a three factor solution presented correlations of 0.28, 0.43, and 0.45 between factors, and a four factor solution presented correlations of 0.22, 0.29, 0.35, 0.36, 0.41, and 0.62 between factors. After considering this information, a three factor solution was selected based on the inclusion of Eigenvalues, explained variance, number of participant loadings, and correlations between factors.

Table 4.3: Information Used to Determine the Factor Rotation Solution

Factor Rotation Solution	Eigenvalues Included	Explained Variance	Number of Participants Loaded	Correlation Among Factors	Reasoning
2 Factors	13.98, 4.60	43%	41 out of 43	0.48	Positives: high number of participant loadings Negatives: exclusion of high Eigenvalue factors, a lower explained variance, and a high correlation between factors
3 Factors	13.98, 4.60, 2.49	50%	36 out of 43	0.28, 0.43, 0.45	Positives: Eigenvalue inclusion, greater explained variance, and a high number of participant loadings. Negatives: high correlations among factors
4 Factors	13.98, 4.60, 2.49, 2.15	54%	35 out of 43	0.22-0.62	Positives: highest explained variance Negatives: inclusion of weaker Eigenvalues, fewer participant loadings, and a higher correlation value among factors

Humphrey's Rule

Humphrey's rule may be used as another method for determining the number of factors to explore in Q-methodology studies (Watts & Stenner, 2012). Humphrey's rule states "a factor is significant if the cross product of its two highest loadings exceeds twice the standard error" (Brown, 1980: 223). A three factor rotation solution decision is supported

using Humphrey's rule. Table 4.4 demonstrates how three factors are significant and merit further exploration.

Table 4.4
Humphrey's Rule

	Factor 1	Factor 2	Factor 3	Factor 4
Cross Product of Two Highest Loadings	0.6764	0.4234	0.3894	0.2127
Standard Error	0.1543	0.1543	0.1543	0.1543
Standard Error x 2	0.3086	0.3086	0.3086	0.3086
Difference	0.3678	0.1148	0.0808	-0.0959

Note. Standard Error <0.01

Correlations Between Factors

Table 4.5 illustrates the correlations between the factors in a three factor rotation solution. The correlation coefficients suggest all three factors relate to one another. Factors one and two are the most similar with a coefficient of 0.4495 while factors two and three are the most dissimilar with a coefficient of 0.2813.

Table 4.5
Correlations Between Factors

	Factor 1	Factor 2	Factor 3
Factor 1	1.0000	0.4495	0.4258
Factor 2	0.4495	1.0000	0.2813
Factor 3	0.4258	0.2813	1.0000

Factor Loadings

Based on the selected three factor solution, PQMethod was used to conduct a varimax factor rotation. This analysis is useful for creating a representative estimate of each factor's viewpoint and may be used to help interpret the factor (Watts & Stenner, 2012). The significance level for this study was at the 99% confidence interval. The standard error equation was $1/\sqrt{N}$ where N equaled the total number of statements (42). The significance level at the 99% confidence interval equaled 0.3981 and was determined by multiplying the standard error by 2.58. The standard deviation was $p < .01$.

A factor matrix was created through this analysis which demonstrated how each participant's Q-sort loaded on each of the three factors. Table 4.6 shows the factor matrix with each participant's loading on each of the three factors. Higher loadings suggest a closer approximation of the particular factor's viewpoint with loadings below 0.6000 considered a cut-off point for factor estimative value (Watts & Stenner, 2012). Of the forty-three participants, thirty-six participants loaded significantly on one factor at the $p < .01$ level.

Seventeen participants loaded significantly on factor one, fifteen participants loaded significantly on factor two, and four participants loaded significantly on factor 3.

The remaining seven participants either did not load significantly on a factor or were confounded. Confounded sorts occur with a participant loads significantly on more than one factor. In this study, participants 02 and 19 did not load significantly on any of the three selected factors. Participants 27 and 32 loaded significantly on factors one and two.

Participants 18 and 29 loaded significantly on factors one and three. Participant 03 loaded significantly on factors two and three. These participants were not included in phase two data collection and analysis. This three factor solution had an explained variance value of 50%. Factor one represented 21%, factor two represented 19%, and factor three represented 10% of the explained variance.

Table 4.6
Factor Matrix Using Participants' Q-Sorts (Loadings)

Participants	Factor 1	Factor 2	Factor 3
01	0.7627*	0.2646	0.0491
02	0.0588	0.2329	0.0185
03	-0.2908	0.5550*	0.5777*
04	0.2439	0.5931*	0.4087
05	0.3583	0.5583*	-0.2392
06	0.7672*	0.2830	0.2226
07	-0.1379	0.6412*	0.1909
08	0.0912	0.6246*	-0.0587
09	0.7995*	-0.1350	-0.0112
10	-0.0029	0.1563	0.5237*
11	0.0525	0.7003*	0.2887
12	0.1215	0.6506*	0.0469
13	0.2864	0.6741*	-0.0008
14	0.2668	0.1375	0.6901*
15	0.4509*	-0.1894	0.2273
16	0.1001	0.2397	0.4605*
17	0.3657	0.4597*	0.1307
18	0.4932*	0.3410	0.4719*
19	0.2615	0.2793	0.3308
20	0.6902*	0.0190	0.4149
21	0.7999*	0.0571	-0.0671
22	0.4981*	0.1953	0.2004
23	0.5820*	0.3709	0.1901
24	0.5731*	0.3124	0.2771
25	0.5848*	0.0971	0.2016
26	0.2958	0.4714*	0.2766
27	0.4427*	0.5685*	0.1797
28	0.4192*	0.2675	0.3762
29	0.4296*	0.0453	0.5610*
30	0.1677	0.6135*	0.2436
31	0.1148	0.8048*	0.0367
32	0.5654*	0.5557*	0.2661
33	0.5430*	-0.0486	-0.1042
34	0.5058*	0.4034	0.1521
35	-0.1763	0.6330*	0.1553
36	0.4561	0.5593*	0.0338
37	0.7224*	0.1135	0.0517
38	0.0514	0.6943*	0.1079
39	0.6667*	0.2432	0.2391
40	0.0835	-0.2075	0.7323*
41	0.2858	0.5332*	0.4494
42	0.6317*	0.4469	0.2645
43	0.5433*	0.1006	0.0427
% Explained Var.	21	19	10

Note. * for .01 significance $1/\sqrt{42} \times 2.58 = 0.3981$ or above $p < .01$

In addition to generating individual participant loadings for each of the three selected factors, PQMethod generated the location where each factor placed each statement card in the Q-sort distribution grid (Figure 3.1). This data allowed the researcher to see how each factor sorted each statement card during the Q-sort and judge the extent of agreement among the factors with regard to each card's placement in the grid. The factor Q-sort values for each statement are illustrated in Table 4.7. PQMethod was used to create normalized z-scores for each card by factor. A z-score indicates how far and in which direction a statement falls from the mean. This allowed the statement cards to be rank ordered by factor from most agreed upon statements to least agreed upon statements. The most and least agreed upon statements for each factor are found in Table 4.9, Table 4.11, and Table 4.13, respectively. A complete ordering of the normalized z-scores for all forty-two statement cards for factor one may be found in Appendix I, for factor two in Appendix J, and for factor three in Appendix K.

Table 4.7
Factor Q-Sort Values for Each Statement

No.	Statement	Factor 1	Factor 2	Factor 3
1	Teacher leadership is holding a titled leadership position	-4	-4	-4
2	Teacher leadership is being a mentor to another teacher	-1	+1	+1
3	Teacher leadership is about developing curriculum	-2	0	-3
4	Teacher leadership is being a change agent	0	+3	0
5	Teacher leadership is being an exemplary teacher	+1	-2	+1
6	Teacher leadership occurs outside of teaching responsibilities	0	-3	0
7	Teacher leadership is communication between teachers and district leaders	-3	-1	+1
8	Teacher leadership is leading improvements without a holding leadership position	+2	+1	+2
9	Teacher leadership is having a high work ethic	+3	-1	-1
10	Teacher leadership is risk taking	+3	+3	-2
11	Teacher leadership is being open to new ideas and approaches	+4	+2	+2
12	Teacher leadership means being a team player	+4	-1	+2
13	Teacher leadership is providing professional development	-1	+1	0
14	Teacher leadership is having shared responsibility with school administration for making school-wide decisions	-2	+2	+1
15	Teacher leadership is having a well-run classroom with strong classroom management	+1	-2	0
16	Teacher leadership is important for professional learning communities	0	0	+4
17	Teacher leadership is about forming collaborative school cultures	+1	+2	+4
18	Teacher leadership is being able to organize and lead others on a particular issue	0	+2	+2
19	Teacher leadership is participating in budget decisions	-4	-2	0
20	Teacher leadership is participating in staffing decisions	-3	-1	-1

(continued)

Table 4.7 Continued

No.	Statement	Factor 1	Factor 2	Factor 3
21	Teacher leadership positions are appointed by the principal	-2	-4	-2
22	Teacher leadership positions are appointed by peers	-2	-2	0
23	Teacher leadership positions are self-appointed by teachers	-1	0	-4
24	Teacher leadership is having excellent interpersonal skills	0	0	-3
25	Teaching experience is required for teacher leadership	-2	-3	0
26	Teacher leadership is promoting and sustaining a vision for change	+2	+4	+3
27	Teacher leadership is challenging the status quo for better student learning outcomes	+2	+4	-1
28	Teacher leadership is conducting action research	-3	0	-3
29	Teacher leadership is improving instructional practice	+2	0	+1
30	Teacher leadership is making instructional decisions	0	-1	+1
31	Teacher leadership is being motivated to keep learning	+3	+1	+2
32	Teacher leadership is providing outreach and collaboration with families and the community	+1	0	-2
33	Teacher leadership is advocating for educational policy improvements	-1	+2	-1
34	Teacher leadership is being a role model for others	+2	+1	-1
35	Teacher leadership is helping to implement decisions made by others	-1	-3	-2
36	Teacher leadership is having a broader perspective and understanding the impact of decisions	0	+3	+3
37	Teacher leadership is using data as the basis for decision making	0	0	+1
38	Teacher leadership needs to be supported by the principal	-1	-1	+3

(continued)

Table 4.7 Continued

No.	Statement	Factor 1	Factor 2	Factor 3
39	Teacher leadership shifts responsibility for student learning from individual to communal responsibility	+1	-1	-2
40	Teacher leadership is something all teachers can engage in	+1	+1	0
41	Teacher leadership is about demonstrating high ethical standards	+1	+1	-1
42	Teacher leadership is having expertise in subject matter and pedagogy	-1	-2	-1

Research Questions

The research questions for this study sought to examine two aspects of teacher leadership and will be used to organize the presentation of findings for each factor:

1. What do teachers believe are the essential elements of teacher leadership?
2. What fosters or inhibits the development of teacher leadership?

The research questions will now be examined through the viewpoints of the three factors using the quantitative and qualitative data collected.

Factor One: Teamwork and Continuous Learning for the Classroom

Research question #1.

Seventeen participants loaded significantly on factor one. This represents 40% of the participants and 21% of the variance. Participants loading significantly on this factor fell in the 0-4 or 15 or more years of experience bands with no participants in the middle experience bands. Of the seventeen participants, eleven were classroom teachers, five were instructional support teachers, and one was a specialist. All participants had at least a bachelor's degree

while four earned master's degrees. Three teachers had earned National Board Certification and six had completed the school system's mentor teacher training program. Eight of the seventeen participants loaded at greater than 0.6000 and were considered to be better estimates of the factor's viewpoint (Stenner & Watts, 2012). Table 4.8 details the participants loading significantly on factor one.

Table 4.8
Participants Loading Significantly on Factor One

Participant	Loading	Teaching Position	Years of Experience	Highest Earned Degree	National Board or Mentor
21	0.7999	Classroom	0-4	Master	
09	0.7995	Instructional Support	15+	Bachelor	
06	0.7672	Classroom	15+	Bachelor	M
01	0.7627	Classroom	0-4	Bachelor	
37	0.7224	Specialist	15+	Master	M
20	0.6902	Classroom	0-4	Bachelor	
39	0.6667	Instructional Support	15+	Master	M
42	0.6317	Instructional Support	15+	Bachelor	
25	0.5848	Classroom	15+	Bachelor	NB & M
23	0.5820	Classroom	15+	Bachelor	
24	0.5731	Classroom	15+	Bachelor	
43	0.5433	Instructional Support	15+	Master	M
33	0.5430	Classroom	0-4	Bachelor	
34	0.5058	Instructional Support	15+	Bachelor	NB & M
22	0.4981	Classroom	15+	Bachelor	
15	0.4509	Classroom	0-4	Bachelor	
28	0.4192	Classroom	15+	Bachelor	NB

Using the z-scores computed by PQMethod, the overall level of agreement with each teacher leader statement card was modeled for each factor. The z-scores represent the distance and direction of each statement card’s placement from the mean. The z-scores for factor one ranged from +1.704 for statement 11 (most agreed with) to -2.345 for statement 1 (most disagreed with). A complete listing of z-scores for factor one may be found in Appendix I. Using z-scores, a model Q-sort for each factor was created. Figure 4.2 provides a model sort for participants who loaded significantly on factor one.

Strongly Disagree		Neither Agree Nor Disagree					Strongly Agree	
-4	-3	-2	-1	0	+1	+2	+3	+4
19	20	22	38	37	40	26	31	11
1	7	3	42	4	5	29	10	12
	28	25	2	6	41	27	9	
		14	35	30	32	8		
		21	23	16	39	34		
			13	24	15			
			33	36	17			
				18				

Figure 4.2. Model Sort for the Participants who Loaded Significantly on Factor One

The high positive and high negative statements from the factor one model sort depicted in Figure 4.2 are listed in Table 4.9. The statements placed in the +4, +3, -3, and -4 positions are most representative of the factor and the viewpoints of the participants who loaded significantly on factor one. The +2 and -2 statements are helpful for providing support for the conclusions drawn from the +4, +3, -3, and -4 statements. These statements are useful in determining participants' perceptions of the essential elements of teacher leadership.

Table 4.9

Factor One: High-Positive and High-Negative Statements

Value	No.	Statement
+4	11	Teacher leadership is being open to new ideas and approaches
+4	12	Teacher leadership means being a team player
+3	31	Teacher leadership is being motivated to keep learning
+3	10	Teacher leadership is risk taking
+3	9	Teacher leadership is having a high work ethic
+2	26	Teacher leadership is promoting and sustaining a vision for change
+2	29	Teacher leadership is improving instructional practice
+2	27	Teacher leadership is challenging the status quo for better student learning outcomes
+2	8	Teacher leadership is leading improvements without a holding leadership position
+2	34	Teacher leadership is being a role model for others
-2	22	Teacher leadership positions are appointed by peers
-2	3	Teacher leadership is about developing curriculum
-2	25	Teaching experience is required for teacher leadership
-2	14	Teacher leadership is having shared responsibility with school administration for making school-wide decisions
-2	21	Teacher leadership positions are appointed by the principal
-3	7	Teacher leadership is communication between teachers and district leaders
-3	28	Teacher leadership is conducting action research
-4	19	Teacher leadership is participating in budget decisions
-4	1	Teacher leadership is holding a titled leadership position

Using the themes associated with each Q-sample statement (Table 3.1) and model sorts for each factor, an examination of the high positive (+3 and +4) and high negative (-3 and -4) statements was conducted for each factor. Factor one participants defined teacher leadership through personal characteristics and skills. All five of the high positive statements fell under the teacher leader characteristics theme. These statements included the phrases “being open to new ideas and approaches,” “being a team player,” “being motivated to keep learning,” “risk taking,” and “having a high work ethic.” An additional review of the statements in the +2 column reflected an emphasis on using these personal characteristics and skills to make improvements. Phrases in the five +2 statements included “promoting and sustaining a vision for change,” “improving instructional practice,” “challenging the status quo for better student outcomes,” “leading improvements,” and “being a role model.”

Factor one participants described the essential elements of teacher leadership as being a team effort which involved continuous learning. Participant 21 described the team effort element as “Leadership is not one person working alone. It is something you do together.” Participant 20 echoed this idea with: “Leadership is not one person in charge. It is people synergizing and working together for a common goal.” Participant 06 also viewed teacher leadership as team based:

Leadership does not mean dictatorship. I think you are on the team for success for your class. You are on the team for the student. You are on the team for school. You are on the team for your parents. You do need to be a team player and realize that one person does not a team make. It takes everybody. Everyone has got a job to do. There is no “I” in this and I value this alot.

Participant 09 linked this team aspect of teacher leadership with learning: “I feel strongly that leadership is all about being a team player because I feel there is so much we can share with one another and build upon. It is always being open to new ideas and learning something new.” Participant 37 added, “Teacher leaders need to be learning and improving all the time and have high moral standards.” Participant 01 stated, “In order for a teacher to be a leader, I feel they must be open-minded to new ideas. This is an important aspect of collaboration with co-workers and parents.” Participant 21 saw continuous learning as something which occurs throughout the professional career and is something which garners respect from colleagues:

Being a relatively new teacher, there has not been a lot of relative change that I have had to go through, but watching my peers who have been in it for a long time and seeing them even being open to my ideas of just being through college and learning some new approaches to education. It makes me respect them more when I see them wanting to try new things.

The idea of risk taking as part of the learning process was shared by participant 39, “For me to move toward a leadership role I had to step out of my comfort zone and take risks. I also had to open myself up to new ideas.” Participant 06 agreed with the idea of continuous learning throughout a teacher’s career:

Teacher leadership is being open to new ideas and approaches because all the time things are changing. Things are new, new ideas, new approaches and if you are not willing to change you are kind of going to be stagnant. I feel like sometimes the older teachers are the ones who are willing to change and sometimes they don’t get credit for it.

Participant 06 went on to express how continuous learning can assist teachers in motivating others:

I think you need to be motivated to keep learning because first of all, I think that keeps your spark and I think it keeps your passion. If you are motivated to keep learning then you are not just stuck in your ways and you are always opening yourself up and maybe coming alive more. As a result, if you are motivated to keep learning then you are going to stress the importance of learning to the children that you work with, the people you work with. Some of that excitement from your motivation is going to rub off on them.

Participant 20 shared how continuous learning is something she feels is important for her to engage in:

Teacher leadership is being motivated to keep learning. It is never done. Even though I just graduated two years ago, every time we go into a staff development, I learn more and more and implement new things in my classroom constantly.

The teacher leadership context for factor one participants was primarily their own classrooms. Participant 37 stated, “Teacher leaders do not usually want to take over the world, they just want to make a difference in their own environment.” For factor one participants, this context rose outside of the classroom level when it came to sharing best instructional practices for use in classrooms. Participant 20 explained this as teachers who “Share their knowledge with others and collaborate with each other to have those leadership roles.” Participant 21 touched on this phenomenon by saying, “There is no secrecy and it is all sharing.”

Factor one participants expressed teacher leadership as not about being involved in managerial or administrative actions in the Q-sorts. The high negative statements fell in the decision making and targeted actions themes. These statements included “participating in budget decisions,” “holding a titled leadership position,” “participating in staffing decisions,” “communication between teachers and district leaders,” and “conducting action research.” It should be noted statement number 1, “Teacher leadership is holding a titled leadership

position” was a consensus statement and was placed in the -4 column by all three factors. Statement number 1 will be discussed further in the Consensus Statements section later in this chapter. Statements in the -2 column further supported this definition and included “shared decision making with school administration,” and “developing curriculum.” The remaining statements in the -2 column referred to the selection process. These supporting statement card placements suggested disagreement with the statements “positions are appointed by peers,” “positions are appointed by the principal,” and “teaching experience is required for teacher leadership.”

Factor one participants shared the items in the -3 and -4 (strongly disagree) columns represented activities which did not fall within their view of teacher leadership. In some cases, participants felt these statements were the opposite of the +3 and +4 (strongly agree) column statements.

Participant 20 shared the following about the -3 and -4 (strongly disagree) column statements:

These statements about leadership are you have a titled position and you are making decisions about certain things. Whereas, I think leadership is more open-ended. It is not just oh, I am in this position. I am a leader because of doing this. You are not a team player. It sounds like you are the one making the calls.

Participant 21 felt teacher leadership was not hierarchal in nature: “It is not having a position or feeling people are under you who have to listen to your ideas or your commands.”

Participant 06 suggested an inclusive approach when stating, “Anyone can be a leader.”

Participant 01 shared this view with, “I do not feel that teacher leadership requires experience, because I am only a third year teacher and I take any opportunity I can to be a

leader for my school.” Participant 37 shared, “Teacher leaders can be anyone who wants to improve their classroom and school.”

Factor one participants also felt the -3 and -4 statements tended to include contexts outside of the classroom. Participant 37 shared, “Teacher leadership has nothing to do with administration or the business side of education.” Participant 01 expressed, “I feel that participating in budget decisions is something administration and county-wide employees should engage in. That is something that teachers cannot control.” Participant 06 felt:

I don’t see participating in budget decisions as a role I need to be involved in. The leader of the school is going to see where staffing decisions have to be made for the good for the most people or the most children.

When participant 09 was asked about the strongly disagree statements in the -3 and -4 columns of the model Q-sort, she replied:

I don’t believe it deals with the team work; the sharing. I am never involved in any of this (motioning to the statements in the -3 and -4 columns). They are out of my league. They are not affiliated with my position. This is where I am involved (motioning to the statements in the +3 and +4 columns). My love is the classroom.

The participants were asked about district initiatives and teacher leadership. The participants felt teachers have a limited role; one that is input only without any real decision making capabilities. Participant 20 summarized this sentiment as:

When things come from district and state we do not always have a say in it so we are not always getting the chance to be a leader. It is such a wider perspective. It’s not like it is within our school, it is beyond us so we really can’t have as much say with certain decisions that they are making.

When factor one participants looked at the model Q-sort holistically, they expressed differences in the nature of the statements. When participant 09 was asked to describe the

sort, she said, “I see the classroom and then the Department of Public Instruction as the structures for decision making” (referring to the strongly agree and then strongly disagree columns). Participant 21 titled her sort “Past, Present, and Future.” When asked to explain her sort name, she suggested a shifting nature for teacher leadership: “What I used to see as leadership as growing up is a different perspective than as I see leadership as now. Everybody can practice leadership now.” Participant 42 strongly disagreed with the idea of a titled leadership position, while alluding to previous conceptions of leadership: “Statement number 1 seems to be how many people define leadership. It’s not what you do; it’s what you are called.” Participant 06 named the sort “All in and Staying Connected.” When asked to elaborate, participant 06 stated, “Strong leaders don’t have to hold on. They rely on the expertise of other people. You trust other people. You don’t feel like you have to have your hands in all the pots.”

Research question #2.

Factor one participants were asked the second research question: What fosters or inhibits the development of teacher leadership? Several themes emerged from the participants. Participants stated administrative support, opportunities to practice leadership, celebrating successes, personal characteristics, and teacher motivation in the specified activity were all things which foster teacher leadership.

Participant 06 described the principal’s role and influence with teacher leadership as: The principal is the captain of the ship. He is the one doing the balancing act for the total picture. He is the big overall cheerleader for the school. The leader has it structured so everybody can contribute in how they feel is the most positive for them and where their strength is. Your product will be better and people will buy into it

more. Everybody will be more positive and you are not going to have so many roadblocks.

This sentiment was echoed by participant 39: “The influence of the administrators....Their support and encouragement help develop leaders.” Participant 09 explained, “Principal support is important. Support them. Build them up. Provide positive feedback and encouragement.” Participant 20 also mentioned the role of school administration in fostering teacher leadership: “Our principal really encourages us to get out there and be a leader in education. Having her delegate that leadership and letting us take things on has fostered my ability to develop my leadership skills.” Participant 42 shared, “A chance to make your own decisions fosters teacher leadership.” Participant 01 stated, “I think your school environment and staff support / collaboration fosters teacher leadership and the administration’s willingness to support the opportunities.” Participant 21 shared:

I have noticed administration finding what you are good at and sharing it with others. I have heard a ton about another teacher’s reading model who then shared this knowledge with the school. This has benefitted every person, every child at our school. The approach they take is whatever is best for the kids and that just rubs off on us. This encouragement and guidance encourages it.

Participant 06 touched on several of the themes for encouraging teacher leadership in her response:

I think if you give shout-outs to people and where you see strengths you ask people to share in a non-threatening way, not a demanding way, and in an environment where you don’t feel threatened or judged. If you don’t have to worry about the atmosphere, I think you would get more people to be on board to lead. If you could lead in your own quiet way, but it didn’t have to be in some big leadership role that everyone has to see. You have all these people who have great ideas, but they are very introverted and quiet. Have many, many opportunities to lead. Encourage spreading the wealth of the leader so it isn’t just the same ten people who are always doing the leading. Make people feel valued and feel like they have something to lead in.

Participant 09 cited a number of personal characteristics and attributes as items which encourage teacher leadership: “When I was doing this I was thinking about so many teacher leaders who are outgoing with their personalities. They are able to organize. They are able to delegate. They love professional development, they love decision-making, and being involved.”

Factor one participants felt acting with a singular focus, not collaborating, perceived unreasonable expectations, and outside demands were all viewed as inhibitors to teacher leadership development. Participant 20 explained this as:

Not celebrating and having a closed door where every man is for himself. This was my student teaching experience at another school. You plan on your own. If you need something, you find it for yourself. I think if I stayed in that environment, it wouldn't have helped me to develop into a teacher leader.

Participant 37 noted outside demands as an inhibitor: “There are mountains of paperwork and you don't feel like being your best when you are more focused on red tape than teaching.” Participant 06 highlighted perceived unreasonable expectations and outside demands:

They never take any plates away, they just keep stacking more and more on even though they say they take plates away, they don't. I think the accountability for teachers...there is so much accountability. It is like there is no trust anymore. You have to assess so much and my scores will be compared with this one's scores and this one's scores. It is not a level playing field, but we are all thrown in that pot together. I don't think teachers are as respected as they used to be and I think it is hard to have the confidence to lead in your profession.

Factor one, teamwork and continuous learning for the classroom, presents a viewpoint of teacher leadership geared toward teachers working together making improvements to instructional practices within classrooms. Participants loading significantly

in factor one favored teamwork and collaboration as important for sharing best practices and increasing both teacher and student learning. Group leadership with opportunities for anyone to participate rather than a single person leading was preferred. Teacher leadership according to this factor takes place at the classroom level. Factor one participants expressed little desire to participate in larger teacher leadership scope of influence contexts. For example, participants were not interested in involvement with managerial and administrative tasks such as staffing and budgetary decisions. Factor one participants stated administrative support, opportunities to practice leadership, celebrating successes, personal characteristics, and teacher motivation in the specified activity were items which foster teacher leadership. Acting with a singular focus, not collaborating, perceived unreasonable expectations, and outside demands were presented as inhibitors to teacher leadership development.

Factor Two: Widespread Leadership of Others for Change

Research question #1.

Fifteen participants loaded significantly on factor two. This represents 35% of the participants and 19% of the variance. Thirteen out of the fifteen participants loading significantly on this factor had five or more years of experience and ten out of the fifteen had ten or more years of experience. Eleven out of the fifteen participants were in non-classroom roles (six instructional support teachers and five specialists). All factor two participants had at least a bachelor's degree while six earned master's degrees. Three teachers had earned National Board Certification and five had completed the school system's mentor teacher

training program. Nine out of the fifteen loaded above 0.6000 on the factor. Table 4.10 details the participants loading significantly on factor two.

Table 4.10
Participants Loading Significantly on Factor Two

Participant	Loading	Teaching Position	Years of Experience	Highest Earned Degree	National Board or Mentor
31	0.8048	Instructional Support	15+	Master	M
11	0.7003	Instructional Support	15+	Master	
38	0.6943	Specialist	15+	Bachelor	
13	0.6741	Instructional Support	10-14	Master	M
12	0.6506	Specialist	15+	Master	
07	0.6412	Classroom	10-14	Bachelor	
35	0.6330	Instructional Support	5-9	Master	M
08	0.6246	Specialist	5-9	Master	
30	0.6135	Instructional Support	15+	Master	
04	0.5931	Instructional Support	15+	Bachelor	NB & M
36	0.5593	Classroom	5-9	Master	NB & M
05	0.5583	Specialist	10-14	Master	NB
41	0.5332	Classroom	15+	Bachelor	
26	0.4714	Specialist	0-4	Bachelor	
17	0.4597	Classroom	0-4	Bachelor	

The z-scores for factor two ranged from +2.058 for statement 27 (most agreed with) to -2.099 for statement 1 (most disagreed with). A complete listing of z-scores for factor two

may be found in Appendix J. Figure 4.3 provides a model sort for participants who loaded significantly on factor two.

Strongly Disagree			Neither Agree Nor Disagree				Strongly Agree	
-4	-3	-2	-1	0	+1	+2	+3	+4
21	6	42	20	32	13	18	36	27
1	35	5	7	24	2	11	4	26
	25	15	38	28	31	33	10	
		19	39	37	34	17		
		22	12	29	8	14		
			9	3	41			
			30	16	40			
				23				

Figure 4.3. Model Sort for the Participants who Loaded Significantly on Factor Two

The high positive and high negative statements from the factor two model sort depicted in Figure 4.3 are listed in Table 4.11. The statements placed in the +4, +3, -3, and -4 positions are most representative of the factor and the viewpoints of the participants who loaded significantly on factor two. The +2 and -2 statements are helpful for providing support

for the conclusions drawn from the +4, +3, -3, and -4 statements. These statements are useful in determining participants' perceptions of the essential elements of teacher leadership.

Table 4.11

Factor Two: High-Positive and High-Negative Statements

Value	No.	Statement
+4	27	Teacher leadership is challenging the status quo for better student learning outcomes
+4	26	Teacher leadership is promoting and sustaining a vision for change
+3	36	Teacher leadership is having a broader perspective and understanding the impact of decisions
+3	4	Teacher leadership is being a change agent
+3	10	Teacher leadership is risk taking
+2	18	Teacher leadership is being able to organize and lead others on a particular issue
+2	11	Teacher leadership is being open to new ideas and approaches
+2	33	Teacher leadership is advocating for educational policy improvements
+2	17	Teacher leadership is about forming collaborative school cultures
+2	14	Teacher leadership is having shared responsibility with school administration for making school-wide decisions
-2	42	Teacher leadership is having expertise in subject matter and pedagogy
-2	5	Teacher leadership is being an exemplary teacher
-2	15	Teacher leadership is having a well-run classroom with strong classroom management
-2	22	Teacher leadership positions are appointed by peers
-3	6	Teacher leadership occurs outside of teaching responsibilities
-3	35	Teacher leadership is helping to implement decisions made by others
-3	25	Teaching experience is required for teacher leadership
-4	21	Teacher leadership positions are appointed by the principal
-4	1	Teacher leadership is holding a titled leadership position

Factor two participants expressed a view of teacher leadership through a broader perspective which included school culture and the ability to lead others. The high positive statements included the statement themes of instruction, improvement efforts, teacher leader characteristics, formality of role, and targeted actions. The statements included “challenging the status quo for better student outcomes,” “promoting and sustaining a vision for change,” “having a broader perspective and understanding the impact of decisions,” “being a change agent,” and “risk taking.” An additional review of the +2 column statements supported this idea of school culture and the ability to lead others. These statements included “being able to organize and lead others,” “open to new ideas and approaches,” “advocating for educational policy improvements,” “forming collaborative school cultures,” and “shared responsibility with school administration for school-wide decisions.”

Factor two participants explained their teacher leadership viewpoint through a wide perspective in the ability to facilitate change over time and lead others. Participant 07 shared this thought with: “I think the best leaders think about the big picture before making decisions.” Participant 35 said, “Teacher leadership is across all areas including classroom, grade level, school, district, etc. Teacher leaders should be knowledgeable in an area and support others as well as promote change and growth.” Participant 38 offered, “Teachers lead in their classrooms, teams, buildings, counties, and states. All are important, but changing the status quo for policy improvement affects the most students.” Participant 11 spoke to the need to understand the ripple effects of change:

It is important to understand the impact change will have on different parties.
Changing the schedule is going to have an impact not just on one grade level, but on

other grade levels. You have a vision of change, but you have to understand how the changes impact other decisions that you are going to make. Is it really impacting what you want, the learning outcomes?

Factor two participants described the idea of being a change agent. Participant 13 said, "To be a true leader you should be a change agent." Participant 08 described this thusly: "You are willing to step outside the norm. You are not willing to go with the flow. You are willing to see a change through and be a change agent." Participant 30 expressed how change agents need a vision: "Being a leader means being a change agent. Change agents must have a clear vision." Participant 12 expressed how leading change over time is important to teacher leadership:

I think the key word is sustaining, because it is one thing to say "Gosh we need to make a change and try this thing and if it doesn't work you just fold." No, you either try something different or you persist. I think that is where real teacher leadership comes in. That you are going to be persistent and you are going to go back and reevaluate what other methods are there or persist with the same methods until you can convince other peers.

Participant 08 discussed how being a change agent over time involves courage and persistence to see the change through:

You are putting yourself out there. People do not like change. So by being that change agent, it is risk taking. You may have people fighting against you, but having the courage to stand up and say "No, we need this to happen and I will take the first step and I will keep taking steps towards it and fighting for what you know needs to be changed." It is being that person who takes those blows when people don't like making a change.

The high negative statements for factor two participants' sorts suggested a belief that anyone may be involved in teacher leadership activities. The statement themes included were setting, decision making, teacher leader characteristics, selection, and formality of role. The

statements included the phrases “the principal selects teachers for teacher leadership positions,” “holding a titled leadership position,” “teaching experience is required,” “helping to implement decisions made by others,” and “occurs outside of teaching responsibilities.” The -2 column (disagree) statements further supported the idea anyone may participate in teacher leadership activities: “having expertise in subject matter and pedagogy,” “being an exemplary teacher,” “having a well-run classroom with strong classroom management,” and “positions are appointed by peers.”

Factor two participants shared how anyone may be involved in teacher leadership. Participant 13 shared, “I don’t think teaching experience is needed to be a teacher leader and effective change agent.” Participant 35 suggested, “Teachers can be leaders without being in a titled leadership position.” Participant 12 highlighted personal characteristics for teacher leadership: “Leadership to me is you are born with that quality and you can develop it in yourself and you can develop it somewhat in others. It is really the interpersonal skills which make you successful.” Participant 08 stated:

If you had to sum up in one word what is a good leader, I would say communication. You have the communication skills to be able to convey ideas and try to get people to jump on the bandwagon with you. You have the type of communication where you can keep everyone informed and involved.

Factor two participants shared how teachers become leaders. Participant 11 cited a teacher’s personal characteristics and motivation when describing how teacher leaders enter their roles:

It is a willingness to take a leadership role. While on the other hand, there are people who don’t want to take leadership roles. Teacher leadership is an organic thing that happens within a community where certain folks naturally become the leaders. There

are qualities that they have where other people feel comfortable having them lead, so teaching experience doesn't matter.

Factor two participants felt the assumption of teacher leadership roles comes from the support of different people and not just the principal alone. Participant 38 shared how the principal is not always the key person in appointing teacher leaders: "I have personally held leadership positions in the county that my principal had nothing to do with." Participant 12 offered the following about principal appointments to teacher leadership positions:

Usually if you appointed by the principal, it is because the principal sees some shared beliefs or values with you and that could be a good thing, but that is not an agent for change. That is sustaining whatever the principal is trying to do.

Participant 11 elaborated on how successful teacher leaders have the support of their peers:

I think teacher leadership is often times earned by your leadership at a school and other staff members. If you are appointed by the principal, unless you have the rest of the staff behind you, it is really just going to be a figurehead leadership position that is not sustainable because you don't have the staff feeling like you are a teacher leader. It is more about are people willing to follow your lead or you are able to rally folks around something or get people excited about something or to convince folks that this is the right decision to make at this point.

Participant 08 also expressed how successful teacher leaders need a wide range of support from others:

It takes a certain level of respect from your peers and administration. If you are someone who won't stand up for certain things, they are not going to come to you to ask what your thoughts are on different things, but being that person who is willing to stand up and is willing to speak up about things is important. Those are the type of people even administration is going to go to you and say "what do you think we need help with?" It is an earned respect and you need that to be a true leader.

When looking at the model sort holistically, factor two participants described it as a continuum. Participant 12 described the sort as an “Educational vision continuum moving from reactionary or stagnant (negative columns) to people being more actively engaged (positive columns).” Participant 11 summarized the sort as “Natural / organic leadership (positive columns) versus contrived leadership (negative columns).” Participant 08 viewed the sort as a way to classify and rate teacher leadership and effectiveness with:

Schools functioning more highly are here (motioning to the statements in the +3 and +4 columns), schools maintaining the status quo are in the middle, and schools not doing great are over here (motioning to the statements in the -3 and -4 columns). It helps you to see where does our school fall and how do we get here (pointing to the positive columns)?

Research question #2.

Factor two participants were asked the second research question: What fosters or inhibits the development of teacher leadership? Factor two participants cited the ability to try new things in a safe environment, administrative support, and having a broader perspective as elements which influence teacher leadership development. Participant 35 alluded to these elements with: “Self-esteem, support from the principal, and confidence in one’s abilities” as necessary for teacher leadership development. Participant 30 stated, “Opportunities to try new things, to think in innovative ways to solve problems.” Participant 07 contributed, “An atmosphere of trust and support among the teachers and administration.” Participant 11 offered, “It is empowering others and trusting them to take a lead and follow through while promoting mutual respect where it is OK if they fail.” Participant 13 suggested, “A

collaborative school culture promotes teacher leadership and administrators being open to new ideas so teachers can implement change.” Participant 12 elaborated on risk-taking:

Risk taking is important. With every risk, I think a good leader calculates that risk against the possible benefits and when they should go forward with the risk. An environment that encourages people to try things and understand that failure is OK.

Factor two participants felt teacher leadership is encouraged through administrative support. Participant 12 shared this as “The top feeder in all of this is the administrator who is a change agent. I think most organizations take on the characteristics of that leadership good or bad.” Participant 11 stated:

The best way to foster it (leadership) is through an administrative perspective. If you have an administration that is promoting and encouraging teachers to take leadership in the school then that is going to facilitate the process. If you are not backed by the principal, making changes is a lot harder. It will also encourage young teachers to engage in opportunities outside of the classroom in areas where they have the skills to do so and gain confidence.

Factor two participants mentioned the importance of having a broader perspective for fostering teacher leadership. Participant 11 described this as:

Helping people see the global impact...I think some people just don't have that global perspective or they are so focused on what they are doing that sometimes helping them to understand how their part is impacting others or how a decision that they are going to make will impact others. That global connection helps everyone to become a better leader because they have an understanding for why you are making changes.

The impact of time was viewed as a limitation for developing teacher leadership. Participant 31 discussed “time and the responsibilities classroom teachers face” as limiters to teacher leadership. Participant 30 also mentioned time as factor: “Teachers being too overwhelmed to try or take on new roles.”

Factor two, widespread leadership of others for change, presents a viewpoint of teacher leadership focused on a single person or small group of people leading improvements on a large scale. One example of factor two teacher leadership is developing school policies which provide direction across an entire school. Factor two participants shared teacher leaders need to possess a broader perspective and be willing to take risks while acting as a change agent in challenging the status quo. Factor two participants felt anyone could be involved in teacher leadership with support needed from both peers and school administration. The ability to try things in a safe environment, administrative support, and possessing a broader perspective were identified as things which encourage teacher leadership development. Time limitations were viewed as an inhibitor for teacher leadership development.

Factor Three: Guiding Leadership which Bridges Organizational Levels

Research question #1.

Four participants loaded significantly on factor three. This represents 9% of the participants and 10% of the variance. Participants loading significantly on this factor fell fairly equally in all of the experience bands: 0-4 years (1 participant), 5-9 years (1 participant), 10-14 years (1 participant), and 15 or more years (1 participant). All four were classroom teachers. All participants had at least a bachelor's degree while one earned a master's degree. One teacher had earned National Board Certification and one teacher had completed the school system's mentor teacher training program. Two teachers loaded at

greater than 0.6000 for factor three. Table 4.12 details the participants loading significantly on factor three.

Table 4.12
Participants Loading Significantly on Factor Three

Participant	Loading	Teaching Position	Years of Experience	Highest Earned Degree	National Board or Mentor
40	0.7323	Classroom	5-9	Master	
14	0.6901	Classroom	0-4	Bachelor	
10	0.5237	Classroom	15+	Bachelor (2)	
16	0.4605	Classroom	10-14	Bachelor	NB & M

The z-scores for factor three ranged from +2.361 for statement 16 (most agreed with) to -2.568 for statement 23 (most disagreed with). A complete listing of z-scores for factor three may be found in Appendix K. Figure 4.4 provides a model sort for participants who loaded significantly on factor three.

Strongly Disagree			Neither Agree Nor Disagree				Strongly Agree	
-4	-3	-2	-1	0	+1	+2	+3	+4
1	24	32	9	6	14	12	38	16
23	28	21	33	15	5	8	36	17
	3	35	34	13	29	18	26	
		39	27	40	30	11		
		10	20	4	37	31		
			42	25	7			
			41	22	2			
				19				

Figure 4.4. Model Sort for the Participants who Loaded Significantly on Factor Three

The high positive and high negative statements from the factor three model sort depicted in Figure 4.4 are listed in Table 4.13. The statements placed in the +4, +3, -3, and -4 positions are most representative of the factor and the viewpoints of the participants who loaded significantly on factor three. The +2 and -2 statements are helpful for providing support for the conclusions drawn from the +4, +3, -3, and -4 statements. These statements are useful in determining participants’ perceptions of the essential elements of teacher leadership.

Table 4.13

Factor Three: High-Positive and High-Negative Statements

Value	No.	Statement
+4	16	Teacher leadership is important for professional learning communities
+4	17	Teacher leadership is about forming collaborative school cultures
+3	38	Teacher leadership needs to be supported by the principal
+3	36	Teacher leadership is having a broader perspective and understanding the impact of decisions
+3	26	Teacher leadership is promoting and sustaining a vision for change
+2	12	Teacher leadership means being a team player
+2	8	Teacher leadership is leading improvements without a holding leadership position
+2	18	Teacher leadership is being able to organize and lead others on a particular issue
+2	11	Teacher leadership is being open to new ideas and approaches
+2	31	Teacher leadership is being motivated to keep learning
-2	32	Teacher leadership is providing outreach and collaboration with families and the community
-2	21	Teacher leadership positions are appointed by the principal
-2	35	Teacher leadership is helping to implement decisions made by others
-2	39	Teacher leadership shifts responsibility for student learning from individual to communal responsibility
-3	24	Teacher leadership is having excellent interpersonal skills
-3	28	Teacher leadership is conducting action research
-3	3	Teacher leadership is about developing curriculum
-4	1	Teacher leadership is holding a titled leadership position
-4	23	Teacher leadership positions are self-appointed by teachers

Through the Q-sort, factor three participants defined teacher leadership as guiding learning and supporting activities in a collaborative atmosphere. The high positive statement themes were outcomes, targeted actions, principal's role, teacher leader characteristics, and improvement efforts. The high positive statements included "important for professional learning communities," "about forming collaborative school cultures," "needs to be supported by the principal," "having a broader perspective and understanding the impact of decisions," and "promoting and sustaining a vision for change." The +2 statements provided additional confirmation and included "means being a team player," "leading improvements without holding a leadership position," "being able to organize and lead others," "open to new ideas and approaches," and "being motivated to keep learning."

Factor three participants described the essential elements of teacher leadership in terms of front line leadership through leading and supporting professional learning communities and bridging gaps with larger levels of the school organizational structure. Factor three participants shared a viewpoint where teacher leaders hold a broader perspective while leading professional learning communities to make impactful changes. Participant 40 shared this as:

I think it is important that they understand that they are impacting what is going on in the school. They are not there to just have a meeting. They are there to impact. You need to have leadership and it has to be strong. I have been in places where the leadership has not been strong and the PLCs struggle. Collaboration is very important for this leadership. It is someone whose job it is to relay messages within the grade level or within the school to develop a better school whether its climate or curriculum. It is guiding your team to be doing what they should be doing. It is helping your teammates with planning or being able to pull and understand data. It is knowing where to go in the curriculum. You are working towards the goal of the group or committee.

This idea of collaborative professional learning communities was shared by another factor three participant. Participant 14 elaborated on this idea when discussing the statements in the strongly agree columns of the factor three model sort:

I think these are so important because you can't get anywhere with just one mind or one thought process. You have got to have collaboration especially in a school setting. I think teacher collaboration and professional learning communities are so important. You can't lead your team without working with others. You can't lead your school without collaborating with other colleagues, other specialists, and administration. I am the lead team member on my team, but I don't make a single decision without talking to my team and weighing out the pros and cons.

Factor three high negative statements provided specific examples of what teacher leadership is not under this viewpoint. They represented the themes of teacher leader characteristics, targeted actions, instruction, formality of role, and selection. The high negative statements included "self-appointed by teachers," "holding a titled leadership position," "developing curriculum," "conducting action research," and "having excellent interpersonal skills." The disagree (-2) column provided further support of teacher leadership non-examples: "providing outreach with families and the community," "appointed by the principal," "helping to implement decisions made by others," and "shifts responsibility for student learning from individual to communal responsibility."

Factor three participants described teacher leadership as something anyone can participate in with the support of others when reviewing the high negative sort statements.

Participant 40 summarized this as:

I don't think you need to have a specific position to show leadership. Leadership is helping your school climate. You are helping them develop things in the school and I don't think you need to be assigned a specific role to show leadership. I don't think teacher leadership positions should be self-appointed. If you are showing leadership

skills, I would think your peers would put you up to be a leader. Teaching experience does not matter. I think it should be peer selection along with some administration selection. Peers will know more than administration about teacher leaders and who can express their ideas and get things done.

Participant 14 described that while anyone can be a leader, people demonstrating leadership with the support of others may feel better about becoming leaders:

You can be a quiet leader. You can do things that show your leadership. Everyone will tell you that they can lead, that they can be a team leader and guide a team. I think when leadership positions are appointed by your administration; it's a lot better of a feeling. "I can do this because they believe in me. They have obviously seen things that I can do." This feeling doesn't always exist when a leadership position is self-appointed. The biggest thing is having people behind you. You have got to have the support of others in order to lead.

Factor three participants were asked to look at the model sort holistically. The factor three model sort was characterized as a way to describe the various aspects of teacher leadership. Participant 14 named the model sort "a teacher leadership effectiveness continuum." Participant 14 described her thinking thusly:

The reason why it was so hard to sort the statements on the negative side (action research and developing curriculum) is that I think they are still a part of teacher leadership, but they are not as important as these (pointing to the strongly agree columns: forming collaborative school cultures, having a broader perspective, and promoting and sustaining a vision for change). I think these things are needed for a teacher to be effective in showing leadership.

Participant 40 entitled the model sort "what leadership is at our school." Participant 40, who had worked in three schools, elaborated on this as:

Leadership shouldn't look different at other schools. It is interesting in being at different schools to see how it changes. The main things are still the same. The leadership team or person should be able to handle meetings. They should be able to share with the team. They should have ideas. They should be able to delegate.

Research question #2.

Factor three participants were asked the second research question: What fosters or inhibits the development of teacher leadership? Administrative support, leadership abilities and opportunities, teachers' willingness to assume leadership roles, and personal characteristics were identified as things which foster teacher leadership. Participant 14 shared, "My principal plays a huge role in teacher leadership. Making your staff feel comfortable and letting them know that it is OK to take risks and to lead in the profession is huge." Participant 40 elaborated on administrative support with:

The teacher leader must be supported by the principal. I think that is the most important. I have been places where administration hasn't been supportive and I have been in places where it has been supportive. I know we excelled a lot more as a leadership team when we were supported. If you are not being supported, the leader is not going to be willing to perform.

The principal plays a role in developing teacher leaders by giving opportunities for leadership which start small and build to greater responsibilities with clear expectations.

Participant 40 described this process as:

I think assigning them [teacher leaders] tasks and seeing how they work with them. It is putting more leadership on them and seeing how they perform. It could be very small before you get to bigger pieces. You can't just throw people into leadership without them feeling comfortable and understanding what they need to be doing.

Factor three participants cited having this opportunity to practice leadership as something which fosters the development of teacher leadership. Participant 14 shared examples of leadership opportunities:

Things that foster teacher leadership are opportunities for professional development where it is led by teachers. There needs to be opportunities for professional learning communities to have conversations. Giving the staff a say in the things that are

important to them is important and then giving them time to help make decisions and make changes.

Teacher leaders need to be willing to serve in leadership positions and have the skills which support their success in leadership roles. Participant 14 mentioned how teacher leaders may flourish when they lead in areas they are strong in:

I think it helps to find your talent. When your principal comes and observes you and says, “Hey you are really good at this. I want you to lead a professional development on this or go present at a conference.” I think this allows you to step out because not everyone is going to be good at everything. I think this highlights your teacher leadership. Find out what you are good at. Leading can be in anything you want to lead in. It is not just what is handed to you or asked of you. It is more.

Participant 40 talked about the need for teacher leaders to be comfortable in their roles and be able to function effectively in the appropriate leadership contexts:

It is having someone who is open and willing to be a member of leadership. I have been in situations where people are not comfortable and they are forced into that situation and it hinders the process. I don’t think every single person has to be a [school] leader. Everyone is a leader in their own classroom. You want to select leaders to make a school leadership group which can get things done and talk with their [grade level] teammates.

It is important for teacher leaders to have a vision and have the skills needed to achieve targeted outcomes. The idea of poor alignment toward a common goal was viewed as an inhibitor of teacher leadership. Participant 40 described these inhibitors to teacher leadership development as “unpreparedness” and “expectations not being set; being able to run meetings and know what they should look like to support the students. I have been in meetings where they don’t and it is frustrating.” Participant 14 shared teacher leadership is inhibited “When there is not a sense of teamwork and collaboration. When it is a group effort, I think it is much more effective and much more direct.”

Factor three, guiding leadership which bridges organizational levels, emphasized a viewpoint of teacher leadership where teachers led in professional learning communities and provided a bridge between classroom and school-wide contexts. Factor three participants saw themselves as leaders of their professional learning communities who helped guide their communities to make impactful changes. Participants in factor three thought anyone should have the opportunity to be a teacher leader. Factor three participants viewed their model sort as a method for providing value to different teacher leadership activities and therefore listed specific teacher activities believed to not be as important in defining teacher leadership. Administrative support, leadership abilities and opportunities, teachers' willingness to assume leadership roles, and personal characteristics were listed as things which foster teacher leadership development for factor three. The factor three viewpoint included poor alignment to a common goal, not setting expectations, ineffectively run meetings, and poor collaboration as inhibitors to teacher leadership development.

Consensus Statements

Consensus statements are statements which do not distinguish between any factors (Watts & Stenner, 2012). Consensus statements are ranked very similarly across all study factors. In other words, in general all participants sorted certain statements similarly. Analysis of consensus statements allows the researcher to determine shared participant beliefs regarding teacher leadership. Table 4.14 details the consensus statements for this study. PQMethod identified one statement as a significant consensus statement: statement 1, "Teacher leadership is holding a titled leadership position." This statement was placed in the

-4 column by all three factors indicating a universal rejection. This disagrees with the traditional definition of teacher leadership presented by Fitzgerald and Gunter (2008) as a formal position in a hierarchical organizational structure.

A second, lesser significant statement was identified in statement 37, “Teacher leadership is using data as the basis for decision making.” This statement was placed in the 0 column by factors one and two and the +1 column by factor three. Promoting the use of assessments and data for school and district improvements is one of the seven teacher leadership domains presented in the *Teacher Leader Model Standards* (2008). Danielson (2006) describes data based decision making as a teacher leadership activity. The neutral rating by all three factors suggested the participants did not hold a strong viewpoint on whether data usage in decision making should be included or excluded in a definition of teacher leadership.

Table 4.14

Consensus Statements

Statement No.	Factor 1 Value	Factor 2 Value	Factor 3 Value
1*	-4	-4	-4
37	0	0	+1

Note. Statements are non-significant at $p > .01$; The statement with * is non-significant at $p > .05$.

Distinguishing Statements

Distinguishing statements are statements which are statistically distinguished among factors. Analysis of distinguishing statements provides additional information regarding each factor and how it differs from the other factors. For instance, statement 11, “being open to new ideas and approaches,” is distinguished in factor one with a +4 value when compared to factor two (+2 value) and factor three (+2 value). This helps to define factor one differently than factors two and three.

PQMethod identified twenty-two distinguishing statements for factor one. Fourteen of the statements were significant at the $p < .01$ level. Table 4.15 lists the significant statements for factor one by model sort column value and z-score. The top two significant statements, numbers 11 and 9, were “being open to new ideas and approaches” and “having a high work ethic.” These statements reflected the factor one emphasis on teacher leader personal characteristics where teamwork and collaboration were valued. The bottom three significant statements, numbers 20, 7, and 19; were “participating in staffing decisions,” “communication between teachers and district leaders,” and “participating in budget

decisions.” These statements agreed with factor one participants’ Q-sorts and interview comments about teacher leadership not being about participating in administrative or managerial activities. In comparison, factors two and three placed statements 20, 7, and 19 in columns -2, -1, 0, or +1. This illustrated how factor one participants viewed these statements differently than the other factor participants.

Table 4.15
Distinguishing Statements for Factor One

Statement No.	Factor 1		Factor 2		Factor 3	
	Value	Z-Score	Value	Z-Score	Value	Z-Score
11	+4	1.70*	+2	1.15	+2	0.83
9	+3	1.01*	-1	-0.54	-1	-0.21
27	+2	0.88*	+4	2.06	-1	-0.46
34	+2	0.83*	+1	0.34	-1	-0.40
40	+1	0.80*	+1	0.20	0	-0.07
39	+1	0.52*	-1	-0.47	-2	-0.79
36	0	0.12*	+3	1.73	+3	1.18
18	0	0.01*	+2	1.16	+2	0.88
3	-2	-0.90*	0	-0.05	-3	-1.78
25	-2	-0.94*	-3	-1.40	0	-0.09
14	-2	-0.96*	+2	0.64	+1	0.79
20	-3	-1.42*	-1	-0.24	-1	-0.48
7	-3	-1.46*	-1	-0.26	+1	0.26
19	-4	-2.21*	-2	-1.15	0	-0.21

Note. * indicates significance at $p < .01$

PQMethod identified twenty-four distinguishing statements for factor two. Seventeen of the statements were significant at the $p < .01$ level. Table 4.16 lists the significant statements for factor two by model sort column value and z-score. The top three significant statements, numbers 27, 26 and 4; were “challenging the status quo for better student learning outcomes,” “promoting and sustaining a vision for change,” and “being a change agent.” These statements supported factor two participants’ viewpoints for leading change over time. The bottom three significant statements, numbers 6, 35, and 25; were “occurs outside of teaching responsibilities,” “helping to implement decisions made by others,” and “teaching experience is required.” Factor two participants felt anyone could be involved in teacher leadership activities regardless of teaching experience.

Table 4.16
Distinguishing Statements for Factor Two

Statement No.	Factor 1		Factor 2		Factor 3	
	Value	Z-Score	Value	Z-Score	Value	Z-Score
27	+2	0.88	+4	2.06*	-1	-0.46
26	+2	0.94	+4	2.02*	+3	1.16
4	0	0.36	+3	1.59*	0	-0.08
33	-1	-0.74	+2	0.95*	-1	-0.34
34	+2	0.83	+1	0.34*	-1	-0.40
8	+2	0.85	+1	0.26*	+2	0.92
28	-3	-1.79	0	0.10*	-3	-1.28
29	+2	0.93	0	-0.01*	+1	0.76
3	-2	-0.90	0	-0.05*	-3	-1.78
12	+4	1.50	-1	-0.51*	+2	1.05
30	0	0.26	-1	-0.66*	+1	0.70
5	+1	0.62	-2	-1.01*	+1	0.78
15	+1	0.51	-2	-1.08*	0	-0.02
19	-4	-2.21	-2	-1.15*	0	-0.21
6	0	0.31	-3	-1.22*	0	0.15
35	-1	-0.40	-3	-1.38*	-2	-0.69
25	-2	-0.94	-3	-1.40*	0	-0.09

Note. * indicates significance at $p < .01$

PQMethod identified twenty distinguishing statements for factor three. Fifteen statements were significant at the $p < .01$ level. Table 4.17 lists the significant statements for factor three by model sort column value and z-score. The top three significant statements,

numbers 16, 17, and 38; were “important for professional learning communities,” “about forming collaborative school cultures,” and “supported by the principal.” This supported factor three participants’ interview comments about leading through collaborative professional learning communities while being supported by school administration. The bottom three significant statements, 24, 3, and 23; were “having excellent interpersonal skills,” “about developing curriculum,” and “positions are self-appointed by teachers.” When factor three participants viewed their model sort holistically, they saw it as a way to organize various teacher leadership aspects by value. These statements reflected what factor three participants viewed as lesser in importance when describing teacher leadership.

Table 4.17
Distinguishing Statements for Factor Three

Statement No.	Factor 1		Factor 2		Factor 3	
	Value	Z-Score	Value	Z-Score	Value	Z-Score
16	0	0.25	0	-0.17	+4	2.36*
17	+1	0.45	+2	0.73	+4	1.62*
38	-1	-0.13	-1	-0.28	+3	1.23*
25	-2	-0.94	-3	-1.40	0	-0.09*
22	-2	-0.87	-2	-1.19	0	-0.13*
19	-4	-2.21	-2	-1.15	0	-0.21*
34	+2	0.83	+1	0.34	-1	-0.40*
27	+2	0.88	+4	2.06	-1	-0.46*
41	+1	0.60	+1	0.25	-1	-0.59*
32	+1	0.52	0	0.14	-2	-0.62*
21	-2	-1.41	-4	-1.74	-2	-0.67*
10	+3	1.21	+3	1.32	-2	-0.88*
24	0	0.21	0	0.14	-3	-1.18*
3	-2	-0.90	0	-0.05	-3	-1.78*
23	-1	-0.48	0	-0.22	-4	-2.57*

Note. * indicates significance at $p < .01$

Chapter Summary

In this chapter, the creation of the Q-sample and selection of the P-Sample were reviewed. The Q-sample was drawn from the teacher leadership literature and through interviews and feedback from teachers and school administrators. The Q-sample was then given to a P-sample of forty-three elementary teachers to sort. The forty-three teachers were

drawn from five elementary schools in a large school district in a southern state. The teachers, school principals, and school demographics were varied in experience level, teaching role, educational background, and program focus.

The Q-sorts were analyzed using PQMethod (version 2.35), a statistical program, to determine correlations, factor determination and rotational analysis, Eigenvalues, variances, factor loadings, correlations, explained variance, and z-scores. A three factor rotation solution was selected to further study the Q-sort data. The three emerging factors accounted for 50% of the explained variance. Varimax factor rotation was performed to study the factors. Forty-one of the forty-three participants loaded significantly on at least one of the three factors. Thirty-six of the participants loaded significantly on only one factor. Seventeen participants each loaded on factor one, fifteen participants loaded on factor two, and four participants loaded on factor three. Participants loading at greater than 0.6000 on a factor were approached for qualitative post-sort interviews. The post-sort interviews provided further clarification and elaboration to the quantitative data.

Factor one, teamwork and continuous learning for the classroom, described the personal characteristics and skills factor one teachers believed are essential for teacher leadership. This viewpoint suggested the ability to be a team player and continuously learn new ideas and approaches are important for teacher leadership. Teacher leadership is about being able to work collaboratively with others to share instructional ideas and build upon the knowledge base. Under this viewpoint, teacher leadership is not one person acting alone or giving orders to a group of people. The context for factor one teacher leadership takes place

primarily in the classroom. Factor one participants believed teacher leadership is not about being involved in managerial or administrative actions. Factor one participants expressed a disinterest for involvement in school-wide or higher decision-making. Participants stated administrative support, opportunities to practice leadership, celebrating successes, a safe environment to try new things, personal characteristics, and teacher motivation in the specified activity were all things which foster teacher leadership. Factor one participants felt acting with a singular focus, not collaborating, perceived unreasonable expectations, and outside demands were all viewed as inhibitors to teacher leadership development.

Factor two, widespread leadership of others for change, expressed a view of teacher leadership through a broader perspective which included school culture and the ability to lead others. In this viewpoint, teacher leadership is about being a change agent and leading others through a change process over time. The context for this perspective is primarily outside of the classroom at the school-wide level. Factor two participants suggested a belief that anyone may be involved in teacher leadership activities and involvement is not limited by experience or appointment by others. Support from teacher peers and school administration is critical for teacher leaders to engage in and be effective in their roles. Teacher leaders need certain personality characteristics and motivation to assume teacher leadership roles such as desire to challenge the status quo, a vision for change, and the ability to act as a change agent. An atmosphere which is safe for risk-taking and failure; and built upon mutual trust is important for teacher leadership development. A lack of time was shared as a limiter to teacher leadership development.

Factor three, guiding leadership which bridges organizational levels, defined teacher leadership as learning and supporting activities in a collaborative atmosphere through the Q-sort. In follow-up interviews, participants felt teacher leaders possess a broader perspective and skills which allow them to be front line leaders in professional learning communities while forming a bridge between the classroom and school-wide contexts. Teacher leaders are able to facilitate meetings and provide support through a collaborative work environment. They have targeted outcomes and work towards making an impact on them. Factor three participants provided non-examples of teacher leadership roles through their negative statement selections and interview answers. Factor three participants felt teacher leadership roles may be fulfilled by anyone willing to accept leadership roles and with the support of their peers and the principal. Teacher leadership may be developed when leadership opportunities are shared by school administration, teacher leaders lead in areas of strength, teacher leaders start with smaller leadership tasks, and when clear role expectations and outcomes are set.

Consensus and distinguishing statements were identified to indicate similarities and differences across all three factors. PQMethod identified one significant consensus statement: “teacher leadership is holding a titled leadership position.” This statement was placed in the -4 column by all three factors. Another statement was also indicated: “teacher leadership is using data as the basis for decision making.” This statement was rated at 0 for factors one and two and at +1 for factor three. Distinguishing statements were identified for all three factors. At the $p < .01$ level, there were fourteen significant statements for factor one, seven significant

statements for factor two, and fifteen significant statements for factor three. The distinguishing statements were used to confirm and distinguish the viewpoints presented by the model sorts and participant interviews for each factor.

In chapter five, the study findings will be compared to the existing teacher leadership literature. The findings will also be used to examine and determine support for the teacher leadership framework shared in chapter two. Study implications and areas for further research will be presented.

Chapter Five: Discussion And Implications

Chapter Introduction

A three factor solution was used to understand this study's research questions. Each factor presents a viewpoint that represents how teachers define teacher leadership. This study also sought to identify the conditions which foster or inhibit teacher leadership development. This chapter will present a summary of study findings. It will relate the study's findings to the existing teacher leadership literature. The framework for defining teacher leadership presented in chapter two will assist with study finding interpretation and form the basis for implications for teachers, school administrators, educational policy makers, and college and university teacher and administrator preparation programs (Figure 5.1). Ideas for future research will be shared.

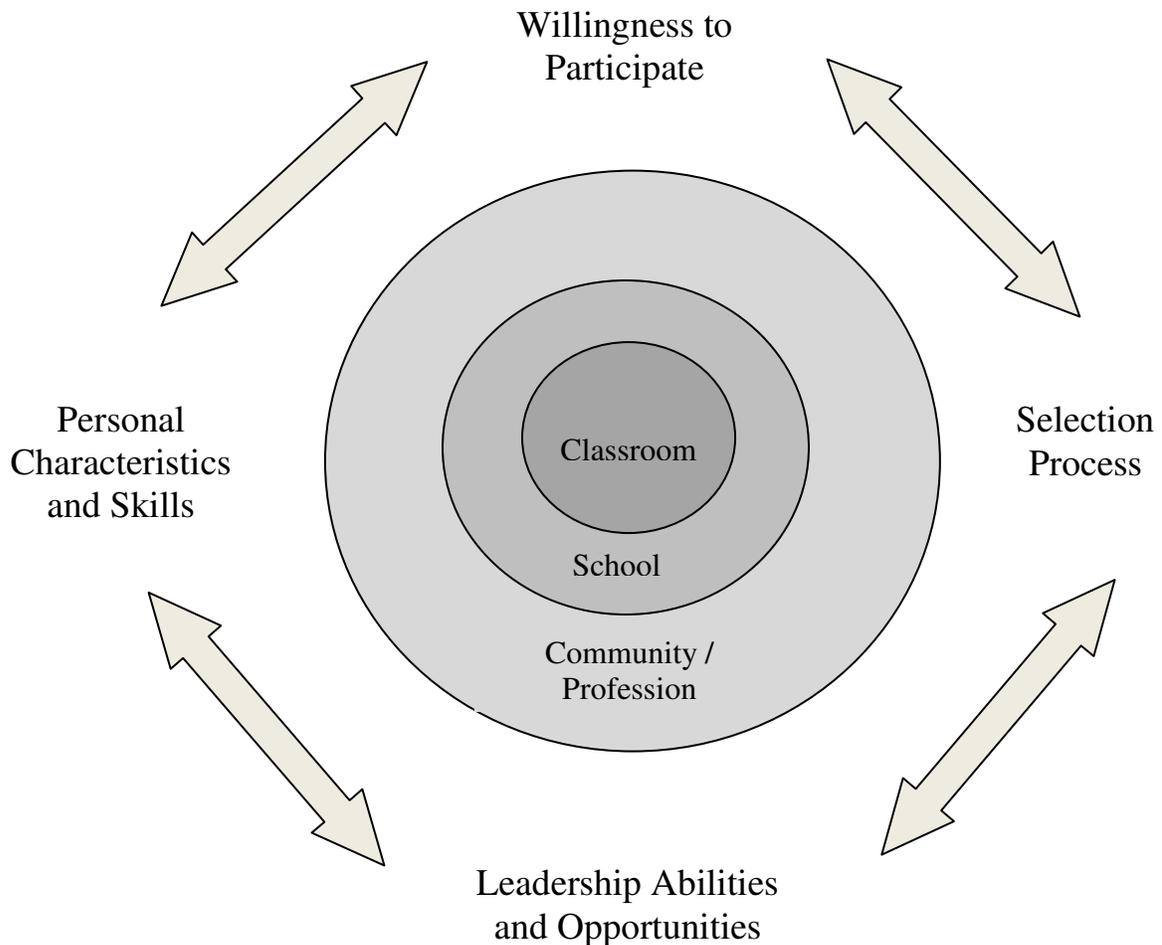


Figure 5.1. A Framework for Defining Teacher Leadership: Role Orientation, Scope of Influence, and Success Conditions.

Summary of Study Findings

In this study, three factors or viewpoints of teacher leadership were examined. Additionally, similarities and differences among the factors emerged through the study's findings. All three factors indicated anyone can be a teacher leader. The three viewpoints suggested a titled leadership position was not necessary to engage in teacher leadership activities. All three viewpoints stated administrative support, a safe environment to try new

things, the existence of a collaborative culture, and the personal characteristics of the teacher leader were important for fostering teacher leadership development. The factors did not offer a shared view for things which inhibit teacher leadership development.

Factor one, teamwork and continuous learning for the classroom, focused primarily on the classroom role orientation and scope of influence with an emphasis on improving instructional practice. Participants loading significantly on this factor had either less than four years or greater than fifteen years of experience and were mostly in classroom teaching roles. Factor one participants defined teacher leadership through personal characteristics such as teamwork, continuous learning, risk taking and trust. This viewpoint felt teacher leadership is not participating in administrative or managerial type decisions. Factor one participants felt administrative support, opportunities to practice teacher leadership, celebrating successes, personal characteristics, teacher motivation, and the existence of a safe environment to try new things were all things which foster teacher leadership development. Not collaborating with others, acting with a singular focus, perceived unreasonable expectations, and outside demands were listed as inhibitors to teacher leadership development.

Factor two, widespread leadership of others for change, focused primarily on the school role orientation and scope of influence. The majority of participants loading significantly on factor two had greater than five years of experience and filled teaching roles outside of the regular classroom. Factor two participants defined teacher leadership as being a change agent, possessing a broader perspective, and exhibiting courage and persistence

while leading improvement processes over time. Factor two participants felt personal characteristics, staff and administrative support, a safe environment to try new things, developing a broader perspective, and a collaborative culture were things which foster teacher leadership development. Factor two participants cited a lack of time and outside responsibilities as inhibitors to teacher leadership development.

Factor three, guiding leadership which bridges organizational levels, focused primarily on connecting the classroom and school organizational levels. Factor three participants led mostly through professional learning communities, but also at the classroom and school levels. Participants loading significantly on factor three represented all experience levels and filled classroom roles. Factor three participants defined teacher leadership as having a broader perspective, making progress and impact toward identified outcomes, being the organizing and driving force behind improvement efforts, and being collaborative and communicative. Factor three participants felt setting clear expectations with identified outcomes, having a willingness to serve, the existence of staff and administrative support, opportunities to practice teacher leadership in smaller ways with chances to expand to larger ways, personal characteristics, a safe environment to try new things, and leading in areas of strength were all things which foster teacher leadership development. A lack of necessary skills and collaboration were viewed as inhibitors to teacher leadership development.

Study Findings and the Teacher Leadership Literature

This section will compare the study findings to the information presented in the chapter two teacher leadership literature review with the purpose of relating the two to each

other. The three factors in this study defined teacher leadership differently through role orientation and scope of influence. Teacher leadership may occur at the classroom, professional learning community, or school wide levels and may be focused on a variety of purposes. Pursuing instructional improvements, leading widespread change, and supporting others in reaching targeted goals are all examples of teacher leadership purposes. The three viewpoints provided similar ideas for supporting teacher leadership. Administrative and peer support, opportunities to practice teacher leadership in a safe and collaborative culture; teacher motivation for leading, and teacher personal characteristics were all cited as success conditions by the three factors.

Teacher leadership is perceived differently by teachers according to their experience, their degree, and whether the teacher holds a leadership position (Angelle & DeHart, 2011). This statement was supported by the research findings. Each factor defined teacher leadership differently. Participants in each of the three factors were generally similar in their responses to the other participants loading significantly on the same factor. Factor one participants had either very little or a great deal of experience and were primarily classroom based. Factor two participants had at least five years of experience and tended to operate outside of the classroom. Factor three participants came from all experience levels, were classroom based, and also served in leadership positions.

A key study finding common to all three factors was the belief teacher leadership may occur outside of a formal titled leadership position. All three factors placed this statement in the strongly disagree (-4) Q-sort column. This suggested a more inclusive approach where all

teachers should have the opportunity to practice teacher leadership if they choose to do so. This is contrary to the traditional definition shared by Fitzgerald and Gunter (2008) as the assignment of formal roles in a hierarchical organizational structure. When teacher leadership is restricted to the possession of a titled position, non-titled position holders are excluded from participating. This inclusive approach suggested a flatter organizational structure is preferred over a hierarchical one for teacher leadership. The viewpoints described having a collaborative culture where many teachers have the opportunity to participate. Furthermore, specific prerequisites used to assign titled leadership positions in hierarchical structures such as possessing teaching experience and subject matter expertise were not viewed as important in the sorts.

Distributed leadership supports the development and continued existence of teacher leadership. At the school level, principals are the lynchpin for teacher leadership flourishing (Helterbran, 2010). In instances where teachers seek out leadership roles, principal supports are needed for them to fulfill their promise as leaders through leadership skill development and assigning leadership responsibilities (Berry, Daughtrey, & Wieder, 2010). Acker-Hocevar and Touchton (1999) found teachers with the greatest ability to affect positive change had empowering principals and school cultures. Teacher leadership thrives in school environments where teacher and principal interests in this form of leadership are publically demonstrated and honored through verbal and concrete actions (Bonduris, 2011; Crowther, et al., 2002; Jackson, et al., 2010; Lashway, 1998; Little, 1988). This study helps to understand the use of distributed leadership in school environments by illustrating how recruiting

teachers from the different three factors may provide the specific expertise needed for a specific leadership activity. Factor one teachers are well suited for engaging in leadership activities requiring instructional expertise. Factor two teachers are ideally suited for addressing school-wide issues. Factor three teachers can bring specific expertise to professional learning community challenges.

The findings suggested providing support for teacher leadership activities and providing opportunities for practicing teacher leadership are two things administrators should provide. Administrative and collegial support for teacher leadership was identified by all three factors. Examples of support identified by study participants included recognizing teachers' strengths, encouraging teachers to lead others, and backing up teacher leaders in their actions. All factors identified the need for opportunities to practice teacher leadership in a safe environment. Factor one participants described a synergistic environment where teachers worked together as a team to make improvements. Factor two participants cited the need for principals to be sincere in their support of teacher leaders and back them up. Factor three participants discussed the need for active principal support and peer support as necessary for more effective teacher leadership. The literature supported the need for peer support in addition to administrative support. Stoops (2011) cited resistance from other teachers as an inhibitor to teacher leadership.

Study participants in all three factors cited the importance of the teacher leader's personal characteristics when describing ascension to leadership activities. Teacher leaders often enter leadership roles with significant teaching experience, knowledge of the

curriculum, strong administrative and organizational skills, time management abilities, and excellent interpersonal skills (Lieberman, Saxl, & Miles, 1988). The findings agreed and disagreed with the literature. Significant teaching experience was not identified as a prerequisite for teacher leadership by the factors in this study. Knowledge of the curriculum was important for factor one, strong administrative and organizational skills was important for factors two and three, time management skills were important to all three factors, and excellent interpersonal skills were important to factors one and two.

A number of personal attributes are presented in the literature to define teacher leadership: collaborators, courageous risk takers, participants in school level decision making, action researchers, relationship builders, role models, innovators, hard workers, confident, flexible, perseverant, open-minded, reflectors, creative, humorists, communicators, lifelong learners, having a global perspective, and problem solvers (Danielson, 2006; Darling-Hammond, et al., 1995; Dauksas & White, 2010; Jackson, Burrus, Bassett, & Roberts, 2010; Krisko, 2001; Mackiewicz-Wolfe, 2013; Middlebrooks, 2004; Silva, Gimbert, & Nolan, 2000; Wilson, 1993; York-Barr & Duke, 2004). The study factors supported many of these characteristics in their responses. The notable exception was conducting action research which earned high negative status (-3) from factors one and three and a zero rating from factor two.

Waters, Marzano, and McNulty (2004) conducted a meta-analysis which examined variables of school leadership which influence student outcomes. Their findings listed twenty-one responsibilities of successful and effective school leaders needed for First-Order,

or incremental, Change. The authors further listed seven of the twenty-one responsibilities as necessary for Second-Order, or deep, Change. Table 5.1 lists the twenty-one responsibilities.

Table 5.1
Twenty-One Responsibilities of Successful and Effective School Leaders

No.	Responsibility
1	Affirmation
2	Change Agent*
3	Contingent Rewards
4	Communication
5	Culture
6	Discipline
7	Flexibility*
8	Focus
9	Ideals/Beliefs*
10	Input
11	Intellectual Stimulation*
12	Involvement in Curriculum, Instruction, and Assessment
13	Knowledge of Curriculum, Instruction, and Assessment*
14	Monitoring/Evaluation*
15	Optimizer*
16	Order
17	Outreach
18	Relationships
19	Resources
20	Situational Awareness
21	Visibility

Note. * for important for establishing Second-Order Change

This study's findings reflected some of the responsibilities presented by Waters, Marzano, and McNulty (2004) and suggested they may also be helpful for effective teacher leadership. All factors cited a need for a collaborative and supportive school culture for teacher leadership to occur. Factor one participants indicated a need for continuous learning and the sharing of instructional best practices. Factor two participants believed taking risks

and acting as a change agent are essential for teacher leadership. Factor three participants cited being open to new ideas through learning and leading others through changes and improvements.

Teacher leadership is an important ingredient for facilitating the growth of professional learning communities. Networks or professional learning communities are structures which organize the work around a particular problem or goal. Networks or communities of practice provide a venue for shared repertoire, joint enterprise, and mutual engagement (Wenger, 1999). Principals wishing to establish improvements in teaching and professional learning communities may turn to teacher leadership as a way to support these improvements (Ackerman & Mackenzie, 2006; Boykin, Scrivner, & Robbins, 2004). Professional learning communities include both formal and informal leadership roles. This structure for teacher leadership focuses on a collegial, collaborative, and open approach (Huth, 2002). Successful learning community construction may occur through teacher leadership activities such as constant teamwork, rotating of leadership roles, and articulation of a shared vision (Fennell, 1999). All three factors cited the need for collaboration when defining teacher leadership. Factor one included the idea of teamwork prominently in its definition while factor three discussed the need for teachers working together to achieve identified outcomes.

Teacher work should be structured in ways which provide opportunities for teaching and learning to take place for both students and teachers. Teachers should develop networks which encourage the sharing of ideas which when coupled with effective professional

development, allow teachers to develop sound instructional selection practices in choosing what to implement in their classrooms with their particular students (Little, 1999). Teacher leaders are likely to be viewed as experts by colleagues, provide formal presentations and informal support and be approached for assistance (Brown, Fouts, & Rojan, 2001). These ideas agree with factor one's synergistic teamwork focus on making instructional improvements within the classroom.

Study participants placed different values on teacher leadership activities. Doyle (2000) and White (1992) defined teacher leadership as providing managerial and administrative support through involvement in budget and staffing decisions. Factor one participants disagreed with this definition, showing little interest in engaging in these types of activities. Conley (1991) found teachers prefer to be more active in instructional decisions than managerial decisions. Factor one participants agreed with this notion and with Snell and Swanson (2000) where teacher leaders are viewed as expert instructors in their classrooms and earn credibility based on their skills. Gonzales and Lambert (2001) suggested teacher leadership was exemplified by teachers who were lifelong learners and change agents who brought action to their classrooms and throughout the school. The combination of all three factors' viewpoints provided support for this definition.

The findings provided separation between lifelong learning and change agent types of activities compared to administrative and managerial types of activities. Both types of activities are crucial for the operation and improvement of a school. Teacher participants in this study displayed affinity for activities which did not come with paramount risks. Teachers

take emotional and social risks when then step forward to lead. It is a risk to share ideas and to inspire others to make changes. However, the level of risk is not as great when compared to certain administrative and managerial tasks. For example, making a financial mistake is one of the quicker reasons for job dismissal. This is not necessarily the case if a leader makes a mistake while leading a change effort. This suggests teachers prefer to practice teacher leadership in areas which may be high-stakes emotionally, but not in areas which may affect them losing their jobs. While aspects of the findings suggested teachers want to be involved in many school leadership matters, there does not appear to be a desire to share leadership on an equal footing with the school principal and accept the risks associated with it.

The literature also suggests teacher leadership as a targeted action process for improvements. Teacher leaders play an important role in promoting and sustaining a vision for change (Heller & Firestone, 1995). They understand the larger perspective, think about the impact of their decisions, develop social networks of influence, and seek to make changes (Acker-Hocevar & Touchton, 1999). Teacher leaders are student advocates who challenge the status quo in effort to achieve better learning outcomes (Collay, 2011; Silva, et al., 2000). Teacher leaders recognize opportunity and take the initiative in mobilizing people around a common purpose, marshal resources and take action, monitor progress and adjust the approach as conditions change, sustain the commitment of others and anticipate negativity, and contribute to a learning organization (Danielson, 2006). Factors two and three shared this viewpoint of teacher leadership where value was placed on having a broader perspective,

acting as a change agent, organizing others in a collaborative setting, and persevering through the improvement initiative over time.

How teacher leaders may be selected and developed is discussed in the literature. Teachers rise to formal teacher leadership roles in a variety of ways. Teachers may be appointed to these positions by school administrators, nominated by peers, or self-select themselves (Helterbran, 2010). The factors' viewpoints agreed formal leadership roles were not necessary to practice teacher leadership and disagreed over a singular route for selection to teacher leadership roles. Principals wishing to identify teacher leaders on staff should look for teachers who are trustworthy and maintain confidentiality, are sensitive to the needs of others, can see beyond their own classrooms, are resourceful and persist to find solutions, admit their mistakes, and are willing to grow and change (Dauksas & White, 2010). These characteristics were supported by the study findings. Factor three participants defined teacher leadership as leading and supporting the needs of others. Factors two and three identified the need to possess a broader perspective. Factor two participants cited a need for teacher leaders to be persistent. Factor one valued the ideas of continuous growth and learning. School administrators wishing to encourage the growth of teacher leaders should identify teacher strengths, match teacher strengths to professional development needs, and enlist these teachers to provide professional development (Hickey & Harris, 2005). Factors one and three identified this type of selection process as one way to foster teacher leadership.

Vail and Redick (1993) suggested if teachers saw the relevance of teacher leadership activities, they would be more likely to engage in them. This idea was supported by the

study's findings. Factor one described this through a different willingness to engage in classroom versus managerial activities. Factor one participants promoted a viewpoint which tied directly to their daily instructional responsibilities. Leadership activities not closely related to this focus were not as important as demonstrated by the factor one model sort. Factor two suggested not all teachers are interested in being leaders. The factor two viewpoint constructed a picture of teacher leadership involving widespread involvement across a school. Leading large groups of colleagues in an initiative may not be something which appeals to all teachers and therefore not be relevant to them. Factor three mentioned the need for teacher leaders to be comfortable in their leadership roles and suggested teachers lead in areas of strength. If teachers are not passionate or knowledgeable in a certain area, they may not choose to be the leader in it.

Several models of teacher leadership are presented in chapter two. Smylie (1992) found the relationship teachers had with their principals had the greatest influence on teachers' willingness to participate in teacher leadership activities. While none of the participants fully characterized their relationships with their school administration in this study, participants did share aspects of the dynamics between teachers and principals. The findings of administrative support and existence of a safe environment for attempting leadership do provided some support to Smylie's model. Factor one participants shared how school administration places a role in relationship building by highlighting teachers' strengths and encouraging them to share them through leadership opportunities. Factor two participants described how having the principal's support and trust helps promote teacher

leadership participation through encouragement and the creation of a safe environment.

Factor three participants identified how principals start by providing small leadership opportunities, offering support and feedback; and developing teachers into leaders.

Wallace, Nesbitt, and Miller (1999) examined teacher leadership through two factors: sphere of influence (classroom, school, or district level) and level of proactivity (degree in which teachers generate support from other teachers to bring about school change). Their resulting Six Leadership Models for Professional Development in Science and Mathematics identified teacher leadership roles as classroom teacher, school facilitator, resource manager, instructional manager, change agent, and leadership choice. This study's findings supported the classroom and school spheres of influence, but did not support the district level sphere of influence. The three study factors supported some of the teacher leadership roles presented in this model: classroom teacher (factor one), school facilitator (factor three), change agent (factor two), and leadership choice (factors two and three).

Riel and Becker (2008) attempted to conceptualize the development of teacher leadership and influence through a pyramidal model. In this model, informal, less skilled, and locally based activities were at the bottom of the pyramid and progressed upward to more outward, formal leadership activities with widespread impact. The first level was based on classroom practice where a teacher functions and learns in his or her immediate classroom. The second level consisted of teachers in the same school collaborating and sharing responsibility for student achievement. The third level involved the use of professional networks where teacher leaders interact and share ideas outside of the school building. The

fourth and final level consisted of knowledge building where teacher leaders make contributions to the teaching profession on a wide scale. The changes in this model's levels were too broad and failed to capture the complexities of teacher leadership when compared to this study's findings. While factor one teachers functioned primarily in their classrooms, they viewed collaboration outside of their classroom as a key component to instructional improvement. However, factor one stopped short of participation in school-wide decisions. This provided an overlap between levels one and two in this model where the study's findings of teacher leadership did not fit neatly into this model's levels. Furthermore, while teachers formed professional networks through professional learning communities for sharing ideas, this study did not find evidence of this occurring outside of the school building.

Silva, Gimbert, and Nolan (2006) presented a three wave model for defining teacher leadership. In the first wave of teacher leadership, the teacher implements other teacher leaders' decisions. These decisions are made through formal roles such as department heads and union representatives and serve more of a managerial purpose for increasing school operations. This study did not find evidence of this model's first wave. Factor two included this idea in a strongly disagree Q-sort column. In the second wave, there is a greater emphasis on the instructional expertise of teacher leaders. This wave leads to the development of teachers as staff developers, mentors, and curriculum leaders. The second model wave was supported by the factor one viewpoint where the sharing of instructional best practices as a means for improving classroom instruction was valued. The third wave

utilizes informal teacher leadership roles where teachers become leaders and influencers by carrying out their normal duties without formal leadership positions as a means of reculturing schools. Factors two and three support this wave through their values of having a vision for change, broader perspective, being a change agent, and forming collaborative cultures for professional learning communities. A fourth wave was proposed to further develop this model. In the fourth wave, teachers employ transformational leadership qualities which lead to the perception of them as exemplary teachers by their peers (Pounder, 2006). This last wave redefines teacher leadership from a person with power through a formal role to a person in an informal role who assumes responsibility for initiating improvements in the school organization through collegial conversation (Gonzales & Lambert, 2001). All three study factors believed anyone could practice teacher leadership without a titled leadership role, identified the need for a collaborative culture, and cited personal characteristics and leadership skills necessary for successful leaders.

A fifth model of teacher leadership relies on four factors to describe teacher leadership: sharing expertise, sharing leadership, supra-practitioner, and principal selection (Angelle & DeHart, 2010). Sharing expertise is concerned with teachers sharing information and instructional support with other teachers. This model factor aligns with the study's factor one. Sharing leadership considers teachers' willingness to engage in leadership activities and the school principal's willingness to offer leadership opportunities. All three study factors aligned with this aspect of the model and indicated its importance for teacher leadership. Supra-practitioner describes teachers' willingness to exceed the expectations of their roles.

All three factors alluded to this aspect of the model when referring to desired teacher leadership activities for that particular study factor. Principal selection examines the degree in which principals control which teachers are able to participate in leadership activities. Study support was mixed for this aspect of the model. Factor one participants suggested principal selection was important for identifying teachers for leadership roles. Factor two participants placed principal selection in a strongly disagree column. Factor three participants shared while the principal has a role in the selection process, better selections are made when peers are involved in the process.

The *Teacher Leader Model Standards* was a model intended to codify, promote, and support teacher leadership as a vehicle for transforming schools to meet the needs of 21st-century learners (*Teacher leader model standards*, 2012). The study findings supported domains 1, 3, 4, and 7 and are summarized in Table 5.2. The supported domains reflect the study findings in the areas of collaborative culture, professional learning, instructional improvements, and challenging the status quo. Conducting action research was rated in the strongly disagree columns for factors one and three in relation to domain 2. Statements reflecting domains 5 and 6 in the Q-sort were not rated strongly by any factor. The ratings for these statements by all three factors ranged from -2 to +1. It should be noted the *Teacher Leader Model Standards* were created by a heterogeneous group of educational stakeholders including teachers, school administrators, policy organizations, leaders in higher education, and union representatives. This study surveyed teachers exclusively so the varying levels of

support for the domains in this model may be due to differences in teacher perceptions versus the perceptions of other educational stakeholders.

Table 5.2
Study Factor Support for *Teacher Leader Model Standards*

No.	Domain	Factors Supporting
1	Fostering a collaborative culture to support educator development and student learning	Factors one, two, and three
2	Assessing and using research to improve practice and student learning	None
3	Promoting professional learning for continuous improvement	Factor one
4	Facilitating improvements in instruction and student learning	Factors one, two, and three
5	Promoting the use of assessments and data for school and district improvement	None
6	Improving outreach and collaboration with families and community	None
7	Advocating for student learning and the profession	Factor two

The consensus statement, “Teacher leadership is using data as the basis for decision making” is related to domain 5 of the *Teacher Leader Model Standards*. Danielson (2006) also listed data based decision making as an aspect of teacher leadership. The study findings did not support its inclusion in a definition of teacher leadership. No factor model sort placed this statement in a high positive or high negative column. This placement suggested teachers do not feel strongly about including this activity as an example of teacher leadership and are unsure where it falls with regard to teacher leadership. Like the term “teacher leadership,” “data based decision making” is used widely. A clearer definition may be needed to better assess its association with teacher leadership.

North Carolina included teacher leadership as one of its six Professional Teaching Standards. These standards are used to evaluate North Carolina teachers annually. The teacher leadership standard is comprised of five elements (*North Carolina teacher evaluation process*, 2009). This study provided support for the majority of these elements and is summarized in Table 5.3. Elements A, B, and C all had at least two factors supporting them. Element D was limited in study support with only factor two supporting it. Element D deals primarily with policy creation. Policy creation is something which generally occurs on larger school organizational levels. Factors one and three focused on the smaller scope of influence organizational levels in this study. A statement for element E was included in the Q-sort. It was not rated strongly by any factor: factor one (+1), factor two (+1), or factor three (-1). This suggested demonstrating high ethical standards is not as important as other statements included in the sort when defining teacher leadership.

Table 5.3
Study Factor Support for North Carolina Teacher Leadership Professional Teaching Standard

Letter	Element	Factors Supporting
A	Teachers lead in their classrooms	Factors one and three
B	Teachers demonstrate leadership in the school	Factors one, two, and three
C	Teachers lead the teaching profession	Factors one, two, and three
D	Teachers advocate for schools and students	Factor two
E	Teachers demonstrate high ethical standards	None

A Framework for Defining Teacher Leadership

A framework for defining teacher leadership was presented in chapter two and analyzed with the study's findings in this chapter. The framework consisted of two key components: a method for conceptualizing teacher leadership and the elements which influence its development. The framework was created as an amalgamation of the teacher leadership literature and previous teacher leadership models. Overall, the framework was supported by the study's findings. The role orientation, scope of influence, and success conditions were supported by the three factors. Additions were made to the framework based upon the study's results. Figure 5.2 presents the framework developed from the teacher leadership literature and revised based upon the study's findings.

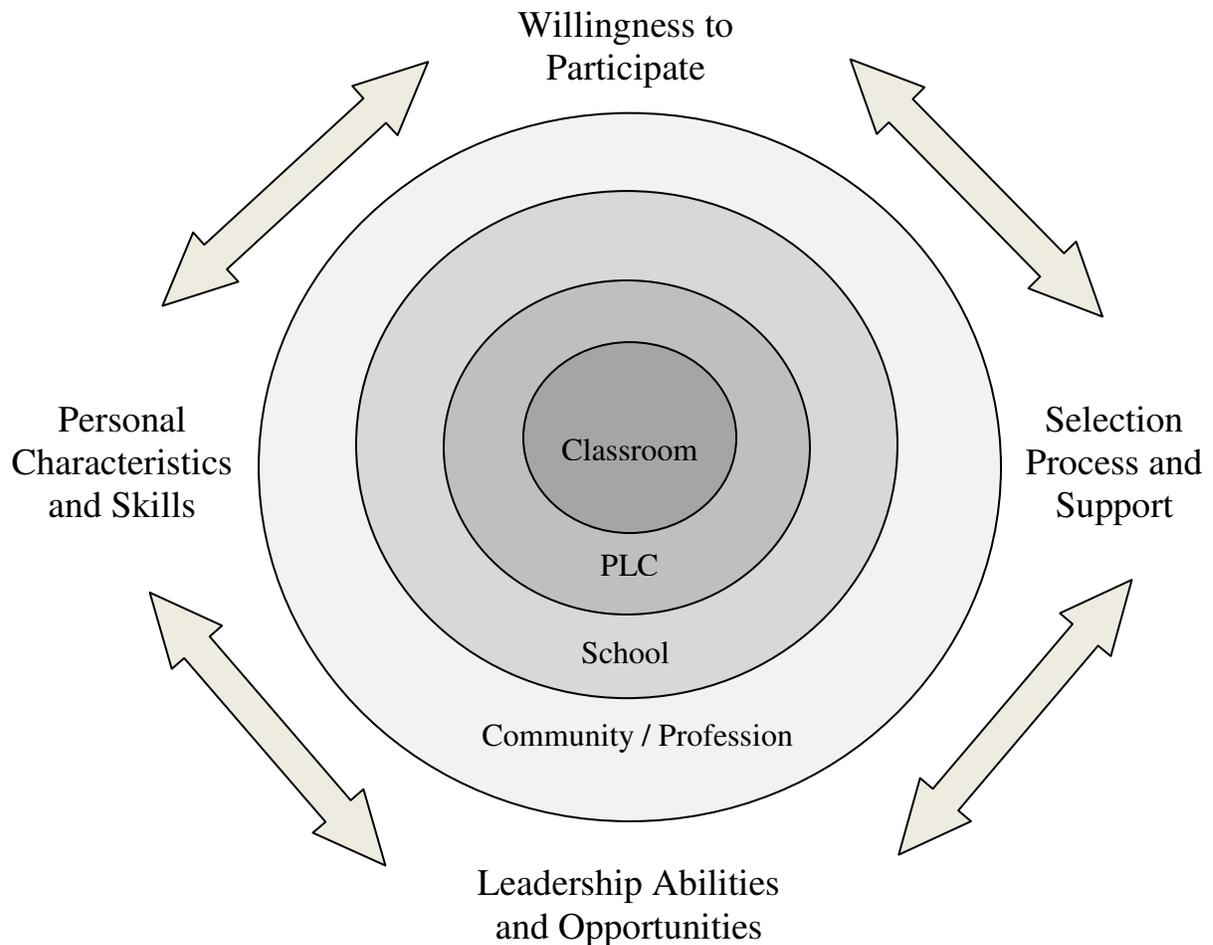


Figure 5.2. A Framework for Defining Teacher Leadership: Role Orientation, Scope of Influence, and Success Conditions (Revised)

Role orientation and scope of influence.

Role orientation and scope of influence are represented in the framework by the circles and seek to address the multi-orientation and multi-level nature of teacher leadership. Role orientation contends with the purposes and desired outcomes of teacher leadership roles. Scope of influence considers the audience impacted by teacher leadership activities. They are represented by the circles in the middle of the framework. These aspects of the

framework are closely related to each other as the role orientation impacts the scope of influence. The three factors' viewpoints found in this study illustrated teacher leadership practiced at three different role orientation and scope of influence levels.

Factor one, teamwork and continuous learning for the classroom, focused on teacher leadership efforts at the classroom contextual level. Factor one participants defined teacher leadership as a vehicle for improving instructional practice within the classroom. Teacher leadership activities for factor one had a classroom orientation with an emphasis on learning for improving instruction. They included activities such as sharing instructional best practices, leading professional development, and collaborative problem solving among classroom teachers. Participant 20 stated, "Even though I just graduated two years ago, every time we go into a staff development, I learn more and more and implement new things in my classroom community." Participant 06 shared this classroom focus: "If you are motivated to keep learning then you are going to stress the importance of learning to the children that you work with." Factor one participants showed disinterest for participation in managerial or administrative leadership activities focused outside of the classroom setting. Participant 06 expressed this as "I don't see participating in budget decisions as a role I need to be involved in. The leader of the school is going to see where staffing decisions have to be made." For factor one, both the role orientation and scope of influence occur at the classroom level of the framework.

Factor two, widespread leadership of others for change, indicated teacher leadership taking place on a wider contextual level than factor one. Factor two's viewpoint focused on

teacher leadership efforts at the school-wide level. Factor two defined teacher leadership as oriented toward school-wide leadership activities which impacted the entire school and not just a particular subset of the school. These activities included recognizing the need for improvement, organizing school staff across the school, and leading the change effort throughout the school. Participant 38 discussed this wider contextual focus for teacher leadership with: “Teachers lead in their classrooms, teams, buildings, counties, and states. All are important, but changing the status quo for policy improvements affects the most students.” Participant 11 shared a school-wide perspective example: “Changing the schedule is going to have an impact not just on one grade level, but on other grade levels.” The role orientation and scope of influence for factor two teacher leadership activities fell in the school level of the framework.

Factor three, guiding leadership which bridges organizational levels, emphasized teacher leadership activities which took place outside of the classroom level, but below the school-wide level. In this study, these activities were expressed as taking place in a specific grade level’s professional learning community and provided a bridge between the classroom oriented instructional leadership activities of factor one and the school-wide change initiative oriented teacher leadership activities of factor two. These activities included facilitating meetings, providing support to teammates, and communicating information. Participant 40 described the teacher leadership contextual focus for factor three with:

It is someone whose job it is to relay messages within the grade level or within the school to develop a better school whether its climate or curriculum. It is guiding your team to be doing what they should be doing. It is helping your teammates with

planning or being able to pull and understand data. It is knowing where to go in the curriculum. You are working towards the goal of the group or committee.

Professional learning communities are a context where teacher leadership takes place.

Participant 14 touched upon the role of professional learning communities with teacher leadership: “I think collaboration and professional learning communities are so important....You can’t lead your school without collaborating with other colleagues, other specialists, and administration.” Participant 40 echoed the link to grade level professional learning communities with: “You want to select leaders to make a school leadership group which can get things done and talk with their [grade level] teammates.” For factor three, teacher leadership takes place outside of the classroom, is often focused on a particular grade level’s work, and is not necessarily oriented toward a school-wide audience. Based on this finding, a professional learning community (“PLC”) circle was added to the framework between “classroom” and “school” to indicate this area of teacher leadership practice.

The “community / profession” contextual level of the framework was not supported by the findings. Participants in this study did not describe teacher leadership activities above the school level and when pressed, were unable to give examples of teacher leadership at this level when defining teacher leadership. It remains included in the revised framework based upon the previous models found in the literature and as a potential participant selection study limitation. This is discussed further in the Future Research section below.

Success conditions.

The second component to the teacher leadership framework considers the elements which influence teacher leadership development. The four success conditions are personal

characteristics and skills; selection process and support; leadership abilities and opportunities; and willingness to participate. The success conditions for teacher leaders are depicted on the outside of the circles. They are connected by arrows on the framework to illustrate their influence upon each other.

The personal characteristics and skills of teacher leaders were cited by all three factors when describing effective teacher leadership. Teacher leadership involves working with others to reach desired outcomes. The need to be a team player and part of a collaborative culture was described by participant 20 (factor one) as “Leadership is people synergizing and working together toward a common goal.” Participant 13 (factor two) offered, “A collaborative school culture promotes teacher leadership and administration being open to new ideas so teachers can implement change.” Participant 40 (factor three) agreed with, “Collaboration is very important for this leadership.” Participant 14 (factor three) summarized the needed collaborative culture thusly: “You can’t lead your school without collaborating with other colleagues, other specialists, and administration.”

Teacher leaders should be motivated to keep learning and be open to new ideas. Participant 37 (factor one) stated, “Teacher leaders need to be learning and improving all the time.” Participant 01 (factor one) shared, “In order for a teacher to be a leader, I feel they must be open-minded to new ideas.” Participant 35 (factor two) believed teacher leaders should continue to learn while supporting others: “Teacher leaders should be knowledgeable in an area and support others as well as promote change and growth.” Participant 09 (factor one) advocated for sharing of ideas for learning: “I feel there is so much we can share with

one another and build upon. It is always being open to new ideas and learning something new.”

Teacher leaders should have a vision for change which includes a broader perspective allowing them to see past their immediate environment. Participant 07 (factor two) stated, “I think the best leaders think about the big picture before making decisions.” Participant 14 (factor three) confirmed this idea with the comment: “I don’t make a single decision without talking to my team and weighing out the pros and cons.” Participant 11 (factor two) talked about perspective and having a vision for change as “It is important to understand the impact change will have on different parties....You have a vision for change, but you have to understand how the changes impact other decisions that you are going to make.”

The findings suggested teacher leaders should be risk takers who challenge the status quo as change agents. Participant 39 (factor one) mentioned risk taking as part of the learning process: “For me to move toward a leadership role I had to step out of my comfort zone and take risks. I also had to open myself up to new ideas.” Participant 08 (factor two) described the importance of risk taking and challenging the status quo as:

You are willing to step outside the norm. You are not willing to go with the flow. You are willing to see a change through and be a change agent....You are putting yourself out there. People do not like change. So by being that change agent, that is risk taking.

When describing a risk taking culture at her school, participant 14 (factor three) said, “Making your staff feel comfortable and letting them know that it is OK to take risks and to lead in the profession is huge.” Participant 11 (factor two) elaborated on this type of culture

with: “It is empowering others and trusting them to take a lead and follow through while promoting mutual respect where it is OK if they fail.”

A second success condition, selection process and support, contends with how teachers assume leadership roles and the support they receive while in them. All three factors believed strongly that having a titled leadership position was not required to practice teacher leadership. Participant 06 (factor one) suggested an inclusive approach to teacher leadership with the comment: “Anyone can be a leader.” Participant 35 (factor two) stated, “Teachers can be leaders without being in a titled leadership position.” Participant 40 (factor three) agreed with this sentiment: “I don’t think you need a specific position to show leadership.” Participant 37 (factor one) summarized this idea with: “Teacher leaders can be anyone who wants to improve their classroom and school.”

The factors did not feel that teaching experience was a prerequisite for being a teacher leader. Participant 01 (factor one) illustrated this thought with: “I do not feel that teacher leadership requires experience, because I am only in my third year and I take any opportunity I can to be a leader for my school.” Participant 13 (factor two) shared, “I don’t think teaching experience is needed to be a teacher leader and effective change agent.”

The three factors did not offer a common method for how teacher leadership positions are selected in the Q-sort. This suggested there is not common conception for how to assume a leadership role. The statement, teacher leadership positions are appointed by the principal, earned -2 (factor one), -4 (factor two), and -2 (factor three) ratings. The statement, teacher leadership positions are appointed by peers, earned -2 (factor one), -2 (factor two), and 0

(factor three) ratings. The statement, teacher leadership positions are self-appointed by teachers, earned -1 (factor one), 0 (factor two), and -4 (factor three) ratings. Likewise, the factor participants differed in their interview responses regarding a singular route for becoming a teacher leader. Participant 14 (factor three) described the benefits of being appointed by the principal:

Everyone will tell you that they can lead, that they can be a team leader and guide a team. I think when leadership positions are appointed by your administration; it's a lot better of a feeling. "I can do this because they believe in me. They have obviously seen things that I can do." This feeling doesn't always exist when a leadership position is self-appointed.

Participant 40 (factor two) placed greater emphasis on peer appointments than administrative appointments:

If you are showing leadership skills, I would think your peers would put you up to be a leader. I think it should be peer selection along with some administration selection. Peers will know more than administration about teacher leaders and who can express their ideas and get things done.

The version of the framework presented in chapter two did not include the support aspect to this success condition. It was explicitly added to bring more clarity as a result of the study's findings to highlight its close relationship with the selection process. School administrative support was identified by all three factors as important for developing teacher leadership. Participant 07 (factor two) felt "An atmosphere of trust and support among the teachers and administration" was necessary for teacher leadership development. Participant 20 (factor one) shared, "Our principal really encourages us to get out there and be a leader in education. Having her delegate that leadership and letting us take things on has fostered my

ability to develop my leadership skills.” Participant 06 (factor one) described the principal’s role as:

The leader has it structured so everybody can contribute in how they feel is the most positive for them and where their strength is. Your product will be better and people will buy into it more. Everybody will be more positive and you are not going to have so many roadblocks.

Participant 21 (factor one) echoed school administration highlighting teacher strengths: “I have noticed administration finding what you are good at and sharing it with others.” This sentiment was shared by participant 06 (factor one): “I think you give shout-outs to people where you see strengths.” Participant 40 (factor three) underscored principal support: “The teacher leader must be supported by the principal. I think this is the most important....I know we excelled a lot more as a leadership team when we were supported.” Participant 09 (factor one) described the administrator’s role in teacher leadership development as “Principal support is important. Support them. Build them up. Provide feedback and encouragement.”

In addition to administrative support, the factor viewpoints suggested the need for peer support for teacher leadership development. Participant 01 (factor one) stated, “I think your school staff environment and staff support / collaboration fosters teacher leadership and the administration’s willingness to support the opportunities.” Participant 14 (factor three) shared, “The biggest thing is having people behind you. You have got to have the support of others in order to lead.” Participant 11 (factor two) described how peer support in the selection process is important:

I think teacher leadership is often times earned by your leadership at a school and other staff members. If you are appointed by the principal, unless you have the rest of the staff behind you, it is really just going to be a figurehead leadership position that is not sustainable because you don't have the staff feeling like you are a teacher leader. It is more about are people willing to follow your lead or you are able to rally folks around something or get people excited about something or to convince folks that this is the right decision to make at this point.

Participant 08 (factor two) shared how a combination of administrative and peer support is necessary: "It takes a certain level of respect from your peers and administration. It is an earned respect and you need that to be a true leader." These findings suggested while the selection process for a leadership role may provide an entry way, it is the support which teacher leaders receive from administration and peers while in the role which contributes to their effectiveness.

A third success condition, leadership abilities and opportunities, is concerned with the leadership skills teacher leaders possess and the opportunities afforded to them to practice leadership activities. All three factors described leadership skills and opportunities to practice leadership. Participant 12 (factor two) detailed leadership abilities as "Leadership to me is you are born with that quality and you can develop it in yourself and you can develop it somewhat in others. It is really the interpersonal skills which make you successful."

Participant 08 (factor two) continued with a communication theme:

If you had to sum up in one word what is a good leader, I would say communication. You have the communication skills to be able to convey ideas and try to get people to jump on the bandwagon with you. You have the type of communication where you can keep everyone informed and involved.

Participant 40 (factor three) described desired leadership skills as "The leadership team or person should be able to handle meetings. They should be able to share with the

team. They should have ideas. They should be able to delegate.” Participant 09 (factor one) also listed leadership skills when describing teacher leaders: “They are able to organize. They are able to delegate. They love professional development; they love decision making, and being involved.”

In addition to having the ability to lead others, teacher leaders need opportunities to practice their leadership. Participant 42 (factor one) explained this as “A chance to make your own decisions fosters teacher leadership.” Participant 30 (factor two) characterized this as “Opportunities to try new things, to think in innovative ways to solve problems.” Participant 40 (factor three) described the importance of starting small and building to greater responsibilities with clear expectations:

I think assigning them [teacher leaders] tasks and seeing how they work with them. It is putting more leadership on them and seeing how they perform. It could be very small before you get to bigger pieces. You can't just throw people into leadership without them feeling comfortable and understanding what they need to be doing.

Participant 14 (factor three) presented specific opportunities for practicing teacher leadership:

Things that foster teacher leadership are opportunities for professional development where it is led by teachers. There needs to be opportunities for professional learning communities to have conversations. Giving the staff a say in the things that are important to them is important and then giving them time to help make decisions and make changes.

A fourth success condition focuses on teachers' willingness to participate in teacher leadership roles. All three factors discussed teachers' willingness to engage in leadership activities. Participant 40 (factor three) indicated not all teachers have to be a teacher leader:

It is having someone who is open and willing to be a member of leadership. I have been in situations where people are not comfortable and they are forced into that situation and it hinders the process. I don't think every single person has to be a [school] leader. Everyone is a leader in their own classroom. You want to select leaders to make a school leadership group which can get things done and talk with their [grade level] teammates.

Participant 08 (factor two) described teachers who are willing to be leaders as "Being that person who is willing to stand up and is willing to speak about things is important.

Participant 11 (factor two) listed motivation when describing how teacher leaders enter their roles:

It is a willingness to take a leadership role. While on the other hand, there are people who don't want to take leadership roles. Teacher leadership is an organic thing that happens within a community where certain folks naturally become the leaders. There are qualities that they have where other people feel comfortable having them lead, so teaching experience doesn't matter.

Participant 35 (factor two) listed three items when discussing her willingness to act as a teacher leader: "Self-esteem, support from the principal, and confidence in one's abilities."

Leading in areas of strength may increase a teacher's willingness to lead. Participant 14 (factor three) shared:

I think it helps to find your talent....I think this allows you to step out because not everyone is going to be good at everything. I think this highlights your teacher leadership. Find out what you are good at. Leading can be in anything you want to lead in. It is not just what is handed to you or asked of you. It is more.

Participant 11 (factor two) elaborated the role administrators play in encouraging teachers' willingness to engage in teacher leadership:

If you have an administration that is promoting and encouraging teachers to take leadership in the school then that is going to facilitate the process. It will also encourage young teachers to engage in opportunities outside of the classroom in areas where they have the skills to do so and gain confidence.

The term teacher leadership is used to describe a wide variety of school phenomena. Consequently, the literature defines teacher leadership in a multitude of ways. This study provided a definition which supports definitions found in the teacher leadership literature. Teacher leadership is about accomplishing the multi-layered work of schools to foster improvements and achieve common goals. Teacher leadership models in the literature suggested teacher leadership occurs in a variety of settings for a variety of purposes. Classroom, school, district, and profession-wide levels are teacher leadership settings cited in the literature. Similarly, the study findings suggested teacher leadership takes place on multiple levels. Study examples of teacher leadership were found at the classroom, professional learning community, and school levels. The inclusion of “professional learning community” in the revised study framework highlighted how professional networks play a role in current teacher leadership practices.

Teacher leadership may be used to accomplish a variety of purposes. Providing support, communication links, professional development, organizational structure, and leadership of improvements are examples of teacher leadership purposes found in the literature. While each study factor presented a different viewpoint of teacher leadership, all three viewpoints were supported in the literature. Helping other teachers make instructional improvements, providing support toward reaching common goals, bridging gaps between different levels of the school organizational structure, and leading change efforts were all examples of teacher leadership purposes discovered in the study.

The literature illustrated areas which are needed for teacher leadership to flourish. These areas included the need for principal support, teacher personal characteristics, collaborative school cultures, leadership selection processes, and teacher motivation for participation. The study's success conditions highlighted similar areas of need for teacher leadership development. The study found peer as well as principal support as important for teacher leadership development. The study's finding of peer support in conjunction with the finding that a titled leadership position is not required illustrated how the current teachers in this study preferred a flatter school leadership structure over a more hierarchical one. The study participants cited personal characteristics as something which helps teachers ascend to leadership roles in addition to peer and administrator support. The study suggested teachers are more likely to participate in teacher leadership roles when they feel supported, are comfortable with the role, and are in a safe environment which encourages measured risk taking. Teacher leadership is further supported when teachers have leadership skills and opportunities to practice them.

Implications

Implications for teachers.

Teachers may use this study to better understand what teacher leadership is and how it occurs in their school environments. Teacher leadership is about working synergistically to improve classroom instruction, leading other teachers in a change process on a school wide level, and supporting the work of other teachers in reaching identified outcomes while bridging between different organizational levels. Teachers may use the three factors' model

sorts from this study to reach a better understanding of what teacher leadership is and how to become better teacher leaders.

Teacher leadership takes place on the classroom, professional learning community, and school levels depending on the nature of the teacher leadership activity. Teacher leadership may be practiced by all teachers. A titled leadership role or teaching experience is not a prerequisite for being a teacher leader. Teacher leadership can be pursued based on individual teacher interests, beliefs, and strengths. Teachers may engage in different teacher leadership activities on different levels based on their motivation and personal inclinations. They may lead in their classrooms, in their grade level professional learning communities, or in school-wide endeavors. Teachers may use this study to help find their own person niche in teacher leadership.

Teachers interested in becoming school administrators may use the results of this study to gain a better understanding of the different role orientations and scope of influence levels of teacher leadership. With this better understanding, teachers may seek out opportunities to practice and hone their leadership abilities. As a result of this process, teachers may develop a greater sense of the types of leadership needed in schools. This greater understanding will help prospective administrators decide if they want to pursue this career change, and if they do, be better prepared to lead a school and foster teacher leadership on their school staffs.

Teachers may use this study to better understand the conditions which support teacher leadership. Working collaboratively in a minimal risk environment will assist teacher

leadership in flourishing. Teachers who are supportive of one another and interested in continuous improvement will encourage school cultures which foster teacher leadership by encouraging more teachers to lead teacher leadership activities. This may help teachers improve their skills and practices for the greater benefit of the school community.

Implications for school administrators.

There are a number of study implications for school administrators. First and perhaps foremost, school administrators need to support teacher leadership efforts. All three factors alluded to the need for administrative and peer support for teacher leadership development. The principal needs to create a school culture which is collaborative, makes it safe for risk taking, and makes failure as part of the learning process acceptable. The supportive role of the principal is varied. It may be passive in nature where the principal allows teachers to engage in teacher leadership activities such as collaborative planning or sharing of instructional strategies to active in nature where the principal designs structures and selects personnel for leadership positions. Study participants stated the need for principals to help identify potential leaders based on their personal characteristics and strengths and give them opportunities to practice their leadership skills. Holding a titled leadership role is no longer necessary for participation in teacher leadership activities. Teacher leadership may occur outside of a formal role. This represents a shift from previous thinking which required a titled position often received as a result of experience or expertise. Teachers desire a flatter leadership structure where all teachers have the opportunity to practice leadership. Distributed leadership is one way to provide this flatter leadership structure while also

tapping into specific faculty expertise when needed. School administrators should recognize this inclusive approach and seek to encourage teachers across their school buildings to assume leadership responsibilities and not just a select few.

Study participants did not identify any specific professional development or training for teacher leadership development. Teacher leadership may be used as a vehicle to provide professional development and support to teachers in an effort to increase instructional performance, teacher retention, and job satisfaction. Factor one participants capitalized on the idea of teamwork and continuous learning as a method for improving teaching practices. This study provided support for the North Carolina Teacher Leadership Professional Teaching Standard used to evaluate teachers. Used in conjunction with the teacher leadership framework, this standard may provide a starting point for school administrators wishing to lead their staffs in developing a shared idea of what teacher leadership looks like in practice and ways for developing it.

Implications for policy makers.

Educational policy makers may use the results of this study when considering how to include teacher leadership in policy design and initiative selection. This study provides a close up view of teacher leadership within the school building and may be insightful to policy makers. This study presents a definition of teacher leadership for elementary level teachers, the conditions which influence its development, and a framework for understanding it. Policy makers may use these findings when considering how best to leverage teacher leadership for school improvement.

The participants in this study had difficulty providing examples of teacher leadership on the community / profession level. Some participants expressed a strong interest in providing input and being more involved in decision making at this level. Policy makers may be well served by including teacher leaders at this level. Teacher leaders may be able to provide feedback and help policy makers craft more relevant policies and initiatives which could be more effectively implemented with teacher leader input. Determining requirements for demonstrating grade level proficiency, technology and software adoption decisions, teacher evaluation standards and procedures selection, alternative teacher compensation practices, and curriculum / instructional design are all examples where teacher leadership may provide meaningful assistance to policy makers.

Implications for college and university leaders.

This study may be used by college and university leaders in their design of teacher and school administrator preparation programs. Teacher preparation programs should foster the personal characteristics cited in this study as helpful for engaging in teacher leadership: being a team player, motivated to keep learning, open to new ideas, being a risk taker, willing to challenge the status quo, being a change agent, having a vision for change, and having a broader perspective. These characteristics will help new teachers more effectively engage in teacher leadership activities.

Teacher preparation programs should foster learning which is collaborative in nature and involves risk taking. Teacher candidates who develop a desire to work closely with others to improve their learning will be better suited to working in collaborative, teacher

leadership environments. Undergraduate preparation programs should include opportunities where students need to work together to solve problems, offer professional development presentations to peers, lead projects, serve on leadership committees, participate in a variety of learning experiences and settings, and form support groups for learning. Student teaching supervisors should look to place teaching interns with teacher leaders and in schools with collaborative cultures. This will provide teacher candidates with role models and experience working in environments conducive to teacher leadership development. These early pre-service experiences may assist novice teachers in becoming teacher leaders more quickly.

School administrator preparation programs should build on the teacher preparation program implications and seek to teach school administration candidates in ways to support teacher leadership in schools. Topics of study could include identifying teacher strengths, creating collaborative school cultures which are safe for risk taking, designing structures which provide opportunities to practice teacher leadership skills on a variety of levels (classroom, professional learning community, school, etc.), and identifying ways to support teacher leaders' efforts.

Teacher leadership may assist with school challenges by aligning school improvement efforts and supporting them through professional networks of practice. If teacher and school administrator preparation program graduates are able to develop the skills needed for fostering teacher leadership, they may be better positioned for addressing the challenges facing schools today such as increasing student test scores, mediating funding

shortfalls in staffing and programs, fostering better instructional practices, and successfully leading change mandates as determined by school leaders or dictated by policy makers.

Future Research

All participants worked in the same, large school district in a southern state. This school district is high performing compared to other state school districts, well funded, and seeks to develop leadership opportunities across all personnel roles. The participants in this study benefit from these initiatives. Teachers in other school districts with other priorities may have different perceptions about teacher leadership. A future study exploring the same research questions in another school district or geographic area in the country may lead to a different definition of teacher leadership.

The majority of the North Carolina Teacher Leadership Professional Teaching Standard elements were supported by the factors in this study. This standard has been used to evaluate teachers on the degree they demonstrate teacher leadership since the 2010-2011 school year. The teachers in this study may have formed their viewpoints of teacher leadership as a result of being evaluated with this standard. Further research would be helpful in determining if an evaluative effect is present and is influencing how teachers define teacher leadership.

The nature of teacher responsibilities and activities vary by school level (elementary, middle, and high). This presents the possibility where the essential elements of teacher leadership may be similar at one school level, but differ from another. Additional research will be required to compare this study's teacher leadership definition to definitions

constructed from other school levels. A similar study may be conducted with teachers at the secondary school level to further explore teacher leadership.

Various actors impact public schooling in areas such as funding, policy, curriculum, initiative adoption, and mandate decisions. Future research may be helpful to explore the perceptions of teacher leadership through these other educational stakeholders. These statement cards could be used in a study with school administrators, policy makers, state department of education officials, legislators, and university professor participants. The resulting viewpoints could be compared and contrasted with the definition presented in this study to arrive at a more inclusive teacher leadership definition.

When study participants examined the model sorts holistically, they made generalizations about the arrangement of the statements. Factor one participants saw their sort as two distinct areas of decision-making: leadership in the classroom in the agree columns versus managerial and administrative tasks in the disagree columns. Factor two participants viewed their sort as a continuum of leadership abilities which could be used as an indicator for teacher leadership functioning in a school organization. Factor three participants used their sort to provide value to various teacher leadership activities. Future research could explore the idea of using these statement cards and teacher leadership framework to create an assessment tool for determining the extent and quality of teacher leadership implementation in a particular setting.

The success condition “selection process” was modified to “selection process and support” in the teacher leadership framework as a result of the study’s findings. School

administration and collegial support of teacher leadership were cited by all three factors as important when discussing the assumption of teacher leadership roles. Study participants suggested support was important to teacher leadership by conveying power to the teacher leader in performing his or her role. A future study examining the success of teacher leaders appointed to formal leadership positions without administrative and / or peer support would be helpful to further explore this success condition.

Using the same data generated in this study, a future study could be conducted which examines the success conditions through a psychological-social lens. Using Albert Bandura's work on motivation and Carol Weiss' work on interest as examples, a separate set of the literature may be accessed to study teacher leadership. This future study could provide a different perspective and additional analytics when thinking about how and why teachers engage in teacher leadership activities.

The findings of this study suggested teacher leadership occurs at the classroom, professional learning community, and school levels. The teacher leadership framework includes a community / profession contextual level. This was included in the framework based on the teacher leadership literature. Little data was collected during this study regarding teacher leadership occurring at this level. Study participants did not include activities at this level in their teacher leadership viewpoints. Future research studying the nature of teacher leadership occurring at the community / profession level is needed to justify its continued inclusion in the framework.

Conclusion

Teacher leadership is an area of rising notoriety in the education profession and is one form of educational leadership. However, the phrase teacher leadership is defined and used in a variety of ways in the literature. This makes it difficult to legitimize in the leadership field (Harris, 2003). Consequently, there is a wide variety of interpretation in what teacher leadership is and how it is implemented. When the phrase “teacher leadership” is used to describe a multitude of activities and school phenomena, it is difficult to determine a coherent definition for it. This study sought to identify what teachers believe to be the essential elements of teacher leadership and to study the elements which foster or inhibit its development.

A review was conducted of the teacher leadership literature to examine what is known about the topic. As experts in the field of education, teacher leaders are uniquely qualified at identifying learning difficulties and seeking solutions, providing professional development to colleagues, and providing guidance to the school community. When properly supported by school administration, teacher leadership may help construct a healthy school climate and an aligned learning community focused on improving student achievement. Teacher leadership may provide some additional benefits to the educational environment. It provides a structure for instructional and student study. It may increase teacher ownership of the school community and increase teachers’ willingness to assume communal responsibility for school issues.

Teacher leadership may be defined as a way to create high functioning schools which grow and improve while simultaneously engaging all teachers in the process. The scope and nature of the activities teacher leaders engage in is important. Collaborative, focused efforts toward a specific goal of improving student achievement should be at the core. Several models have been created to describe teacher leadership. However, due to the complexity of teacher leadership in the literature, each model has gaps. The literature and these models suggest a study of teacher leadership have two key facets: its definition and how it is developed. A framework for defining teacher leadership was presented using role orientation, scope of influence, and success conditions for teacher leadership. This framework served as a guiding lens for this teacher leadership study.

Q-methodology was the research design used to answer the study's research questions. William Stephenson developed Q-methodology in 1935 as a mixed methods approach for scientifically studying and quantifying human subjectivity (McKeown & Thomas, 1988). It is an approach which allows a researcher to study and quantify participant perceptions through factor analysis (Watts & Stenner, 2012). A concourse theory consisting of one hundred thirty-five subjective statements focused on teacher leadership was created through a literature review and brief interviews consisting of elementary teachers and administrators giving their definitions of teacher leadership. The concourse theory statements were reviewed for alignment with the research questions and for similarity and clarity. Forty-two statements were selected to form the Q-sample. The Q-sample statements were printed on business sized cards and were reviewed by four teachers with varying levels of experience

for clarity, similarity, and importance for inclusion. The P-sample of forty-three teacher participants was drawn from five elementary schools in the researcher's school district. Each participant completed a Q-sort where he or she organized the Q-sample statement cards into a specified distribution grid based on his or her level of agreement with each statement.

PQMethod, a statistical program, was used to analyze the forty-three Q-sorts. A factor analysis using Eigenvalues, explained variance, number of participants significantly loading, and correlations between factors was completed to determine a three factor rotational solution of study. The significance level for this study was at the 99% confidence interval. Of the forty-three participants, thirty-six loaded significantly on only one of the three factors of study. Higher loadings suggest a closer approximation of a particular factor's viewpoint with loadings below 0.6000 considered a cut-off point for factor estimative value (Watts & Stenner, 2012). Participants from each of the three factors loading at this level or higher were approached for a follow-up interview to provide further explanation of their beliefs. The quantitative data from the Q-sorts and qualitative data from the interviews were used to determine the study's findings.

Factor one, teamwork and continuous learning for the classroom, represented seventeen participants or 40% of the total number of participants. Factor one described the personal characteristics and skills factor one teachers believe are essential for teacher leadership. This viewpoint suggested the ability to be a team player and continuously learn new ideas and approaches are essential elements of teacher leadership. Teacher leadership is about being able to work collaboratively with others to share instructional ideas and build

upon the knowledge base. Under this viewpoint, teacher leadership is not one person acting alone or giving orders to a group of people. The context for factor one teacher leadership takes place primarily in the classroom. Factor one participants believed teacher leadership is not about being involved in managerial or administrative actions. Factor one participants expressed a disinterest for involvement in school-wide or higher decision-making. Participants stated administrative support, opportunities to practice leadership, celebrating successes, a safe environment to try new things, personal characteristics, and teacher motivation in the specified activity were all things which foster teacher leadership.

Factor two, widespread leadership of others for change, represented fifteen participants or 35% of the total number of participants. Factor two indicated a view of teacher leadership through a broader perspective which included school culture and the ability to lead others. In this viewpoint, teacher leadership is about being a change agent and leading others through a change process over time. The context for this perspective is primarily outside of the classroom at the school-wide level or higher. Factor two participants suggested a belief that anyone may be involved in teacher leadership activities and involvement is not limited by experience or appointment by others. Support from teacher peers and school administration is critical for teacher leaders to engage in and be effective in their roles. Teacher leaders need certain personality characteristics and motivation to assume teacher leadership roles such as a desire to challenge the status quo, a vision for change, and the ability to act as a change agent. An atmosphere which is safe for risk-taking and failure and built upon mutual trust is important for teacher leadership development.

Factor three, guiding leadership which bridges organizational levels, represented four participants or 9% of the total number of participants. Factor three defined teacher leadership as learning and supporting activities in a collaborative atmosphere through the Q-sorts. In follow-up interviews, participants felt teacher leaders possess a broader perspective and skills which allow them to be front line leaders in smaller professional learning communities and in greater school leadership contexts. Teacher leaders are able to facilitate meetings and provide support through a collaborative work environment. They have targeted outcomes and work towards making an impact on them. Factor three participants felt teacher leadership roles may be fulfilled by anyone willing to accept leadership roles and with the support of their peers and the principal. Teacher leadership may be developed when leadership opportunities are shared by school administration, teacher leaders lead in areas of strength, teacher leaders start with smaller leadership tasks, and when clear role expectations and outcomes are set.

This study contributed to the teacher leadership literature by both challenging and supporting previous findings. A key study finding common to all three factors was the belief teacher leadership may occur outside of a formal titled leadership position. This is contrary to the traditional definition shared by Fitzgerald and Gunter (2008) as the assignment of formal roles in a hierarchical organizational structure. Study findings disagreed with the literature that significant teaching experience is required for teacher leadership roles. This represented a shift in thinking to a more inclusive approach where anyone may be a teacher leader in a flatter organizational structure.

Teacher leadership activities described in the literature were supported and challenged by study findings. Acting as a change agent, challenging the status quo, and organizing others around a particular issue were all examples of teacher leadership activities described in the literature and supported by the study. Conducting action research and participating in managerial and administrative type decisions were areas of disagreement between the literature and findings. The study findings supported the literature in that principal and peer support are important for teacher leadership development. The finding that principals utilize teachers' strengths for leadership roles agreed with the literature. A number of personal attributes are presented in the literature to define teacher leadership and were supported by study findings. All three factors cited the need for collaboration when defining teacher leadership. This supported the literature on teacher leadership and professional networks / learning communities.

Existing teacher leadership models found in the literature were supported in varying degrees by the study's findings. Areas of agreement included the principal's role with teacher leadership, the multi-layered levels where teacher leadership is practiced, teacher leadership activities and desired outcomes, and needed school culture. While aspects of each model were supported by the study's findings, no single model completely agreed with the study's findings.

A framework for defining teacher leadership was created based on the teacher leadership literature and revised based on this study's findings. The framework symbolizes role orientation, scope of influence, and success conditions for teacher leadership. Role

orientation contends with the purposes and desired outcomes of teacher leadership roles. Scope of influence considers the audience impacted by teacher leadership activities. Role orientation and scope of influence are represented by the circles in the framework. This study found teacher leadership occurs in the classroom, professional learning community, and school-wide levels. The success conditions impact teacher leadership development. The four success conditions are personal characteristics and skills; selection process and support; leadership abilities and opportunities; and willingness to participate. The success conditions are represented outside of the circles. They are connected by arrows on the framework demonstrating their interrelatedness. This framework may be used to better understand the nuances and development of teacher leadership.

Teacher leadership is used for a variety of purposes and desired outcomes on a variety of levels in schools. Teacher leadership is used to make improvements in instructional practice within classrooms. Teachers lead by sharing best practices and providing professional development with the desired outcome of increasing student academic performance. Teacher leadership is supporting others reach targeted goals. Teachers lead by facilitating conversations, meetings, and providing professional development and support to other teachers in the grade level through professional learning communities. Teacher leadership is used to develop policies and provide direction across the entire school. Teachers lead by seeking to make positive change with widespread effect, considering the impact of decisions, organizing others to action, and maintaining the course over the long term.

Teacher leadership is something all teachers may engage in. Teachers' willingness to engage in teacher leadership roles is based in part on their interest in the particular activity and their personal interests and strengths as a teacher. Teacher leadership is supported by the personal characteristics and skills of teacher leaders. Teacher leaders are team players, motivated to keep learning, open to new ideas, risk takers, willing to challenge the status quo, change agents, have a vision for change, and have a broader perspective. While teacher leaders rise to leadership roles in a variety of ways, administrative and peer support are crucial for their effectiveness. Teacher leaders have leadership abilities and skills which help them to effectively interact with and lead others. Finally, teacher leaders need opportunities to practice their leadership skills in collaborative environments which encourage risk taking.

Epilogue

Following the completion of data collection, I completed a Q-sort using the forty-two teacher leadership statement cards and the post Q-sort questionnaire to examine my perceptions of teacher leadership. Figure 5.3 displays my Q-sort.

Strongly Disagree			Neither Agree Nor Disagree				Strongly Agree	
-4	-3	-2	-1	0	+1	+2	+3	+4
25	28	3	7	2	12	8	36	4
1	6	35	37	9	14	10	17	18
	32	42	20	21	34	26	38	
		39	19	22	29	27		
		33	41	13	11	16		
			15	31	24			
			5	30	40			
				23				

Figure 5.3. Researcher’s Sort

The high positive and high negative statements from my sort depicted in Figure 5.3 are listed in Table 5.4. The statements placed in the +4, +3, -3, and -4 positions are most representative of my viewpoint. These statements are useful in determining my perceptions of the essential elements of teacher leadership.

Table 5.4
 Researcher's High-Positive and High-Negative Statements

Value	No.	Statement
+4	4	Teacher leadership is being a change agent
+4	18	Teacher leadership means being able to organize and lead others on a particular issue
+3	36	Teacher leadership is having a broader perspective and understanding the impact of decisions
+3	17	Teacher leadership is about forming collaborative school cultures
+3	38	Teacher leadership needs to be supported by the principal
+2	8	Teacher leadership is leading improvements without a holding leadership position
+2	10	Teacher leadership is risk taking
+2	26	Teacher leadership is promoting and sustaining a vision for change
+2	27	Teacher leadership is challenging the status quo for better student learning outcomes
+2	16	Teacher leadership is important for professional learning communities
-2	3	Teacher leadership is about developing curriculum
-2	35	Teacher leadership is helping to implement decisions made by others
-2	42	Teacher leadership is having expertise in subject matter and pedagogy
-3	32	Teacher leadership is providing outreach and collaboration with families and the community
-3	6	Teacher leadership occurs outside of teaching responsibilities
-3	28	Teacher leadership is conducting action research
-4	1	Teacher leadership is holding a titled leadership position
-4	25	Teacher leadership experience is required for teacher leadership

I defined teacher leadership as being able to seeing the need for change, understanding the dynamics involved, and then being able to organize and lead others through the change in a collaborative and supportive environment. The high positive statements included the statement themes of improvement efforts, targeted actions, teacher leader characteristics, and principal's role. The statements included "being a change agent," "being able to organize and lead others," "having a broader perspective and understanding the impact of decisions," "forming collaborative school cultures," and "being supported by the principal." The +2 column statements supported this idea of leading change in a dynamic environment with "leading improvements without holding a leadership position," "risk taking," "promoting and sustaining a vision for change," "challenging the status quo for better student outcomes," and "important for professional learning communities."

This viewpoint suggested the need for teacher leaders to see the bigger picture and recognize areas in need of change. Teacher leaders must then be able to understand the underpinnings of the environment before taking action in a measured and successful way for that particular environment. Teacher leaders should lead in ways which are collaborative and enlist others in the improvement effort over the long term.

The high negative statements for my sort suggested a belief that anyone may be involved in teacher leadership activities and detailed examples of activities I felt were not as important in defining teacher leadership. The statement themes included teacher leader characteristics, formality of role, targeted actions, and setting. The statements included the phrases "teaching experience is required," "holding a titled leadership position," "conducting

action research,” “occurs outside of teaching responsibilities,” and “providing outreach and collaboration with families and the community.”

These statements reflected my viewpoint where the opportunity for teacher leadership should be available to anyone. A formal leadership role or the need for a teacher to “pay his or her dues” by gaining experience prior to assuming a leadership role is not necessary. I felt teacher leadership is embedded in teaching responsibilities. At a minimum, teachers are the leaders in their own classrooms.

In comparison to the three factors studied, my sort was not identical to any of the factors. My sort was most similar to factors two and three by sharing five out of a possible ten high positive (+3 and +4) and high negative (-3 and -4) statements with each factor. This could be due to the similarities in the scope of influence contextual focus between my role as a school principal and factors two (widespread leadership of others for change) and three (guiding leadership which bridges organizational levels). For the high positive statements, I shared no statements with factor one, two statements (4 and 36) with factor two, and three statements (36, 17, and 38) with factor three. The shared statements included “being a change agent,” “having a broader perspective and understanding,” “forming collaborative school cultures,” and “supported by the principal.” For the high negative statements, I shared two statements (28 and 1) with factor one, three statements (6, 1, and 25) with factor two, and two statements (28 and 1) with factor three. The shared statements included “conducting action research,” the consensus statement, “holding a titled leadership position;” “occurs outside of teaching responsibilities,” and “experience is required.”

I considered the second research question, what fosters or inhibits the development of teacher leadership? I felt principal and colleague support of teacher leadership through the school's organizational governance structure was important. Teacher leaders need to be supported in their ascension to teacher leadership roles and in their work in them. I felt teacher leaders need to possess needed personal and leadership skills to lead change and improvement efforts. I believed the absence of these skills could restrain teacher leadership efforts through a limited ability to accomplish the assigned tasks and minimize peer support. The interest level and a shared understanding of teacher leadership by school administration and teachers was a third area I felt would impact teacher leadership development. Administrators and teachers must be willing to participate in leadership activities and have a clear understanding regarding the expectations and responsibilities for achieving identified outcomes.

These beliefs represented the success conditions presented in the defining teacher leadership framework and will guide me in my practice as a school principal. Teacher recruitment and hiring practices should identify candidates with personal skills and characteristics helpful for supporting leadership. I reflected on how it is important to create school climates where teachers are willing and supported in entering and fulfilling teacher leadership activities. Furthermore, it is important to make sure teachers have the needed skills to be successful leaders and opportunities to practice leadership. A climate which encourages measured risk taking and acknowledges successes come after some failure should

be desired. Professional development should include teaching leadership skills so all teachers have the opportunity to become better teacher leaders if they choose.

Principals tend to define teacher leadership through ideal qualities and roles; cultivate it through building capacity, and draw from their previous experiences as teacher leaders (Boyd, 2011). I agreed with this sentiment while reflecting on his sort. While completing the Q-sort, I felt my current role as principal influenced how I completed the sort. I noticed the high positive columns contained bigger picture ideas about leadership while the high negative columns tended to include specific teacher activities. This perspective represented in some ways how principals need to think about leadership on a larger scale than teachers. Principals are charged with building school communities and leading change efforts. Specific activities were valued or devalued in the sort when compared to the researcher's high positive statements about leadership. I thought back to my previous experiences as a teacher leader and reflected how the sort would look differently with a lesser role orientation and scope of influence for leadership. It was conceivable specific teacher leadership activities would be valued more if I was in a teacher role because these activities would have greater relevance to the teacher's daily responsibilities.

My leadership practices have been influenced by this study. The varied role orientation and scope of influence levels helped me to better organize and define what teacher leadership is. I feel like I have a better understanding of teacher leadership and how it may be used to accomplish a variety of goals such as improving instructional practice in the classroom, leading a school wide improvement effort, or helping to organize and lead a

team's professional learning community. Perhaps more importantly for me was the study of the success conditions aspect of the framework. The study participants clearly reflected a belief that anyone may be a teacher leader. This means I need to make a conscious effort to encourage more teachers to pursue leadership roles and not just a select few. This is a shift in thinking from traditional conceptions of teacher leadership. As a school principal, I play an important role in promoting teacher leadership. I need to make sure I am recognizing teacher strengths, leveraging them against school needs, and encouraging teachers to share them with others for the greater good of the school community. This will not be possible without the existence of a collaborative school culture which is safe for risk-taking. Furthermore, teachers will need opportunities to practice their leadership skills in this type of environment if teacher leadership is to continue to grow.

One way I plan to improve my leadership practice with my school's faculty is to have them complete a Q-sort using the same Q-sample statement cards used in this study. I think this action will provide me with two important outcomes. First, it will help me to identify and think about the teachers in my building who are most like factor one, two, or three. Knowing this information, I will better be able to identify, support, and coach each teacher's leadership activities based on their teacher leadership viewpoint. This relates back to teachers feeling comfortable in their leadership activities and their willingness to engage in them. In the future, this is also something which may be done when teachers come to my school as part of new teacher orientation and support program. Second, this activity will form the basis for an ongoing conversation about teacher leadership with my faculty. This conversation will be

helpful in increasing awareness about teacher leadership, encouraging teachers to become engaged in teacher leadership activities, and sharing what is necessary for teacher leadership to be supported and thrive in a school environment. As a result of this ongoing conversation, it is my desire that teachers will become more consciously aware of teacher leadership and will work to support its growth throughout the school building.

Finally, I think it will be important for me in my practice to always consider teacher leaders' viewpoints. Participant 08 shared:

Being that person who is willing to stand up and is willing to speak up about things is important. Those are the type of people even administration is going to go to and say "What do you think we need help with?"

Principals, including myself, would be well served to listen to teacher leaders' viewpoints when determining school needs and creating school organizational, governance, and professional development structures. Doing so will foster the development of teacher leadership and ensure the health of our schools.

References

- Acker-Hocevar, M., & Touchton, D. (1999). *A model of power as social relationships: Teacher leaders describe the phenomena of effective agency in practice*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec, Canada.
- Ackerman, R., & Mackenzie, S. V. (2006). Uncovering teacher leadership. *Educational Leadership, 63*(8), 66-70.
- Anderson, K. D. (2004). The nature of teacher leadership in schools as reciprocal influences between teacher leaders and principals. *School Effectiveness and School Improvement, 15*(1), 97-113.
- Angelle, P. S., & DeHart, C. A. (2010). *A four factor model of teacher leadership: Construction and testing of the Teacher Leadership Inventory*. Paper presented at the American Educational Research Association, Denver: CO.
- Angelle, P. S., & DeHart, C. A. (2011). Teacher perceptions of teacher leadership: Examining differences by experience, degree, and position. *NASSP Bulletin, 95*(2), 141-160.
- Ault, C. R. (2009). *A case study of leadership characteristics of teacher leaders in an urban literacy program*. (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.

- Berry, B., Daughtrey, A., & Wieder, A. (2010). Teacher leadership: Leading the way to effective teaching and learning. Retrieved from ERIC Document Reproduction Service (ED509719).
- Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education* (5th ed.). Boston: Allyn and Bacon.
- Bonduris, J. (2011). *Who's leading now: A case study of teacher leadership*. (Doctoral dissertation) Ed.D. ProQuest Dissertations & Theses Full Text database.
- Boyd, K. A. (2011). *High school principals' perceptions of teacher leadership*. (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.
- Boykin, Z., Scrivner, J., & Robbins, S. (2004). The professional leadership development project: Building writing project and school-site teacher leadership in urban schools (Vol. 1). Berkeley, CA: National Writing Project.
- Brooks, J. S., Scribner, J. P., & Eferakorho, J. (2004). Teacher Leadership in the Context of Whole School Reform. *Journal of School Leadership, 14*(3), 242-265.
- Brown, C. J., Fouts, J. T., & Rojan, A. (2001). Teacher leadership project 2001: evaluation report: Retrieved from <http://proxying.lib.ncsu.edu/index.php?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED475748&site=ehost-live&scope=site>.
- Brown, S. R. (1980). *Political subjectivity: Applications of Q methodology in political science*. New Haven, CT: Yale University Press.

- Brown, S. R. (2006). A match made in heaven: A marginalized methodology for studying the marginalized. *Quality and Quantity*, 40, 361-382.
- Collay, M. (2011). *Everyday teacher leadership: Taking action where you are*. Indianapolis: Jossey-Bass.
- Conley, S. (1991). Review of research on teacher participation in school decision making. In G. Grant (Ed.), *Review of research in education* (Vol. 17). Washington, DC: American Educational Research Association.
- Conley, S., & Muncey, D. E. (1999). Teachers talk about teaming and leadership in their work. *Theory Into Practice*, 38, 46-55.
- Creswell, J. W. (2007). *Qualitative inquiry and research design* (2nd ed.). Thousand Oaks, CA: Sage
- Crowther, F., Kaagan, S. S., Ferguson, M., & Hann, L. (2002). *Developing teacher leaders: How teacher leadership enhances school success*. Thousand Oaks, CA: Corwin Press.
- Danielson, C. (2006). *Teacher Leadership that Strengthens Professional Practice*: Association for Supervision and Curriculum Development.
- Darling-Hammond, L. (2010). *The flat world and education*. New York: Teachers College Press.
- Darling-Hammond, L., Bullmaster, M. L., & Cobb, V. L. (1995). Rethinking Teacher Leadership through Professional Development Schools. *Elementary School Journal*, 96(1), 87-106.

- Dauksas, L., & White, J. (2010). Should I stay or should I go? How teacher leadership can improve teacher retention. *AASA Journal of Scholarship & Practice*, 7(2), 27-32.
- DeMeulle, L. (1999). "More Than Having a Vision": The Emergence of Teacher Leadership in a PDS. *Research in the Schools*, 6(1), 1-18.
- Dierks, K., Dillard, S., McElliot, K., Morgan, J., Schultz, B., Tipps, L., et al. (1998). *Teacher leadership: Commitment and challenge*. Seattle: University of Washington, Puget Sound, Educational Consortium.
- Doyle, M. (2000). *Making Meaning of Teacher Leadership in the Implementation of a Standards-Based Mathematics Curriculum*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.
- DuFour, R. (2005). What is a professional learning community? In R. DuFour, R. Eaker & R. DuFour (Eds.), *On common ground: The power of professional learning communities* (pp. 31-43). Bloomington, IN: Solution Tree.
- DuFour, R., Eaker, R., & DuFour, R. (2005). Recurring themes of professional learning communities and the assumptions they challenge. In R. DuFour, R. Eaker & R. DuFour (Eds.), *On common ground: The power of professional learning communities* (pp. 7-29). Bloomington, IN: Solution Tree.
- Duke, D. L., Showers, B. K., & Imber, M. (1980). Teachers and shared decision making: The costs and benefits of involvement. *Educational Administration Quarterly*, 16, 93-106.
- Durning, D. (1999). The transition from traditional to postpositivist policy analysis: A role for Q-methodology. *Journal of Policy Analysis and Management*, 18(3), 389-410.

Fay, C. (1992). *The Case for Teacher Leadership: Towards Definition and Development*.

Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Fennell, H. A. (1999). *Encouraging Teacher Leadership*. Paper presented at the Annual Meeting of American Educational Research Association, Montreal, Quebec.

Fink, A. (2010). *Conducting research literature reviews* (3rd ed.). Los Angeles: Sage.

Finn, J., & Chester E. (1991). *We must take charge: Our schools and our future*. New York: The Free Press.

Fitzgerald, T., & Gunter, H. M. (2008). Contesting the orthodoxy of teacher leadership. *International Journal of Leadership in Education*, 11(4), 331-340.

Frost, D., & Durrant, J. (2003). Teacher Leadership in a Culture of Change. *School Leadership & Management*, 23(2), 173-186.

Frost, D., & Harris, A. (2003). Teacher Leadership: Towards a Research Agenda. *Cambridge Journal of Education*, 33(3), 479-498.

Gates, G. S., & Siskin, D. (2001). Principal leadership styles and attitudes toward shared decision making with teachers. *Planning and Changing*, 32, 164-183.

Ghamrawi, N. (2010). No teacher left behind: Subject leadership that promotes teacher leadership. *Educational Management Administration and Leadership*, 38(3), 304-320.

Gonzales, S., & Lambert, L. (2001). Teacher Leadership in Professional Development Schools: Emerging Conceptions, Identities, and Practices. *Journal of School Leadership*, 11(1), 6-24.

- Griffin, G. A. (1995). Influences of shared decision on school and classroom activity: Conversations with five teachers. *Elementary School Journal, 96*, 29-45.
- Gutierrez, C., & Bryan, C. (2010). Online community becomes a pathway to teacher leadership. *Journal of Staff Development, 31*(1), 42-47.
- Harris, A. (2003). Teacher Leadership as Distributed Leadership: Heresy, Fantasy or Possibility? *School Leadership & Management, 23*(3), 313-324.
- Harris, A. (2005). Teacher Leadership: More than Just a Feel-Good Factor? *Leadership and Policy in Schools, 4*(3), 201-219.
- Harrison, C., & Killion, J. (2007). Ten roles for teacher leaders. *Educational Leadership, 65*(1), 74-77.
- Hart, A. W. (1994). Creating teacher leadership roles. *Educational Administration Quarterly, 30*, 472-497.
- Hart, A. W. (1995). Reconceiving school leadership: Emergent views. *Elementary School Journal, 96*, 9-28.
- Heller, M. F., & Firestone, W. A. (1995). Who's in charge here? Sources of leadership for change in eight schools. *Elementary School Journal, 96*, 65-86.
- Helterbran, V. R. (2010). Teacher leadership: Overcoming "I am just a teacher" syndrome. *Education, 131*(2), 363-371.
- Henning, J. E., Trent, V., Engelbrecht, D., Robinson, V., & Reed, G. A. (2004). Cultivating Teacher Leadership through a School and University Partnership. *Teacher Education and Practice, 17*(4).

- Hickey, W. D., & Harris, S. (2005). Improved professional development through teacher leadership. *Rural Educator*, 26(2), 12-16.
- Howey, K. R. (1988). Why Teacher Leadership? *Journal of Teacher Education*, 39(1), 28-31.
- Huth, M. D. (2002). *Teacher perspectives on teacher leadership*. (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.
- Jackson, T., Burrus, J., Bassett, K., & Roberts, R. D. (2010). Teacher leadership: An assessment framework for an emerging area of professional practice. Retrieved from ERIC Document Reproduction Service (ED523742).
- Katzenmeyer, M. H., & Moller, G. V. (2001). *Awakening the Sleeping Giant. Helping Teachers Develop as Leaders* (2nd ed.). Thousand Oaks, CA: Corwin.
- Krisko, M. E. (2001). *Teacher Leadership: A Profile To Identify the Potential*. Paper presented at the Biennial Convocation of Kappa Delta Pi, Orlando, FL.
- Labaree, D. F. (1997). *How to succeed in school without really learning*. New Haven CT: Yale University Press.
- Lashway, L. (1998). Teacher Leadership. *Research Roundup*, 14(3), 1-4.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation* New York: Cambridge University Press.
- Leadership for student learning: Redefining the teacher as leader. (2001). Washington D. C.: Institute for Educational Leadership.
- LeCompte, M. D. (2000). Analyzing qualitative data. *Theory Into Practice*, 39(3), 146-154

LeBlanc, P. R., & Shelton, M. M. (1997). Teacher Leadership: The Needs of Teachers.

Action in Teacher Education, 19(3), 32-48.

Leithwood, K., & Duke, D. L. (1999). A century's quest to understand school leadership. In

K. S. Louis & J. Murphy (Eds.), *Handbook of research on educational administration* (2nd ed., pp. 45-72). San Francisco: Jossey-Bass.

Leithwood, K., & Jantzi, D. (1999). The relative effects of principal and teacher sources of

leadership on student engagement with school. *Educational Administration Quarterly, 35*, 679-706.

Leithwood, K., & Jantzi, D. (2000). Principal and teacher leadership effects: A replication.

School Leadership & Management, 20, 415-434.

Lieberman, A., & Grolnick, M. (1999). Networks and reform in education. In L. Darling-

Hammond & G. Sykes (Eds.), *Teaching as the learning profession* (pp. 292-312). San Francisco: Jossey-Bass.

Lieberman, A., Saxl, E. R., & Miles, M. B. (1988). Teacher leadership: Ideology and

practice. In A. Lieberman (Ed.), *Building a professional culture in schools* (pp. 148-166). New York: Teachers College Press.

Lieberman, J. M. (2002). *Promoting teacher leadership in urban schools*. Paper presented at

the Annual Meeting of the American Association of Colleges for Teacher Education, New York.

- Little, J. W. (1988). Assessing the prospects for teacher leadership. In A. Lieberman (Ed.), *Building a professional culture in schools* (pp. 78-106). New York: Teachers College Press.
- Little, J. W. (1995). Contested ground: The basis of teacher leadership in two restructuring high schools. *Elementary School Journal*, 96, 47-63.
- Little, J. W. (1999). Organizing schools for teacher learning. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession* (pp. 233-262). San Francisco: Jossey-Bass.
- Little, J. W. (2003). Constructions of Teacher Leadership in Three Periods of Policy and Reform Activism. *School Leadership & Management*, 23(4), 401-419.
- Lynch, M., & Strodl, P. (1991). *Teacher Leadership: Preliminary Development of a Questionnaire*. Paper presented at the Conference of the Eastern Educational Research Association, Boston, MA.
- Mackiewicz-Wolfe, Z. (2013). *The relationships between teacher practice and teacher leadership skills in second stage teachers*. (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.
- Mangin, M. M. (2007). Facilitating elementary principals' support for instructional teacher leadership. *Educational Administration Quarterly*, 43(3), 319-357.
- Marks, H. M., & Louis, K. S. (1997). Does teacher empowerment affect the classroom? The implications of teacher empowerment for instructional practice and student academic performance. *Educational Evaluation and Policy Analysis*, 19, 245-275.

- McKeown, B., & Thomas, D. (1988). *Q Methodology*. Newbury Park: CA: Sage Publications.
- Merriam, S. B. (1995). "What can you tell from an N of 1?" Issues of validity and reliability in qualitative research. *PAACE Journal of Lifelong Learning*, 4, 51-60.
- Middlebrooks, G. H. (2004). Professionalism and Teacher Leadership Preparation. *Teacher Education and Practice*, 17(4), 432-450.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Militello, M., & Benham, M. K. P. (2010). "Sorting out" collective leadership: How Q-methodology can be used to evaluate leadership development. *The Leadership Quarterly*, 21, 620-632.
- Moller, G. (2006). Teacher leadership emerges within professional learning communities. *Journal of School Leadership*, 16(5), 520-533.
- Moller, G., Childs-Bowen, D., & Scrivner, J. (2001). *Teachers of the Year Speak Out: Tapping into Teacher Leadership. A SERVE Special Report: SouthEastern Regional Vision for Education*.
- Muijs, D., & Harris, A. (2007). Teacher leadership in (in)action: Three case studies of contrasting schools. *Educational Management Administration & Leadership*, 35(1), 111-134.
- North Carolina teacher evaluation process*. (2009). Raleigh: NC: McRrel.

- Ogawa, R. T., & Bossert, S. T. (1995). Leadership as an organizational quality. *Educational Administration Quarterly, 31*, 224-243.
- Ovando, M. N. (1996). Teacher leadership: Opportunities and challenges. *Planning and Changing, 27*, 30-44.
- Parker, A. (1977). *Networks for innovation and problem solving and their use for improving education: A comparative overview*. National Institute of Education, School Capacity for Problem Solving. Washington, D.C.
- Paulu, N., & Winters, K. (1998). Teachers leading the way: Voices from the National Teacher Forum. Washington, DC: U.S. Department of Education.
- Pounder, D. G., Ogawa, R. T., & Adams, E. A. (1995). Leadership as an organization-wide phenomena: Its impact on school performance. *Educational Administration Quarterly, 31*, 564-588.
- Quigley, C. (2011). *Instructional teacher leadership roles in New York City public elementary schools: Theory into practice*. (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.
- Reason, C., & Reason, C. (2011). *Mirror images: New reflections on teacher leadership*. Thousand Oaks, CA: Corwin Press.
- Reeves, D. B. (2008). *Reframing teacher leadership to improve your school*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Richards, L. (2009). *Handling qualitative data: A practical guide* (2nd ed.). Los Angeles: Sage.

- Riel, M., & Becker, H. J. (2008). Characteristics of teacher leaders for information and communication technology. In J. Voogt & G. Knezek (Eds.), *International handbook of information technology in primary and secondary education* (pp. 397–417). New York: Springer Science + Business Media.
- Ross, D., Adams, A., Bondy, E., Dana, N., Dodman, S., & Swain, C. (2011). Preparing teacher leaders: Perceptions of the impact of a cohort-based, job embedded, blended teacher leadership program. *Teaching and Teacher Education: An International Journal of Research and Studies*, 27(8), 1213-1222.
- Ruscoe, G. C., & Whitford, B. L. (1991). *Quantitative and qualitative perspectives on teacher attitudes: The third year*. Paper presented at the annual meeting of the American Educational Research Association, Chicago.
- Ryan, S. (1999). *Principals and teacher leading together*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec, Canada.
- Sanocki, S. J. (2013). *The process of how teachers become teacher leaders and how teacher leadership becomes distributed within a school: A grounded theory research study*. (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.
- Schmoker, M. (2005). No turning back: The ironclad case for professional learning communities. In R. DuFour, R. Eaker & R. DuFour (Eds.), *On common ground: The power of professional learning communities* (pp. 135-153). Bloomington, IN: Solution Tree.

- Silva, D. A., Gimbert, B., & Nolan, J. (2000). Sliding the doors: Locking and unlocking the possibilities for teacher leadership. *Teachers College Record, 102*, 779-804.
- Smylie, M. A. (1992). Teacher participation in school decision making: Assessing willingness to participate. *Educational Evaluation and Policy Analysis, 14*, 53-67.
- Smylie, M. A., & Denny, J. W. (1990). Teacher Leadership: Tensions and Ambiguities in Organizational Perspective. *Educational Administration Quarterly, 26*(3), 235-259.
- Smylie, M. A., Lazarus, V., & Brownlee-Conyers, J. (1996). Instructional outcomes of school-based participative decision making. *Educational Evaluation and Policy Analysis, 18*, 181-198.
- Snell, J., & Swanson, J. (2000). *The essential knowledge and skills of teacher leaders: A search for a conceptual framework*. Paper presented at the annual meeting of the American Education Research Association, New Orleans, LA.
- Sparks, D. (2005). Leading for transformation in teaching, learning, and relationships. In R. DuFour, R. Eaker & R. DuFour (Eds.), *On common ground: The power of professional learning communities* (pp. 155-175). Bloomington, IN: Solution Tree.
- Stone, M., Horejs, J., & Lomas, A. (1997). Commonalities and Differences in Teacher Leadership at the Elementary, Middle, and High School Levels.
- Stoops, B. (2011). *Teacher leadership as meaningful school reform: A snapshot of contemporary teacher leadership*. (Doctoral Dissertation). ProQuest Dissertations & Theses Full Text database.

- Taylor, D. L., & Bogotch, I. E. (1994). School-level effects of teachers' participation in decision making. *Educational Evaluation and Policy Analysis, 16*, 302-319.
- Teacher Leader Model Standards. (2012): Teacher Leadership Exploratory Consortium.
- Teacher leadership in high schools: How principals encourage it how teachers practice it. (2008). Washington, DC: Institute for Educational Leadership.
- Tschannen-Moran, M. (2009). Fostering teacher professionalism in schools. *Educational Administration Quarterly, 45*(2), 217-24
- Vail, A., & Redick, S. (1993). Predictors of Teacher Leadership Performance of Vocational and Nonvocational Teachers. *Journal of Vocational Education Research, 18*(1), 51-76.
- Van Excel, J., & De Graaf, G. (Producer). (2005). Q methodology: A sneak preview. Retrieved from <http://qmethod.org/articles/vanExcel.pdf>
- Vergari, S. (2007). The politics of charter schools. *Educational Policy, 21*(1), 15-39.
- Wallace, J. D., Nesbit, C. R., & Miller, A. C. S. (1999). Six leadership models for professional development in science and mathematics. *Journal of Science Teacher Education, 10*(4), 247-268.
- Wasley, P. A. (1991). *Teachers who lead: The rhetoric of reform and the realities of practice*. New York: Teachers College Press.
- Waters, J., Marzano, R., & McNulty, B. (2004). Leadership that sparks learning. *Educational Leadership, 61*(7), 48-51.
- Watts, S., & Stenner, P. (2012). *Doing Q methodological research*. Los Angeles: Sage.

- Weber, L., & McBee, J. (1990). Teacher evaluation instruments for merit pay decisions: Is their use justifiable? *Evaluation Review*, *14*(4), 411-426.
- Weiner, J. M. (2011). Finding common ground: Teacher leaders and principals speak out about teacher leadership. *Journal of School Leadership*, *21*(1), 7-41.
- Weiss, C. H., Cambone, J., & Wyeth, A. (1992). Trouble in paradise: Teacher conflicts in shared decision making. *Educational Administration Quarterly*, *28*, 350-367.
- Wells, C. M., Maxfield, C. R., Klocko, B., & Feun, L. (2010). The role of superintendents in supporting teacher leadership: A study of principals' perceptions. *Journal of School Leadership*, *20*(5), 669-693.
- Wenger, E. (1999). Communities of practice and social learning systems. *Organization*, *7*(2), 225-246.
- Whitaker, T. (1995). Informal teacher leadership: The key to successful change in the middle level. *NASSP Bulletin*, *79*(567), 76-81.
- White, P. A. (1992). Teacher empowerment under "ideal" school-site autonomy. *Educational Evaluation and Policy Analysis*, *14*, 69-82.
- Wilson, M. (1993). The search for teacher leaders. *Educational Leadership*, *50*(6), 24-27.
- Yeh, S. S. (2007). The cost-effectiveness of five policies for improving student achievement. *American Journal of Evaluation*, *28*(4), 416-436.
- Yin, R. K. (2011). *Qualitative research from start to finish*. New York: The Guilford Press.
- 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.

Appendices

Appendix A: North Carolina Teacher Working Conditions Survey**Teacher Leadership Questions**

Q: Please rate how strongly you agree or disagree with the following statements about teacher leadership in your school. (Strongly Disagree, Disagree, Agree, Strongly Agree, or Don't Know)

- a. Teachers are recognized as educational experts.
- b. Teachers are trusted to make sound professional decisions about instruction.
- c. Teachers are relied upon to make decisions about educational issues.
- d. Teachers are encouraged to participate in school leadership roles.¹
- e. The faculty has an effective process for making group decisions to solve problems.
- f. In this school we take steps to solve problems.
- g. Teachers are effective leaders in this school.

¹School leadership roles may include formal roles such as department chair, an elected member of the School Improvement Team, mentor, coach or leader of a professional learning community, etc.

Q: Teachers have an appropriate role at your school in each of the following areas. (Strongly Disagree, Disagree, Agree, Strongly Agree, or Don't Know)

- a. Selecting instructional materials and resources
- b. Devising teaching techniques
- c. Setting grading and student assessment practices
- d. Determining the content of in-service professional development programs
- e. Establishing student discipline procedures
- f. Providing input on how the school budget will be spent
- g. The selection of teachers new to this school
- h. School improvement planning

Q: Teachers have an appropriate level of influence on decision making in this school. (Strongly Disagree, Disagree, Agree, Strongly Agree, or Don't Know)

Q: Members of the school improvement team are elected. (Strongly Disagree, Disagree, Agree, Strongly Agree, or Don't Know)

Appendix B: North Carolina Professional Teaching Standards

Standard 1: Teachers Demonstrate Leadership

- A. Teachers lead in their classrooms.
- B. Teachers demonstrate leadership in the school.
- C. Teachers lead the teaching profession.
- D. Teachers advocate for positive change in policies and practices affecting student learning.
- E. Teachers demonstrate high ethical standards.

Standard 2: Teachers Establish a Respectful Environment for a Diverse Population of Students

- A. Teachers provide an environment in which each child has a positive, nurturing relationship with caring adults.
- B. Teachers embrace diversity in the school community and in the world.
- C. Teachers treat students as individuals.
- D. Teachers adapt their teaching for the benefit of students with special needs.
- E. Teachers work collaboratively with the families and significant adults in the lives of their students.

Standard 3: Teachers Know the Content They Teach

- A. Teachers align their instruction with the North Carolina Standard Course of Study.
- B. Teachers know the content appropriate to their teaching specialty.
- C. Teachers recognize the interconnectedness of content areas/disciplines.
- D. Teachers make instruction relevant to students.

Standard 4: Teachers Facilitate Learning for Their Students

- A. Teachers know the ways in which learning takes place, and they know the appropriate levels of intellectual, physical, social, and emotional development of their students.
- B. Teachers plan instruction appropriate for their students.
- C. Teachers use a variety of instructional methods.
- D. Teachers integrate and utilize technology in their instruction
- E. Teachers help students develop critical thinking and problem-solving skills.
- F. Teachers help students work in teams and develop leadership qualities
- G. Teachers communicate effectively.
- H. Teachers use a variety of methods to assess what each student has learned.

Standard 5: Teachers Reflect on Their Practice

- A. Teachers analyze student learning.
- B. Teachers link professional growth to their professional goals.
- C. Teachers function effectively in a complex, dynamic environment.

Appendix C: Literature Review Table

Citation (APA)	
Wells, C. M., Maxfield, C. R., Klocko, B., & Feun, L. (2010). The role of superintendents in supporting teacher leadership: A study of principals' perceptions. <i>Journal of School Leadership, 20</i> (5), 669-693.	
Literature Typology: Conceptual, Empirical, or Dissertation	Empirical
Research Questions	<ul style="list-style-type: none"> • Examine principals' perceptions of the role of superintendents in promoting and supporting teacher leadership • Differences between what principals wanted and received from their superintendents
Research Design: Qualitative, Quantitative, or Mixed Method; Procedures and Sample	<ul style="list-style-type: none"> • Quantitative • Quasi- experimental descriptive using electronic survey (Survey Monkey) • 34 school districts in midwestern state in 2008 (17 participating districts in Galileo Academy, 106 respondents and 17 nonparticipating districts, 70 respondents)
Main Findings	<ul style="list-style-type: none"> • Principals desire superintendents to engage in activities and behaviors to support teacher leadership programs • Principals want active rather than passive roles by superintendents in creating systems that support teacher leadership • Differences between participating and nonparticipating districts. Participating districts had greater support for working with teacher unions, providing financial support for programs, speaking publically about importance of teacher leaders, encouraging principals to develop teacher leaders, and provide teacher recognition • Teacher Leadership programs require persistent action, systematic alignment, and commitment
Keywords	Supporting Teacher Leadership
Weiner, J. M. (2011). Finding common ground: Teacher leaders and principals speak out about teacher leadership. <i>Journal of School Leadership, 21</i> (1), 7-41.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • How do Teacher Connectors and their principals describe the TC's role and its responsibilities? • How do TC's and their principals describe the principal's leadership (e.g. vision, resource allocation, ongoing support) in relation to the

	<p>TC's role?</p> <ul style="list-style-type: none"> • In what ways do these descriptions overlap? In what ways do they diverge?
Research Design	<ul style="list-style-type: none"> • Qualitative • 1 hour semi-structured interviews with 4 pairs of TCs and their principals • 1 high, 2 middle, and 1 K-8 school • Majority of students from low income families, all schools had difficulty meeting performance standards
Main Findings	<ul style="list-style-type: none"> • For effective teacher leadership, principals need to create a clear vision of school reform and situate the teacher leader's work within that vision • Neither principals nor TCs had a clear sense of the knowledge and skills needed to effectively implement the TC role • Principals need to evaluate how the allocation of resources may affect teacher leader's effectiveness • Increase teacher leaders' and principals' awareness about how traditional school norms may affect teachers' response to teacher leadership (egalitarianism, seniority, and autonomy)
Keywords	Supporting Teacher Leadership
<p>Gonzales, S., & Lambert, L. (2001). Teacher Leadership in Professional Development Schools: Emerging Conceptions, Identities, and Practices. <i>Journal of School Leadership</i>, 11(1), 6-24.</p>	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • How do teachers conceptualize leadership? • How does teacher identity change as roles and responsibilities are altered? • How do teacher leaders view their work with colleagues and administrators? • How does gender influence how leadership is perceived and performed? • How do teacher leaders seek to transform their school communities?
Research Design	<ul style="list-style-type: none"> • Qualitative • 12 teacher leaders selected by nomination, application, and committee interview were interviewed • Field Observations of teacher leader meetings and meetings of various committees headed by teacher leaders • Document analysis of documents produced as the meetings
Main Findings	<ul style="list-style-type: none"> • Teacher leadership was defined as individuals who possessed various qualities and behaviors (professional, effective teachers, role

	<p>models for teachers and students, know subject matter and pedagogy, effective classroom managers, lifelong learners) –and as-</p> <ul style="list-style-type: none"> • People of action outside of their classrooms to bring change in others and in schools • Leadership identity = mentor and role model (department chair, leadership team member, researcher, mentor teacher, program coordinator, and teacher leader) • Greater self-confidence, ability to influence others, conceptualizing issues and problems • Reconceptualization of leadership from “person in charge” to person who assumes responsibility for initiating collegial conversations that lead to development of plans to improve the school community
Keywords	Definitions
Brooks, J. S., Scribner, J. P., & Eferakorho, J. (2004). Teacher Leadership in the Context of Whole School Reform. <i>Journal of School Leadership</i> , 14(3), 242-265.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • How do teachers and the principal in one school undergoing whole school reform perceive of teachers as leaders? • How does a whole school reform effort influence teachers’ conceptions of their roles as school leaders?
Research Design	<ul style="list-style-type: none"> • Qualitative • Case Study of one Midwestern high school for 1 academic year which generally performs well on standardized achievement measures • Interviews and Field Observations
Main Findings	<ul style="list-style-type: none"> • Varied conceptions of what teacher leadership is: local classroom teacher leaders (stayed within the classroom), departmental teacher leaders (within the department on curricular, assessment, and intradepartmental collaboration), whole school teacher leaders (shape the professional mores, culture, and work of the school) • Lack of teacher participation in leadership roles may be attributed to perceived lack of input in defining leadership roles • Communication and collaboration are critical among teachers and principal to define roles and decrease organizational stress
Keywords	Definitions
Moller, G. (2006). Teacher leadership emerges within professional learning communities. <i>Journal of School Leadership</i> , 16(5), 520-533.	
Literature Typology	Empirical

Research Questions	How does teacher leadership emerge within schools with either a high level (HLR) or a low level (LLR) of readiness to establish a professional learning community?
Research Design	<ul style="list-style-type: none"> • Qualitative • Semi-structured interviews of principals and teacher leaders from 19 schools across the county using a professional learning communities lens • Schools represented elementary, middle, and high levels and rural and urban settings
Main Findings	<ul style="list-style-type: none"> • HLR principals were supportive of teacher leadership and used power of their positions to productively build shared leadership • HLR schools approached collaboration with inclusiveness whereas LLR schools relied on a select group of teachers for leadership
Keywords	Supporting Teacher Leadership
Vail, A., & Redick, S. (1993). Predictors of Teacher Leadership Performance of Vocational and Nonvocational Teachers. <i>Journal of Vocational Education Research</i> , 18(1), 51-76.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • What are the personal and professional characteristics of vocational and non-vocational teachers, and what opinions do these teachers hold about their schools' overall health and the importance of teacher leadership? • To what extent do vocational and non-vocational teachers perform various types of teacher leadership activities? • How does a teacher's exhibited teacher leadership relate to the teacher's personal characteristics, professional characteristics, opinions about school health, and opinions about the importance of teacher leadership? • How much of a variance in the dependent variable teacher leadership performance is explained by subjects' classification as vocational and non-vocational teachers? • Which of the independent variables personal characteristics, professional characteristics, school health, and teacher leadership importance are the best predictors of the dependent variable, teacher leadership performance?
Research Design	<ul style="list-style-type: none"> • Quantitative • Ex post facto/correlational • Questionnaires of 370 non-vocational and 373 vocational teachers in Ohio during 1990-1991
Main Findings	<ul style="list-style-type: none"> • Both groups more alike than different in terms of personal characteristics, opinions about school health, and professional

	<p>characteristics.</p> <ul style="list-style-type: none"> • Vocational teachers were more involved in teacher leadership and other educational activities (administrative and community leadership). • When teachers believe a leadership behavior to be important, they are more likely to assume the behavior. • School health (institutional integrity, principal influence, consideration, initiating structure, resource support, morale, and academic emphasis) is 2nd biggest predictor with healthier schools more likely to have more teacher leadership. • Having spilt assignments (department chair, etc.) increases teacher leadership activities
Keywords	Predictors of teacher leadership
Gutierrez, C., & Bryan, C. (2010). Online community becomes a pathway to teacher leadership. <i>Journal of Staff Development</i> , 31(1), 42-47.	
Literature Typology	Conceptual
Research Questions	Teacher leadership development through an online learning community
Research Design	University of Colorado Denver's Professional Development School
Main Findings	<ul style="list-style-type: none"> • Sustained and intensive professional development for teachers is related to student achievement gains. • Collaborative approaches to professional learning can promote school change that extends beyond individual classrooms. • Effective professional development is intensive, ongoing and connected to practice, focused on teaching and learning of specific academic content, connected to other school initiatives, and built on strong working relationships with teachers.
Keywords	Professional Development Development of teacher leaders
Harrison, C., & Killion, J. (2007). Ten roles for teacher leaders. <i>Educational Leadership</i> , 65(1), 74-77.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	Formal and Informal TL roles: resource provider, instructional specialist, curriculum specialist, classroom supporter, learning facilitator, mentor, school leader, data coach, catalyst for change, learner
Keywords	Teacher Leadership Activities

<p>Ross, D., Adams, A., Bondy, E., Dana, N., Dodman, S., & Swain, C. (2011). Preparing teacher leaders: Perceptions of the impact of a cohort-based, job embedded, blended teacher leadership program. <i>Teaching and Teacher Education: An International Journal of Research and Studies</i>, 27(8), 1213-1222.</p>	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • What are teachers’ perceptions of the impact of the program on their approach to teaching practice, instructional problem solving, their leadership within the school, and other teachers in the school? • What are the principals’ perceptions of the impact of the program on teachers’ practice and instructional problem solving, leadership within the school, and other teachers in the school?
Research Design	<p>Qualitative</p> <p>Interviews w/ 20 program graduates of Teacher Leadership for School Improvement Graduate Program and 6 principals</p>
Main Findings	<ul style="list-style-type: none"> • Teachers believe knowledge and skill increased • Teachers developed inquiry stance for self-examination of teaching • Principals indicated teachers more confident and able to locate information to improve practice • Graduates took formal leadership roles (School Advisory Council chair, professional development liaison for the school, math coach, reading coach, team leader) • Teacher defined themselves as leaders and were nominated by peers for leadership positions • Shift from individual to communal responsibility for student learning
Keywords	<p>Professional Development</p> <p>Definitions</p> <p>Development of Teacher Leaders</p>
<p>Ghamrawi, N. (2010). No teacher left behind: Subject leadership that promotes teacher leadership. <i>Educational Management Administration and Leadership</i>, 38(3), 304-320.</p>	
Literature Typology	Empirical
Research Questions	<p>What is the sphere of influence of subject leaders, who constitute middle leadership in the context of this study, on teacher leadership establishment?</p>
Research Design	<ul style="list-style-type: none"> • Qualitative • 51 semi-structured interviews w/principals, subject leaders, and classroom teachers in 3 high success K-12 schools in Beirut, Lebanon
Main Findings	<p>3 ways subject leaders encourage and restrain teacher leadership development:</p> <ul style="list-style-type: none"> • Creating subcultures of professional collaboration and distributed

	<p>leadership</p> <ul style="list-style-type: none"> • Establishing bartered leadership structures • Walking the talk of a shared system of teacher monitoring and evaluation
Keywords	Supporting Teacher Leadership
Helterbran, V. R. (2010). Teacher leadership: Overcoming "I am just a teacher" syndrome. <i>Education, 131</i> (2), 363-371.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> • Teacher leadership is a mechanism for school reform and is largely untapped • Leadership must be shared between teacher and principal for it to be effective • Teacher leadership is not simply assigning tasks; it is efforts which specifically impact student achievement • Formal roles (grade chair, mentor, coach) often include extra compensation and release time • Informal roles may have bigger impact on learning with a focus on self-generated learning for professional and school improvement • Unlike external reforms, teacher leadership is done by and with teachers and can be exquisitely tailored to teachers' needs and practice • Principal is lynchpin to teacher leadership being able to flourish • 3 considerations for increasing teacher leadership: hiring of new teachers, having seasoned teachers see themselves and others as leaders, model learning and collegiality
Keywords	<p>Definitions</p> <p>Supporting teacher leadership</p> <p>Reform effort</p>
Dauksas, L., & White, J. (2010). Should I stay or should I go? How teacher leadership can improve teacher retention. <i>AASA Journal of Scholarship & Practice, 7</i> (2), 27-32.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> • Teacher leaders are collaborators, risk takers, participants in school shared decision making, experts in instruction, willingness to share with others, engage in action research, and continuous professional

	<p>development</p> <ul style="list-style-type: none"> • Principals should look for teachers who are trustworthy and maintain confidentiality; are sensitive to the needs of others; can see beyond their own classroom; are resourceful and persist to find solutions; admit their mistakes; and are willing to grow and change • If principals cultivate teacher leaders within their school, teacher retention may be improved with the benefits of a stable school culture • Principals can foster a school environment that leads to collaboration and teacher leadership by sharing responsibility with teachers as often as possible and by helping them develop skills that foster collaborative problem solving • Teachers need to view induction as the opportunity to ask questions and seek understanding. • Teacher leaders can represent their grade level or department, form study groups to enhance student learning, take ownership of school issues and see themselves as part of the solution.
Keywords	<p>Definitions Reform effort Supporting teacher leadership Professional development</p>
<p>Pounder, J. S. (2006). Transformational classroom leadership: The fourth wave of teacher leadership? <i>Educational Management Administration & Leadership</i>, 34(4), 533-545.</p>	
Literature Typology	<p>Conceptual</p>
Research Questions	
Research Design	
Main Findings	<p>4 waves of teacher leadership:</p> <ul style="list-style-type: none"> • 1st control model where teachers implemented other teacher's decisions • 2nd same hierarchy, but greater emphasis on instruction • 3rd (present), more process rather than position where teachers are leaders and influencers through carrying out their duties without specific leadership roles • 4th teacher leaders employ transformational leadership qualities in the classroom which lead to the perception of them as exemplary teachers
Keywords	<p>Definitions</p>
<p>York-Barr, J. & Duke, K. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. <i>Review of Educational Research</i>, 74(3), 255-316.</p>	

Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	<p>Literature Review of Teacher Leadership</p> <ul style="list-style-type: none"> • Definitions of teacher leadership • Activities of teacher leaders • Who are teacher leaders • Condition which influence teacher leadership • Preparations for teachers leading • Effects of teacher leadership
Keywords	<p>Definitions</p> <p>Supporting teacher leadership</p> <p>Professional development</p>
<p>Acker-Hocevar, M., & Touchton, D. (1999). <i>A model of power as social relationships: Teacher leaders describe the phenomena of effective agency in practice</i>. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec, Canada.</p>	
Literature Typology	Empirical
Research Questions	How do teacher leaders describe decision making structures, culture, and the politics of their work?
Research Design	<ul style="list-style-type: none"> • Qualitative • Interviews with 6 recipients of the Florida Teacher of the Year Award
Main Findings	<ul style="list-style-type: none"> • Teacher leaders understand larger picture, think about impact of decisions, develop social networks of influence, seek to make changes • Teachers with greatest change ability had empowering principals and work contexts
Keywords	<p>Supporting Teacher Leadership</p> <p>Characteristics of Teacher Leaders</p>
<p>Conley, S. (1991). Review of research on teacher participation in school decision making. In G. Grant (Ed.), <i>Review of research in education</i> (Vol. 17). Washington, DC: American Educational Research Association.</p>	
Literature Typology	Conceptual
Research Questions	What are the expectations for participation in decision making?
Research Design	
Main Findings	<ul style="list-style-type: none"> • Teachers desire more participation in instructional decisions and

	less in managerial decisions, but still prefer to have more input in managerial decisions <ul style="list-style-type: none"> • Differences in actual versus desired participation produces stress and less loyalty
Keywords	Supporting Teacher Leadership
Conley, S., & Muncey, D. E. (1999). Teachers talk about teaming and leadership in their work. <i>Theory Into Practice</i> , 38, 46-55.	
Literature Typology	Empirical
Research Questions	Do teachers identify contradictions as leaders and as members of a team and if so, how do they resolve them?
Research Design	<ul style="list-style-type: none"> • Qualitative • Interviews of teachers at two elementary and two secondary school
Main Findings	<ul style="list-style-type: none"> • Teachers did not see contradictions and preferred one role over another • Teaming members preferred collegiality while leaders preferred decision making and administrative characteristics
Keywords	Supporting Teacher Leadership
Crowther, F., Kaagan, S. S., Ferguson, M., & Hann, L. (2002). <i>Developing teacher leaders: How teacher leadership enhances school success</i> . Thousand Oaks, CA: Corwin Press.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • What are the characteristics of teachers who have achieved notable success working in disadvantaged schools? • What forms of leadership (if any) are inherent in those characteristics?
Research Design	<ul style="list-style-type: none"> • Qualitative • Observations and interviews of 15 teachers identified by colleagues and administrators
Main Findings	Parallel leadership where teachers (pedagogical) and principals (strategic) to improve schools
Keywords	Reform Effort Characteristics of Teacher Leadership
Darling-Hammond, L., Bullmaster, M. L., & Cobb, V. L. (1995). Rethinking Teacher Leadership through Professional Development Schools. <i>Elementary School Journal</i> , 96(1), 87-106.	
Literature Typology	Empirical
Research Questions	What are the possibilities for new forms of teacher leadership are there that are accessible for most teachers?
Research Design	<ul style="list-style-type: none"> • Qualitative

	<ul style="list-style-type: none"> • Case studies of 7 established professional development schools, interviews, observations, surveys, document analysis, teacher logs
Main Findings	<ul style="list-style-type: none"> • Leadership roles included: mentor, teacher educator, curriculum developer, problem solver, change agent, researcher • Teachers in leadership roles learned by teaching, redesigning schools, and collaborating
Keywords	Definitions
Dierks, K., Dillard, S., McElliot, K., Morgan, J., Schultz, B., Tipps, L., et al. (1998). <i>Teacher leadership: Commitment and challenge</i> . Seattle: University of Washington, Puget Sound, Educational Consortium.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • What is teacher leadership? • What characteristics define teachers in leadership positions? • What responsibilities do teacher leaders have? • How are they compensated? • What are needed directions for change?
Research Design	<ul style="list-style-type: none"> • Qualitative • 87 teacher interviews with 10 open ended questions
Main Findings	<ul style="list-style-type: none"> • Teachers spent more time in committee meetings rather than working with other teachers in instructional issues • 62% reported received some reward (intrinsic or extrinsic) for leadership role
Keywords	Definitions Characteristics of Teacher Leadership
Duke, D. L., Showers, B. K., & Imber, M. (1980). Teachers and shared decision making: The costs and benefits of involvement. <i>Educational Administration Quarterly</i> , 16, 93-106.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • Are teachers anxious to participate in and commit to decision making? • What are the costs and benefits for participation?
Research Design	<ul style="list-style-type: none"> • Qualitative and Quantitative • 50 secondary school teachers at schools with shared decision making where interviewed and surveyed
Main Findings	<ul style="list-style-type: none"> • Teachers rated the benefits greater than the costs • Most teachers not anxious to participate without influence on final decision
Keywords	Predictors of Teacher Leadership Supporting Teacher Leadership
Gates, G. S., & Siskin, D. (2001). Principal leadership styles and attitudes toward shared	

decision making with teachers. <i>Planning and Changing</i> , 32, 164-183.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • What are principals' leadership styles, attitudes, and practices? • What variables are predictive of collaborative leadership?
Research Design	<ul style="list-style-type: none"> • Quantitative • Mailed surveys to 500 Texas principals at all levels (66% response)
Main Findings	<ul style="list-style-type: none"> • Teacher involvement very important especially for evaluating instructional programs
Keywords	• Supporting Teacher Leadership
Griffin, G. A. (1995). Influences of shared decision on school and classroom activity: Conversations with five teachers. <i>Elementary School Journal</i> , 96, 29-45.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • What do teachers believe are the primary consequences of school redesign toward greater shared decision making?
Research Design	<ul style="list-style-type: none"> • Qualitative • Interviews of 5 teachers over 3 years
Main Findings	<ul style="list-style-type: none"> • Teacher involvement in decision making focused on areas outside of the classroom (student evaluation, curriculum frameworks, behavior policies) and lack of effect on teacher practices within the classroom • Lack of effects explained by culture of isolation, autonomy, teachers' beliefs about own competence, information and decision making overload
Keywords	Supporting Teacher Leadership Characteristics of Teacher Leadership Reform
Hart, A. W. (1994). Creating teacher leadership roles. <i>Educational Administration Quarterly</i> , 30, 472-497.	
Literature Typology	Empirical
Research Questions	What are the attitudes and judgments of teachers in a new teacher career ladder program?
Research Design	<ul style="list-style-type: none"> • Qualitative • Case study of 2 middle schools in a district with a career ladder program
Main Findings	<ul style="list-style-type: none"> • One school was positive and the other school negative toward program • Positive school had norms of teamwork, teacher leaders were public and accountable, strong principal-teacher leader communication, teacher leadership roles were collectively shaped by faculty, teacher

	leadership roles were linked to instructional values
Keywords	Supporting Teacher Leadership Reform Effort
Heller, M. F., & Firestone, W. A. (1995). Who's in charge here? Sources of leadership for change in eight schools. <i>Elementary School Journal</i> , 96, 65-86.	
Literature Typology	Empirical
Research Questions	Who performed leadership functions in schools with a social problem solving initiative was implemented?
Research Design	<ul style="list-style-type: none"> • Qualitative • Case studies eight district schools with varying socioeconomic status
Main Findings	<ul style="list-style-type: none"> • Teachers contributed to many leadership functions, most significantly to sustaining and promoting vision for change • Leadership functions were performed by a variety of people with no key figures
Keywords	Characteristics of Teacher Leadership Supporting Teacher Leadership
LeBlanc, P. R., & Shelton, M. M. (1997). Teacher Leadership: The Needs of Teachers. <i>Action in Teacher Education</i> , 19(3), 32-48.	
Literature Typology	Empirical
Research Questions	How do teacher leaders perceive themselves and others as they work in their teacher leadership roles?
Research Design	<ul style="list-style-type: none"> • Qualitative • Interviews of 5 teacher leaders who had received leadership training and were identified by colleagues and principals
Main Findings	<ul style="list-style-type: none"> • Teacher leaders experienced conflict between needs of achievement and for affiliation, gained increased job satisfaction, believed made the most impact through collaboration and strong relationships with peers • Viewed themselves as needing lifelong learning focused on caring for students and maintaining a positive attitude
Keywords	Characteristics of Teacher Leaders Supporting Teacher Leadership
Leithwood, K., & Jantzi, D. (1999). The relative effects of principal and teacher sources of leadership on student engagement with school. <i>Educational Administration Quarterly</i> , 35, 679-706.	
Literature Typology	Empirical
Research	What are the relative effects of principal and teacher leadership on

Questions	students' engagement in school?
Research Design	<ul style="list-style-type: none"> • Quantitative • Survey completed by 1,762 teachers (71% response) • Survey completed by 9,941 students (100% response)
Main Findings	<ul style="list-style-type: none"> • Teacher leadership did not have a statistical effect on student engagement • Principal leadership was significant (weak) on student engagement and school conditions
Keywords	Supporting Teacher Leadership
Leithwood, K., & Jantzi, D. (2000). Principal and teacher leadership effects: A replication. <i>School Leadership & Management</i> , 20, 415-434.	
Literature Typology	Empirical
Research Questions	What are the relative effects of principal and teacher leadership on students' engagement in school?
Research Design	<ul style="list-style-type: none"> • Quantitative • Survey completed by 1,818 teachers (75% response) Survey completed by 6,490 students (90% response)
Main Findings	<ul style="list-style-type: none"> • Teacher leadership had not significant effects • Principal leadership had weak significant effects
Keywords	Supporting Teacher Leadership
Lieberman, A., Saxl, E. R., & Miles, M. B. (1988). Teacher leadership: Ideology and practice. In A. Lieberman (Ed.), <i>Building a professional culture in schools</i> (pp. 148-166). New York: Teachers College Press.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • What capabilities do teacher leaders use to effect change? • Do teachers have a core of skills and capabilities in common?
Research Design	<ul style="list-style-type: none"> • Qualitative • 17 teacher leaders from a variety of schools in a large eastern city
Main Findings	<ul style="list-style-type: none"> • Teacher leaders came to leadership roles with significant teaching experience, knowledge of the curriculum, strong administrative and organizational skills, and excellent interpersonal skills • In leadership roles, they learned about school culture and how to work within the organizational system • Common skills and abilities: trust and rapport, organizational diagnosis, dealing with process, using resources, managing work, and building skills and confidence in others
Keywords	Characteristics of Teacher Leadership Definitions Supporting Teacher Leadership
Little, J. W. (1988). Assessing the prospects for teacher leadership. In A. Lieberman (Ed.),	

<i>Building a professional culture in schools</i> (pp. 78-106). New York: Teachers College Press.	
Literature Typology	Empirical / Conceptual
Research Questions	What are the prospects of teachers accepting one another's initiatives on matters of curriculum and instruction?
Research Design	Data drawn from four studies: instructional leadership, teacher advisors assisting with the development of teachers, school level leadership teams, California Mentor Teacher Program
Main Findings	<ul style="list-style-type: none"> • Teacher leadership will be advanced when work is viewed as important and difficult • Teacher leaders are exemplars of rigorous, rewarding professional relationships • Shared teacher and principal interests in leadership are publically demonstrated • Incentives favor teacher collaboration • Local policy supports hiring and evaluating principals who support and preserve teacher leadership
Keywords	Supporting Teacher Leadership Characteristics of Teacher Leadership Development of Teacher Leadership
Little, J. W. (1995). Contested ground: The basis of teacher leadership in two restructuring high schools. <i>Elementary School Journal</i> , 96, 47-63.	
Literature Typology	Empirical
Research Questions	How did two high schools transform secondary education?
Research Design	<ul style="list-style-type: none"> • Qualitative • Case studies with interviews, document analysis, observations of 53 teachers over a two year period
Main Findings	<ul style="list-style-type: none"> • Teachers experienced tension between teaming norms and authority over peers • Subject are specialization important for legitimacy for leading as a teacher
Keywords	Supporting Teacher Leadership Characteristics of Teacher Leaders
Marks, H. M., & Louis, K. S. (1997). Does teacher empowerment affect the classroom? The implications of teacher empowerment for instructional practice and student academic performance. <i>Educational Evaluation and Policy Analysis</i> , 19, 245-275.	
Literature Typology	Empirical

Research Questions	<ul style="list-style-type: none"> • To what extent does teacher empowerment influence the school instructional context? • How and to what extent does teacher empowerment enhance authentic pedagogy and student academic performance?
Research Design	<ul style="list-style-type: none"> • Qualitative and Quantitative • Case studies of 24 restructured schools (8 on each level) • Surveys completed by 910 teachers (82% response) • Assessments of student achievement
Main Findings	<ul style="list-style-type: none"> • Teacher empowerment plays a role in teachers' efforts to improve and their belief in their own learning • Teacher empowerment does not directly cause increased student achievement
Keywords	Characteristics of Teacher Leadership
Ovando, M. N. (1996). Teacher leadership: Opportunities and challenges. <i>Planning and Changing</i> , 27, 30-44.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • What are the perceptions of teacher leaders associated with their dual duties of teaching and leading? • What are the opportunities and challenges related to performing both?
Research Design	<ul style="list-style-type: none"> • Qualitative • Open ended surveyed of 25 teacher leaders in one district
Main Findings	<ul style="list-style-type: none"> • Teacher leadership viewed with both positive and negative effects • Teaching and leading require two different mindsets • Challenges included time, increased workload, pressure, and demands of work
Keywords	Supporting Teacher Leadership Characteristics of Teacher Leadership
Paulu, N., & Winters, K. (1998). Teachers leading the way: Voices from the National Teacher Forum. Washington, DC: U.S. Department of Education.	
Literature Typology	Conceptual
Research Questions	<ul style="list-style-type: none"> • Why is teacher leadership needed? • What forms can teacher leadership take? • What steps can teachers take to become effective leaders?
Research Design	
Main Findings	<ul style="list-style-type: none"> • Teachers have front line knowledge of classroom issues and school cultures for school reform • Teachers lead in formal and informal roles • Support for teacher leaders include: encouraging leadership, creating leadership roles, providing leadership training opportunities,

	easing time constraints, creating more opportunities for connection
Keywords	Reform Effort Definitions Supporting Teacher Leadership Professional Development
Pounder, D. G., Ogawa, R. T., & Adams, E. A. (1995). Leadership as an organization-wide phenomena: Its impact on school performance. <i>Educational Administration Quarterly</i> , 31, 564-588.	
Literature Typology	Empirical
Research Questions	What is the relationship between leadership (principal, teacher, secretary, parents) and school effectiveness?
Research Design	<ul style="list-style-type: none"> • Quantitative • Surveyed principal, counselor, 20 teachers, 2 secretaries, and 1 custodian in each of 57 schools • Existing attendance and achievement data was also used
Main Findings	<ul style="list-style-type: none"> • Principal and teacher leadership positively associated with commitment (and school effectiveness and teacher retention)
Keywords	Reform Effort
Powers, S., Rayner, S., & Gunter, H. (2001). Leadership in inclusive education: A professional development agenda for special education. <i>British Journal of Special Education</i> , 28, 108-112.	
Literature Typology	Empirical
Research Questions	How do special educators describe and understand their professional development needs to prepare for the challenges of leadership?
Research Design	<ul style="list-style-type: none"> • Quantitative • Surveys completed by 117 teachers (80% response)
Main Findings	<ul style="list-style-type: none"> • Wanted professional development in organizational topics • Little interest in self improvement topics
Keywords	Professional Development
Ruscoe, G. C., & Whitford, B. L. (1991). <i>Quantitative and qualitative perspectives on teacher attitudes: The third year</i> . Paper presented at the annual meeting of the American Educational Research Association, Chicago.	
Literature Typology	Empirical
Research Questions	What are the effects of professional development schools on teachers' attitudes about their professional lives?
Research Design	<ul style="list-style-type: none"> • Qualitative and Quantitative • Surveys and interviews over three years of teachers in 24 professional development schools

Main Findings	<ul style="list-style-type: none"> • Teacher involvement in more than one type of restructuring resulted in more positive teacher attitudes through presence of a supportive administrator, collegial and change oriented faculty/peers, and student centered orientation
Keywords	Reform Effort Characteristics of Teacher Leadership
Ryan, S. (1999). <i>Principals and teacher leading together</i> . Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec, Canada.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • What is the perceived impact of teacher leadership? • What conditions support or constrain teacher leadership
Research Design	<ul style="list-style-type: none"> • Qualitative • Interviews of 12 teacher leaders, 18 nominating teachers, and 3 principals
Main Findings	<ul style="list-style-type: none"> • Significant influence on the practices of colleagues as a resource regarding instruction, difficult students, and new programs • Student learning supported by influencing decisions about curriculum, professional development for staff, scheduling, and school and student policies • Conditions with the greatest influence on teacher leadership: school culture, decision making structures, principal
Keywords	Structures for Teacher Leadership Reform Effort
Silva, D. A., Gimbert, B., & Nolan, J. (2000). Sliding the doors: Locking and unlocking the possibilities for teacher leadership. <i>Teachers College Record</i> , 102, 779-804.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • What is teacher leadership from within the classroom? • How do leaders who lead predominantly from the classroom experience teacher leadership?
Research Design	<ul style="list-style-type: none"> • Qualitative • Case studies of three teacher leaders in a progressive school district
Main Findings	<ul style="list-style-type: none"> • Teacher leaders navigate structures of schools, nurture relationships, model professional growth, help others with change, and challenge the status quo for students • Barriers to teacher leadership: principals, valuing of structure over people, finding space and time to share knowledge
Keywords	Structures for Teacher Leadership Definitions
Smylie, M. A. (1992a). Teachers' reports of their interactions with teacher leaders	

concerning classroom instruction. <i>Elementary School Journal</i> , 93, 85-98.	
Literature Typology	Empirical
Research Questions	What factors influence the quantity and quality of interactions about classroom instruction between teachers and teacher leaders?
Research Design	<ul style="list-style-type: none"> • Quantitative • Surveys completed by 116 teachers (66% response) from seven schools
Main Findings	<ul style="list-style-type: none"> • Three variables were statistically significant in the interactions: extent to which advice implied obligation, extent of assumed professional equality among teachers, and opportunities available for interactions (advice implies obligation, strong beliefs, and few opportunities suggests less teacher less likely to interact with teacher leaders)
Keywords	Supporting Teacher Leadership
Smylie, M. A. (1992b). Teacher participation in school decision making: Assessing willingness to participate. <i>Educational Evaluation and Policy Analysis</i> , 14, 53-67.	
Literature Typology	Empirical
Research Questions	In the context of school decision making, what is the willingness of teachers to actually participate if given the opportunity?
Research Design	<ul style="list-style-type: none"> • Quantitative • Surveys completed by 116 teachers (60% response) from K-8 mid-western, suburban school district
Main Findings	<ul style="list-style-type: none"> • Teachers vary in their willingness to participate in decisions • Teacher-principal relationships have the greatest influence on willingness to participate
Keywords	Supporting Teacher Leadership Predictors of Teacher Leadership
Smylie, M. A., & Brownlee-Conyers, J. (1992). Teacher leaders and their principals: Exploring the development of new working relationships. <i>Educational Administration Quarterly</i> , 28, 150-184.	
Literature Typology	Empirical
Research Questions	What key factors are related to the development of relationships between teacher leaders and their principals from the perspectives of both?
Research Design	<ul style="list-style-type: none"> • Qualitative • Individual interviews with each partner of seven teacher leader-principal pairs
Main Findings	Six major factors in the relationship: ambiguities and uncertainties,

	interests and prerogatives, expectations, interpersonal obligations, strategic interactions, and key events or accomplishments
Keywords	Supporting Teacher Leadership
Smylie, M. A., & Denny, J. W. (1990). Teacher Leadership: Tensions and Ambiguities in Organizational Perspective. <i>Educational Administration Quarterly</i> , 26(3), 235-259.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • How did teacher leaders define and perform their new leadership roles? • What factors did teacher leaders believe influenced the performance and development of their roles? • How did other teachers perceive and respond to these leadership roles and their performance?
Research Design	<ul style="list-style-type: none"> • Qualitative and Quantitative • Interviews with 13 teacher leaders in their second year serving 7 K-8 schools • Surveys completed by 56 randomly selected peers (62% response)
Main Findings	<ul style="list-style-type: none"> • Discrepancy found between perceived primary role (providing support to peers) and actual role (meetings and administrative work) • Tensions existed between classroom and leadership responsibilities
Keywords	Supporting Teacher Leadership
Smylie, M. A., Lazarus, V., & Brownlee-Conyers, J. (1996). Instructional outcomes of school-based participative decision making. <i>Educational Evaluation and Policy Analysis</i> , 18, 181-198.	
Literature Typology	Empirical
Research Questions	What are the relationships among variations in the implementation of participative decision making, instructional improvement, and student learning over a 5 year period of time?
Research Design	<ul style="list-style-type: none"> • Quantitative • Longitudinal study • Reading and math test scores • Surveys completed by teachers biannually from seven K-8 schools in one district
Main Findings	<ul style="list-style-type: none"> • Where teacher participation was high: Teacher participation was frequent, regular, and inclusive; decision making was collaborative and consensus driven; focus included school mission, curriculum, instruction, and staff development; leadership and responsibility were shared between the principal and teachers. • Where teacher participation was low: Teacher participation was sporadic and non-inclusive; decisions were made by the majority and reflected prevailing point of view; the focus was on procedures and

	<p>management; leadership was mainly from the principal, teachers did not take much initiative or responsibility.</p> <ul style="list-style-type: none"> • The higher the participation, the greater the reports of instructional improvement and the more likely test score changes would be positive.
Keywords	Supporting Teacher Leadership
Snell, J., & Swanson, J. (2000). <i>The essential knowledge and skills of teacher leaders: A search for a conceptual framework</i> . Paper presented at the annual meeting of the American Education Research Association, New Orleans, LA.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • What knowledge, skills, and dispositions characterize teacher leaders who have come into prominence under standards-based reform? • What experiences contribute to the development of teacher leaders?
Research Design	<ul style="list-style-type: none"> • Qualitative • 2 year study of interviews, professional portfolio reviews of 10 middle school teacher leaders in urban schools
Main Findings	<ul style="list-style-type: none"> • Characteristics of teacher leaders: expertise, collaboration, reflection, and empowerment • Expertise was foundational in that it established credibility • Intensive and extensive high-quality professional development was perceived to have helped the development of the teacher leaders
Keywords	Professional Development Characteristics of Teacher Leadership
Stone, M., Horejs, J., & Lomas, A. (1997). <i>Commonalities and Differences in Teacher Leadership at the Elementary, Middle, and High School Levels</i> .	
Literature Typology	Empirical
Research Questions	What are the commonalities and differences in teacher leadership at the elementary, middle, and high school levels?
Research Design	<ul style="list-style-type: none"> • Qualitative and Quantitative • 18 teacher leaders (6 from each level) nominated by peers • Interviews of teacher leaders and other school staff, focus groups, journals, observations
Main Findings	<ul style="list-style-type: none"> • Teacher leaders assume leadership roles to accomplish meaningful work, to understand more fully the educational enterprise, to increase overall knowledge and skills, and to expand influence and participation in decision making. • Teacher leaders are constrained by time, power, and politics. • Teacher leaders can improve professional practice by encouraging collaboration and decision making and can assist school improvement efforts by raising teacher voices and views.

	<ul style="list-style-type: none"> Challenges were experienced owing to hierarchical structures in which teacher leaders were viewed by colleagues as both leaders and peers.
Keywords	Definitions Characteristics of Teacher Leadership Supporting Teacher Leadership Reform Efforts
Taylor, D. L., & Bogotch, I. E. (1994). School-level effects of teachers' participation in decision making. <i>Educational Evaluation and Policy Analysis</i> , 16, 302-319.	
Literature Typology	Empirical
Research Questions	What is the effect, if any, of teacher participation on outcomes for teachers and students?
Research Design	<ul style="list-style-type: none"> Quantitative Surveys completed by 637 teachers (39% response) in a large, urban diverse district
Main Findings	<ul style="list-style-type: none"> Teacher participation did not significantly improve teacher or student outcomes Teachers felt most involved in how and what to teach and least involved in testing policy, hiring, and budget issues
Keywords	Supporting Teacher Leadership Reform Efforts Definitions
Wasley, P. A. (1991). <i>Teachers who lead: The rhetoric of reform and the realities of practice</i> . New York: Teachers College Press.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> What is the nature of the work teacher leaders do? What are the constraints and supports? How do the teachers and their colleagues define and perceive the value (or not) of teacher leadership? How are they selected and evaluated? Do these roles promote experimentation and collegiality? Do they result in more powerful learning for students?
Research Design	<ul style="list-style-type: none"> Qualitative Three teacher leaders from different levels and parts of the country interviewed along with principals and selected colleagues
Main Findings	<ul style="list-style-type: none"> The following conditions must exist for teacher leadership to be successful: The work must be significant; the teacher leaders must not be "hit" people; the ground rules, incentives, and rewards must be clear; there must be support for local policy and professional associations; and teacher leaders must have good training.

	<ul style="list-style-type: none"> • Challenges included: administrative rather than instructionally focused tasks; lack of training, time, and security for leadership roles; sharing leadership in a hierarchical system; lack of incentives for teacher leaders and their colleagues; colleagues as nonparticipants in school reform efforts; and matching intentions with realities.
Keywords	Supporting Teacher Leadership Characteristics of Teacher Leadership Definitions
Weiss, C. H., Cambone, J., & Wyeth, A. (1992). Trouble in paradise: Teacher conflicts in shared decision making. <i>Educational Administration Quarterly</i> , 28, 350-367.	
Literature Typology	Empirical
Research Questions	What is the nature of face-to face interactions and confrontations with colleagues in the context of shared decision making?
Research Design	<ul style="list-style-type: none"> • Qualitative • Interviews with the principal and nine teachers in each of six high school which had implemented shared decision making
Main Findings	<ul style="list-style-type: none"> • Conflicts arose about who was able to participate and how the final decision was made • More attention needs to be given to changing school culture and preparation of teachers and administration • Most study participants would not want to go back to less shared decision making
Keywords	Supporting Teacher Leadership Reform Efforts Development of Teacher Leadership
Whitaker, T. (1995). Informal teacher leadership: The key to successful change in the middle level. <i>NASSP Bulletin</i> , 79(567), 76-81.	
Literature Typology	Empirical
Research Questions	What are the strategies used by middle school principals to cultivate teacher leadership in their schools?
Research Design	<ul style="list-style-type: none"> • Qualitative • Interviews with four effective and four ineffective principals identified by the Audit of Principal Effectiveness
Main Findings	<ul style="list-style-type: none"> • Effective principals cultivate teacher leadership: identify key informal teacher leaders who are successful and respected, involve teacher leaders in decision making, and use teacher leaders informally in school improvement and reform. • In the more effective schools, principals identified and used teacher leaders to a greater extent.
Keywords	Supporting Teacher Leadership

	Characteristics of Teacher Leadership Development of Teacher Leadership
White, P. A. (1992). Teacher empowerment under "ideal" school-site autonomy. <i>Educational Evaluation and Policy Analysis, 14</i> , 69-82.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • How do teachers respond to opportunities for more influence? • How do these opportunities affect their teaching, their work life, and their sense of efficacy?
Research Design	<ul style="list-style-type: none"> • Qualitative • Interviews of 30 teacher leaders at decentralized schools and additional school and central office administrators
Main Findings	<ul style="list-style-type: none"> • High amounts of teacher involvement in budget decisions (95%), curriculum decisions (90%), and staffing decisions (70%) • 92% satisfied with amount of influence they had • Constraints: lack of time, training, and funding • Teachers perceived increased morale, knowledge of school and district, teacher communication within and between schools, and student motivation
Keywords	Supporting Teacher Leadership Professional Development Definitions
Wilson, M. (1993). The search for teacher leaders. <i>Educational Leadership, 506(6)</i> , 24-27.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • Who are teacher leaders? • How do they think, feel, and behave? • How do they show leadership? • Do they have an impact on the system?
Research Design	<ul style="list-style-type: none"> • Qualitative • Interviews of 13 teacher leaders nominated by 400 high school colleagues
Main Findings	<ul style="list-style-type: none"> • Teacher leaders seek challenge and growth; support, coach, and encourage colleagues; and seek to persuade and influence colleagues rather than confront. • Common characteristics of teacher leaders: hardworking, innovative, creative, gregarious, and available. • Teacher leaders feel challenged by school cultures that do not support their leadership; risk taking, collaboration, and role modeling create tensions with colleagues.
Keywords	Definitions

	Characteristics of Teacher Leadership Supporting Teacher Leadership
Reason, C. S. & Reason, C. (2011). <i>Mirror images: New reflections on teacher leadership</i> . Thousand Oaks, CA: Corwin.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> • 10 types of modern teacher leadership roles: learning advocate, believer, transformationalist, synergizer, method master, fully invested owner, present balance keeper, servant, inquisitor, and detective • 6 current educational trends supported by teacher leadership: greater levels of complexity in the profession, continued focus on accountability and results, overwhelming trend toward personalization, embarking on the age of learning, influence of networks and open sourcing, and emerging learning needs of teachers who are digital natives
Keywords	Definitions Reform Effort
Reeves, D. B. (2008). <i>Reframing teacher leadership to improve your school</i> . Alexandria, VA: Association for Supervision and Curriculum Development.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> • How may teacher leadership improve schools?
Research Design	<ul style="list-style-type: none"> • Qualitative • Review of 81 research teams implementing school based research projects in 81 schools ranging from pre-k to high school in Clark County, Nevada (330,000 students) in urban, suburban, and rural settings
Main Findings	<ul style="list-style-type: none"> • Teachers exert significant influence on student performance, other teachers, and school leaders • Teachers were more likely to be influenced by the professional practices and action research of peers than journal articles and college coursework • Direct observation of the professional practices of teachers by teachers must become the new foundation for professional development models • New framework for teacher leadership: recognition of challenges, research, results, reflection, reinforcement, resilience, and rejection

	<ul style="list-style-type: none"> • Barriers to teacher leadership: blame (lack of efficacy), bureaucracy (hierarchical organizations lacking professional networks), and “baloney” (superstitions, prejudice, and deeply held convictions unsupported by evidence)
Keywords	Supporting Teacher Leadership Reform Effort
Crowther, F., Kaagan, S. S., Ferguson, M., & Hann, L. (2002). <i>Developing teacher leaders: How teacher leadership enhances school success</i> . Thousand Oaks, CA: Corwin Press.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> • 5 Core values for teacher professionalism: learning, participation, collaboration, cooperation, and activism • 4 Conditions for development of teacher leadership: public and professional acceptance of its existence, active support of principals and system administrators, nurturing of teacher leadership is greater development of teachers’ roles in school reform and revitalization, acknowledgement that teacher leadership produces positive school outcomes • Parallel leadership between principal and teacher leaders is important for building school capacity is based on mutual respect, shared purpose, and allowance for individual expression • Describes the role of the principal in successful school reform and 7 challenges for nurturing teacher leadership
Keywords	Supporting Teacher Leadership Developing Teacher Leadership Reform Effort Definition
Harris, A. & Muijs, D. (2005). <i>Improving schools through teacher leadership</i> . New York: Open University Press.	
Literature Typology	Conceptual (with multiple empirical studies cited)
Research Questions	
Research Design	
Main Findings	<p>Explores the concept of teacher leadership in the following dimensions</p> <ul style="list-style-type: none"> • Theoretical background of teacher leadership

	<ul style="list-style-type: none"> • Enhancing teacher leadership • Empirical support for teacher leadership • Future directions for teacher leadership
Keywords	Definitions Development of Teacher Leadership Supporting Teacher Leadership Reform Effort
Collay, M. (2011). <i>Everyday teacher leadership: Taking action where you are</i> . San Francisco: Jossey-Bass.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	This book examines teacher leadership through the lens of <ul style="list-style-type: none"> • Personal dimensions of leadership • Teaching as leading • Collaboration as leading • Inquiry as leading • Partnership development as leading
Keywords	Definitions Development of Teacher Leadership Supporting Teacher Leadership
Danielson, C. (2006). <i>Teacher Leadership that strengthens professional practice</i> . Alexandria, VA: Association for Supervision and Curriculum Development	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	This book examines teacher leadership through three areas of focus: <ul style="list-style-type: none"> • Definitions of teacher leadership through activities, roles, and culture • How teacher leadership is demonstrated through school-wide polices & programs, teaching & learning, and communications & community relations • Promoting and developing teacher leadership through cultural, structural, and specific skill sets
Keywords	Definitions Supporting Teacher Leadership Characteristics of Teacher Leadership

Ackerman, R., & Mackenzie, S. V. (2006). Uncovering teacher leadership. <i>Educational Leadership</i> , 63(8), 66-70.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> • Formal teacher leadership roles still exist, more teachers lead informally by revealing their classroom practice, sharing their expertise, asking questions of colleagues, mentoring new teachers, and modeling how teachers collaborate on issues of practice. • Principals nurture and support teacher leadership because they know how crucial it is to establish improvements in teaching and teaming at the classroom level. • Teacher leaders, empowered by their confidence in themselves and their colleagues, hold the key to improved learning and offer new contexts and alternatives for genuine school change. • Successful teacher leaders stay true to their beliefs, couple confidence with humility in their practice, and continually work with colleagues to improve student learning.
Keywords	Definitions Supporting Teacher Leadership Characteristics of Teacher Leaders Reform Effort
Anderson, K. D. (2004). The nature of teacher leadership in schools as reciprocal influences between teacher leaders and principals. <i>School Effectiveness and School Improvement</i> , 15(1), 97-113.	
Literature Typology	Empirical
Research Questions	Contribute to a better understanding of the nature of teacher leadership.
Research Design	Qualitative: 28 respondent interviews from 6 schools (teacher leaders, teachers nominated by peers as teacher leaders, and principal)
Main Findings	<ul style="list-style-type: none"> •Teacher leaders have influence on principals (Strongest theme with 100% agreement by principals) •Principals have influence over teacher leaders through modeling and setting priorities •3 models if models of influence between teacher leaders and principals:

	<p>The Buffered Model – teacher leaders surround and isolate the principal and act as foot soldiers carrying out directives</p> <p>The Interactive Model – Principal interacts with all staff and involves all staff in decision making opportunities</p> <p>The Contested Model – Teacher leaders try to take decision making control away from the principal</p> <ul style="list-style-type: none"> •Formal teacher leadership roles may impede other forms of teacher leadership
Keywords	Supporting Teacher Leadership Predictors of Teacher Leadership
Angelle, P. S., & DeHart, C. A. (2011). Teacher perceptions of teacher leadership: Examining differences by experience, degree, and position. <i>NASSP Bulletin</i> , 95(2), 141-160.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> •Are there differences in the extent and type of teacher leadership as perceived by teachers at the elementary, middle, and high school levels? •Are there differences in the extent and type of teacher leadership as perceived by teachers who hold different degree levels? •Are there differences in the extent and type of teacher leadership as perceived by teachers in leadership positions versus teachers who do not occupy leadership positions?
Research Design	Quantitative study of 43 schools in 7 states (online survey with 672 teacher respondents with varying educational levels, teaching level, and size of teaching area: urban, suburban, rural)
Main Findings	<ul style="list-style-type: none"> •The idea of a teacher leader is perceived differently by teachers according to their experience, their degree (which in this study was an indication of experience), and whether the teacher holds a leadership position at the school. •Principals cannot hold the expectation that teacher leaders will “step up” if they are interested in leadership. •An awareness of roles a teacher leader may play in the organization can inform teachers, regardless of their years of experience, of opportunities where practicing leadership may be provided. •Administrators can provide professional development and training to strengthen teacher skills in these areas.
Keywords	Characteristics of Teacher Leaders Professional Development
Berry, B., Daughtrey, A., & Wieder, A. (2010). Teacher leadership: Leading the way to effective teaching and learning. Retrieved from ERIC Document Reproduction Service (ED509719).	

Literature Typology	Empirical
Research Questions	To understand the role that participation in teacher leadership networks play in supporting and retaining effective teachers in high-needs urban schools.
Research Design	National survey of 1,210 teacher leaders followed up with 29 interviews of preK-12 grade teachers in all subject areas
Main Findings	<ul style="list-style-type: none"> •Teacher leadership is a critical component of effective teaching and school success. •Accomplished teachers tend to seek out leadership opportunities but require supports to fulfill their promise as leaders. •Expanding leadership roles and advancement opportunities for teachers may be an excellent and cost-effective strategy for retaining the most effective teachers. •Professional networks for teachers offer a means by which teacher leadership can be nurtured and expertise can be spread. •More research needs to be conducted into teacher leadership and how it can be cultivated under different contexts and demands.
Keywords	Supporting Teacher Leadership Reform Effort
Boykin, Z., Scrivner, J., & Robbins, S. (2004). The professional leadership development project: Building writing project and school-site teacher leadership in urban schools (Vol. 1). Berkeley, CA: National Writing Project.	
Literature Typology	Empirical
Research Questions	
Research Design	Qualitative (monograph of the National Writing Project)
Main Findings	<ul style="list-style-type: none"> •Teachers developed stronger learning communities which allowed the sharing of ideas and critical feedback on these ideas •Developed structures which helped teachers have more efficient meetings (learning self-assessment, critical feedback, active listening, group input)
Keywords	Development of Teacher Leadership
Brown, C. J., Fouts, J. T., & Rojan, A. (2001). Teacher leadership project 2001: evaluation report: Retrieved from http://proxying.lib.ncsu.edu/index.php?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED475748&site=ehost-live&scope=site .	
Literature Typology	Empirical
Research	•Are the teachers integrating and using the technology as intended?

Questions	<ul style="list-style-type: none"> •How have teachers' technical skills developed over the year? •What effect has the training have on teaching, the classroom and the school? •What percentage of the teachers can be categorized as "technology integrated?" •What leadership activities have the teachers performed during the year? •What is the appropriate use of technology for K-2 students?
Research Design	Qualitative (teacher journals, interviews, and observations) and Quantitative (Taking a Good Look at Instructional Technology online survey)
Main Findings	<ul style="list-style-type: none"> •Teacher leaders were viewed as experts by colleagues and were asked for help •Teacher leaders used their trainings to provide professional development to their colleagues through formal presentations and informal sharing (opening their classrooms for observations) •Teacher leaders' journals suggested personal and professional growth
Keywords	Definition Professional Development
DeMeulle, L. (1999). "More Than Having a Vision": The Emergence of Teacher Leadership in a PDS. <i>Research in the Schools</i> , 6(1), 1-18.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> •What PDS efforts encouraged and/or discouraged teachers to explicate and realize their shared visions? •What are the visions of the teachers in this PDS? •What process impacted the sharing of teachers' visions?
Research Design	Qualitative Ethnography of a large suburban elementary school in the mid-south with 1,500 students and 80 faculty
Main Findings	<ul style="list-style-type: none"> •Leadership activities: working on school improvement plan, weekly collaborative meetings with university mentor, graduate leadership course help at the school •Impacting of sharing visions depended on the presence of a structured dialogue, the activity level of committee implementing the project and trust levels between committee members •While all teachers need to be leaders in their classrooms, some were unable to articulate a vision outside of their classroom which would lead others
Keywords	Professional Development Development of Teacher Leadership

	Supporting Teacher Leadership
Doyle, M. (2000). <i>Making Meaning of Teacher Leadership in the Implementation of a Standards-Based Mathematics Curriculum</i> . Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> •How do teacher leaders support fellow classroom teachers in the implementation of TERC's mathematical curriculum, Investigations? •What different roles do teacher leaders play in supporting classroom teachers in implementing Investigations? •How do teacher leaders use the knowledge gained at district-wide professional development programs for in-house staff development meetings at their school?
Research Design	Qualitative Descriptive Case Study of 4 teacher leaders and their classroom teacher pairs (observations, interviews, and document analysis)
Main Findings	<ul style="list-style-type: none"> •Teacher leaders provided managerial support and provided communication link between teachers and district leaders •With additional grant support teacher leaders provided instructional and content knowledge support and developed mentoring relationships with other teachers
Keywords	Professional development Reform Effort Definitions
Fay, C. (1992). <i>The Case for Teacher Leadership: Towards Definition and Development</i> . Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.	
Literature Typology	Empirical
Research Questions	•What do practicing teachers think and experience in their new roles?
Research Design	Qualitative (Interviews of 5 teacher leaders)
Main Findings	<ul style="list-style-type: none"> •Distinctions exist between teacher leadership and administrative power •Positive collegial relationships are important •Leadership roles and teaching practices affect each other •Need for Leadership and training designed specifically for teachers •Fundamental changes are needed to the school day so teachers may use time differently
Keywords	Definitions Characteristics of Teacher Leaders

	Supporting Teacher Leadership
Fennell, H.A. (1999). <i>Encouraging Teacher Leadership</i> . Paper presented at the Annual Meeting of American Educational Research Association, Montreal, Quebec.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> •In what ways to teachers act as leaders in the six schools? •In what ways do principals encourage teachers to lead in their schools?
Research Design	Qualitative phenomenological study of six female principals of urban schools who encouraged the development teacher leadership at their schools (six in-depth interviews with each principal)
Main Findings	<ul style="list-style-type: none"> •Teachers were involved in leadership outside of the classroom through planning in collaborative groups and shared decision making •Teachers were heavily involved in consensus building activities for curriculum interpretation and implementation •Construction of learning communities with constant teamwork, rotating leadership roles, and articulation of a shared vision •Teacher leadership examples: mentoring other teachers, leading a committee, organizing an event (e.g. science fair). Shared decision making, development of school practices •Principal practices: creating time for teachers to plan collaboratively, professional development emphasis with collective involvement and shared decision making
Keywords	Development of Teacher Leadership Definitions Supporting Teacher Leadership
Fitzgerald, T., & Gunter, H. M. (2008). Contesting the orthodoxy of teacher leadership. <i>International Journal of Leadership in Education</i> , 11(4), 331-340.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	•Teacher leadership has been traditionally defined through policy as the assignment of formal roles in a hierarchal organizational structure. This perspective does not consider perhaps more academically important informal roles in a flat structure
Keywords	Definition Reform Effort
Frost, D., & Durrant, J. (2003). Teacher Leadership in a Culture of Change. <i>School Leadership & Management</i> , 23(2), 173-186.	
Literature	Conceptual

Typology	
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> •Promotes high levels of consistency of practice and coherence in values •Teacher engagement is crucial to long-term sustained school improvement efforts •Helps to increase teacher moral and retention •Promotes democratic values by engaging teachers in the governance process •Teacher leadership may be increased through: external support (vehicle for providing scaffolding, critical discourse, and networking) and internal support (transformational leadership practices)
Keywords	Supporting Teacher Leadership Reform Effort
Frost, D., & Harris, A. (2003). Teacher Leadership: Towards a Research Agenda. <i>Cambridge Journal of Education</i> , 33(3), 479-498.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> •Key factors in the analysis of teacher leadership: how the professional role of being a teacher is defined by the teacher and other teachers, the organizational environment of the school, the teacher’s personal capacity (authority, knowledge, situational understanding and interpersonal skills)
Keywords	Development of Teacher Leadership Characteristics of Teacher Leaders
Harris, A. (2003). Teacher Leadership as Distributed Leadership: Heresy, Fantasy or Possibility? <i>School Leadership & Management</i> , 23(3), 313-324.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> •Overlapping and competing definitions of teacher leadership in literature making it difficult to legitimize in the leadership field •Three facets to teacher leadership: leadership of students or other teachers, leadership of operational tasks, leadership through decision

	<p>making or partnerships</p> <ul style="list-style-type: none"> •Student achievement likely to improve when leadership is distributed and teachers are empowered in areas important to them •Structures for developing teacher leadership: time for collaborative planning and discussion, rich and diverse opportunities for professional development, increase in teachers’ self-confidence to act as leaders in their schools
Keywords	<p>Definitions Reform Effort Development of Teacher Leadership</p>
<p>Henning, J. E., Trent, V., Engelbrecht, D., Robinson, V., & Reed, G. A. (2004). Cultivating Teacher Leadership through a School and University Partnership. <i>Teacher Education and Practice, 17</i>(4).</p>	
Literature Typology	<p>Conceptual</p>
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> •Three waves of teacher leadership: administrative; instructional with formal roles; connected to daily practice of giving instruction, collaborating with other to improve instruction, and contributing to a better school culture by embracing more leadership opportunities •Job-embedded through inquiry at the school setting •Collaboration opportunities with university faculty, school teams, and participants from across the district •Inquiry based where participants engaged in school improvement activities (assess student learning, engage in professional development, implement and evaluate instructional practices) •Standards based professional development model using five models
Keywords	<p>Definitions Professional Development Reform Effort Supporting Teacher Leadership</p>
<p>Hickey, W. D., & Harris, S. (2005). Improved professional development through teacher leadership. <i>Rural Educator, 26</i>(2), 12-16.</p>	
Literature Typology	<p>Empirical</p>
Research Questions	<p>Can a district’s exemplary teachers teach formal professional development modules normally taught by non-district experts be an effective model for professional development?</p>

Research Design	Quantitative conducted in a small rural district of 720 students and 62 teachers K-12. Data was conducted through surveys
Main Findings	<ul style="list-style-type: none"> •Participants had generally positive experiences with the professional development •Participants enjoyed seeing their peers present the modules •Teacher togetherness and collaboration received the highest ratings •Recommendations to encourage the growth of teachers as leaders: <ol style="list-style-type: none"> 1. Identify teacher strengths; 2. Match teacher strengths to professional development needs; 3. Develop professional development programs with these strengths and needs in mind; 4. Provide teachers with time to prepare for their presentation; 5. Provide opportunities for informal presentations to reduce anxiety and stress of presenting; and 6. Provide time throughout the year to take advantage of collaborative opportunities.
Keywords	Professional Development Supporting Teacher Leadership Development of Teacher Leadership Reform Effort
Howey, K. R. (1988). Why Teacher Leadership? <i>Journal of Teacher Education</i> , 39(1), 28-31.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> •New forms of leadership are required with increased demands placed on schools •Teachers must assume leadership positions which will enable them to model methods of teaching, coach and mentor colleagues, study critically and thoughtfully various aspects of classroom life, develop curriculum and instructional materials, and strengthen relationships between the school and home.
Keywords	Definitions Reform Effort
Leadership for student learning: Redefining the teacher as leader. (2001). Washington D. C.: Institute for Educational Leadership.	
Literature Typology	Conceptual
Research	

Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> •Schools are not organized for teacher leadership •Need for more training in professionalism and leadership •Steps for increasing teacher leadership: recruit quality teachers, support quality teachers, ensure leadership opportunities for teachers, evaluate and recognize quality teachers, ensure community support for quality teachers and teacher leaders
Keywords	Development of Teacher Leadership Supporting Teacher Leadership
Teacher leadership in high schools: How principals encourage it how teachers practice it. (2008). Washington, DC: Institute for Educational Leadership	
Literature Typology	Empirical
Research Questions	
Research Design	Quantitative national survey of high school principals followed by qualitative interviews of 76 principals at schools with established teacher leadership
Main Findings	<ul style="list-style-type: none"> •Teacher leadership plays a major role in the professional culture of schools •Principals believe in collaboration and try to foster an environment in which teachers can lead. •Though not necessarily about power, teacher leadership is about shared influence. Teacher leadership requires teachers to have access to and an impact on decision making structures. •Principals in these schools generally provide the conditions in which teacher leadership can emerge and that teachers are making extraordinary efforts to be active participants in the leadership of their school. <p>School culture & context</p> <ul style="list-style-type: none"> • School-wide focus on learning, inquiry and reflective process • Encouragement for taking initiative • An expectation of teamwork and shared responsibility, decision making, and leadership • Teaching professionals valued as role models • A strong sense of community among teachers that fosters professionalism <p>Roles & responsibilities</p> <ul style="list-style-type: none"> • Colleagues recognize and respect teacher leaders who have subject-area and instructional expertise • High trust and positive working relationships exist both among

	<p>teacher peers and with administrators</p> <ul style="list-style-type: none"> • Teacher leadership work central to the teaching and learning processes (as opposed to administrative or managerial tasks) is routinely assigned • Interpersonal relationships between teacher leaders and the principal flourish <p>Structures</p> <ul style="list-style-type: none"> • Provision of adequate access to materials, time, and space for activities that facilitate teacher leadership (ex., professional development)
Keywords	<p>Supporting Teacher Leadership Developing Teacher Leadership</p>
<p>Jackson, T., Burrus, J., Bassett, K., & Roberts, R. D. (2010). Teacher leadership: An assessment framework for an emerging area of professional practice. Retrieved from ERIC Document Reproduction Service (ED523742).</p>	
Literature Typology	<p>Conceptual</p>
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> •Key roles: coaching and learning team facilitators •Personal skills of teacher leaders: work ethic, teamwork, leadership, openness, vision, positive affect, risk taking, teach related skills •Principals must actively support teacher leaders, honor their accomplishments, and promote development of them •Quality assessments of teacher leadership cannot be developed until greater clarity is made regarding the definition of teacher leadership
Keywords	<p>Characteristics of Teacher Leaders Development of Teacher Leadership Supporting Teacher Leadership Definitions</p>
<p>Krisko, M. E. (2001). <i>Teacher Leadership: A Profile To Identify the Potential</i>. Paper presented at the Biennial Convocation of Kappa Delta Pi, Orlando, Fl.</p>	
Literature Typology	<p>Empirical</p>
Research Questions	<ul style="list-style-type: none"> •Develop a profile of teacher leaders •Show that teachers identifying with this profile have the potential to be leaders and change agents in shifting a school to a professional learning community
Research Design	<p>Qualitative were respondents were interviewed and asked to identify descriptors of effective teacher leaders working beyond the classroom</p>

Main Findings	<p>Attributes of Potential Teacher Leaders</p> <ul style="list-style-type: none"> •Intrapersonal Sense- keen awareness of personal strengths, weaknesses and goals •Interpersonal Skills- develop collegial relationships and have the capacity to communicate, understand, and interact with others •Finds Humor- perseverance through problems •Takes Risks- unconventional and are willing to test new ideas •Creative- highly motivated and look for alternatives to barriers •Flexible- open to learning and adjusting to change •Efficacious/Effective- reflective listeners •Lifelong Learner- visualize, take and apply meaning to the situation
Keywords	<p>Characteristics of Teacher Leaders Predictors of Teacher Leadership</p>
<p>Lambert, L. (2003). Leadership redefined: An evocative context for teacher leadership. <i>School Leadership & Management</i>, 23(4), 421-430.</p>	
Literature Typology	<p>Conceptual</p>
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> •Constructivist Leadership Assumptions: <ol style="list-style-type: none"> (1) Leadership may be understood as reciprocal, purposeful learning in community. (2) Everyone has the right, responsibility and capability to be a leader. (3) The adult learning environment in the school and district is the most critical factor in evoking leadership identities and actions. (4) Within that environment, opportunities for skillful participation top the list of priorities. (5) How we define leadership frames how people will participate. (6) Educators are purposeful—leading realizes purpose. •Leadership capacity suggests several goals: <ol style="list-style-type: none"> (1) Development of all adults within the school community (teachers, staff, parents, community members) as reflective, skillful leaders. (2) Achievement of steady and lasting improvement in student performance and development. (3) Construction of schools and districts that are sustainable organizations. •Actions for developing leadership: mentoring, networking, integration into the school community, beginning teacher support
Keywords	<p>Definitions Development of Teacher Leadership</p>

	Supporting Teacher Leadership
Lashway, L. (1998). Teacher Leadership. <i>Research Roundup</i> , 14(3), 1-4.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> •School administrators must move away from a hierarchal governance structure and develop team-building, conflict resolution, groups process and collaboration skills •Teacher leaders focused on teaching in learning can transforms schools and be developed through personal assessment, a supportive school environment, diverse strategies for influencing others, and planning for action •Teacher Leaders may experience stress with increased leadership duties while maintaining classroom teaching responsibilities (limited time) •Teacher leaders need support from within and outside of the school to overcome leadership barriers; verbal support is not enough and concrete actions by the principal are often required •Effective shared teacher / principal leadership must move away from promoting personal agendas to symbiosis and focus on the tasks to be accomplished
Keywords	Supporting Teacher Leadership Developing Teacher Leadership
Lieberman, J. M. (2002). <i>Promoting teacher leadership in urban schools</i> . Paper presented at the Annual Meeting of the American Association of Colleges for Teacher Education, New York.	
Literature Typology	Empirical
Research Questions	How can teacher educators provide teachers with the opportunities to acquire the knowledge and skills required to take on increasing types of leadership roles?
Research Design	Quantitative and Qualitative Program Evaluation: selection, retention, and graduation rates; determine fidelity of implementation; document participants' affect in reform efforts; record teachers initiating and successfully complete National Board for Professional Teaching Standards Certification Process; course evaluations; and rate program participants for mentoring roles
Main Findings	•Teacher education programs should align themselves with NBPTS

	as this is a common benchmark for accomplished teaching
Keywords	Development of Teacher Leadership
Little, J. W. (2003). Constructions of Teacher Leadership in Three Periods of Policy and Reform Activism. <i>School Leadership & Management</i> , 23(4), 401-419.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	<ul style="list-style-type: none"> •Teacher leadership definitions vary based shifts in the policy and reform goals of the time •Formal teacher leadership roles are often tied to policies teachers have little control over or are divided about •Teacher leadership should be framed by teacher learning, teacher commitment, and school reform
Keywords	Definitions Reform Effort
Lynch, M., & Strodl, P. (1991). <i>Teacher Leadership: Preliminary Development of a Questionnaire</i> . Paper presented at the Conference of the Eastern Educational Research Association, Boston, MA.	
Literature Typology	Empirical
Research Questions	What teacher roles translate into leadership skills?
Research Design	Q-Sort of 56 professional educators
Main Findings	<p>Six factors associated with teacher roles which reflect leadership skills</p> <ul style="list-style-type: none"> •Emergent leadership- representing others while making decisions with administration •Teacher authority- assertiveness of teacher in promoting teachers' point of view •Empowerment of others- supporting other teachers, encouraging students to take more ownership, serving on committees •Student relationships- positive relationship building for student success •Task participation- engaging others in the main school activities •Instructional openness- involving students in curriculum planning and implementation
Keywords	Characteristics of Teacher Leadership Developing Teacher Leadership
Mangin, M. M. (2007). Facilitating elementary principals' support for instructional teacher	

leadership. <i>Educational Administration Quarterly</i> , 43(3), 319-357.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> •How do principals' knowledge of teacher leadership and their interaction with teacher leaders contribute to principals' support for teacher leadership? • How might district communication structures influence principal support?
Research Design	Qualitative interviews with 15 principals, 12 math teacher leaders, and six supervisors focused on the nature and scope of the teacher leader's work and the role of the principal and/or supervisor with regard to the teacher leader.
Main Findings	<ul style="list-style-type: none"> •Evidence of a link between principals' knowledge of the position, their interaction with teacher leaders, and their support for teacher leadership. •Districts can influence principals' level of support for teacher leaders by increasing communication about the role. •Districts should build principals' knowledge of teacher leadership and foster principal-teacher leader interaction as a way to promote support.
Keywords	Supporting Teacher Leadership
Middlebrooks, G. H. (2004). Professionalism and Teacher Leadership Preparation. <i>Teacher Education and Practice</i> , 17(4), 432-450.	
Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> •Do teachers demonstrate leadership in the educational environment? •How are leaders prepared?
Research Design	Mixed method design of interviews, observation, and statistical analysis of 43 secondary schools in New York and Atlanta
Main Findings	<ul style="list-style-type: none"> •87% of administrators, 100% of teachers, and 54% of students defined teacher leadership roles as managers, decision makers, role models, change agents, and advocates •Teacher preparation programs which include leadership development, content knowledge, pedagogical skills, and dispositions prepare candidates for leadership roles
Keywords	Development of Teacher Leadership Definitions Professional Development
Moller, G., Childs-Bowen, D., & Scrivner, J. (2001). <i>Teachers of the Year Speak Out: Tapping into Teacher Leadership. A SERVE Special Report: Southeastern Regional Vision for Education.</i>	

Literature Typology	Empirical
Research Questions	<ul style="list-style-type: none"> •Why promote teacher leadership? •How do I know teacher leadership when I see it? •What would a school look like with a critical mass of teacher leaders? •What do teacher leaders need? •Who is responsible for promoting teacher leadership?
Research Design	Qualitative: past and present teachers of the year from Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina compared their experiences with current teacher leadership literature
Main Findings	<ul style="list-style-type: none"> •As educational experts, teachers can help make decisions for affecting educational change •Function as leaders when act to improve student learning, contribute to school improvement, inspire excellence in professional practice, and empower stakeholders to participate in the educational environment •Healthy school culture, professional development oriented to student learning, shared decision making by many, and students acting as leaders •Formal and informal networks, leadership development opportunities, and time to practice and reflect upon leadership •University programs, principals, school districts, policy makers, and teachers
Keywords	Definitions Reform Effort Supporting Teacher Leadership Professional Development Development of Teacher Leadership
Katzenmeyer, M. H., & Moller, G. V. (2001). <i>Awakening the Sleeping Giant. Helping Teachers Develop as Leaders</i> (2nd ed.). Thousand Oaks, CA: Corwin.	
Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	Teacher leadership has three main facets: <ul style="list-style-type: none"> • leadership of students or other teachers: facilitator, coach, mentor, trainer, curriculum specialist, creating new approaches, leading study groups; • leadership of operational tasks: keeping the school organized and moving towards its goals, through roles such as head of department,

	<p>action researcher, member of task forces;</p> <ul style="list-style-type: none"> • leadership through decision making or partnership: membership of school improvement teams, membership of committees; instigator of partnerships with business, higher education institutions, LEAs, and parent-teacher associations.
Keywords	Definitions
<p>Muijs, D., & Harris, A. (2007). Teacher leadership in (in)action: Three case studies of contrasting schools. <i>Educational Management Administration & Leadership</i>, 35(1), 111-134.</p>	
Literature Typology	Empirical
Research Questions	What are the distinguishing factors for developing and supporting teacher leadership?
Research Design	Qualitative case study of three schools with differing levels of teacher leadership
Main Findings	<ul style="list-style-type: none"> •Teacher leadership requires active steps to be taken to constitute leadership teams and provide teachers with leadership roles. A culture of trust and collaboration is essential, as is a shared vision of where the school needs to go, clear line management structures and strong leadership development programs.
Keywords	Supporting Teacher Leadership
<p>Mackiewicz-Wolfe, Z. (2013). <i>The relationships between teacher practice and teacher leadership skills in second stage teachers</i>. (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.</p>	
Literature Typology	Dissertation
Research Questions	<ul style="list-style-type: none"> •What skills and types of knowledge related to teaching practice and teacher leadership do teachers feel they possess as second stage teachers? •What skills and types of knowledge do second stage teachers identify as important for teacher practice and teacher leadership? •What are the relationships between teachers' confidence in their skills and types of knowledge needed for teacher practice and those that are needed for teacher leadership? •To what extent is engagement in different leadership activities associated with confidence in teacher practice and teacher leadership skills?
Research Design	Mixed Method of survey questionnaire and interviews of individual teachers
Main Findings	<ul style="list-style-type: none"> •Teachers see a strong connection between the skills and types of

	<p>knowledge required for excellent teacher practice and what is needed to engage in teacher leadership</p> <ul style="list-style-type: none"> •Teacher leadership revolves primarily around a focus on instruction and learning, with teachers making parallels between teacher leadership and teaching in their classroom. •The following skills were generally important and related to both teacher practice and teacher leadership: the importance of being able to build relationships, the importance of communication skills, having a positive affective disposition, and developing a greater awareness of teaching beyond their classroom or own school.
Keywords	<p>Characteristics of Teacher Leadership Supporting Teacher Leadership Developing Teacher leadership</p>
<p>Quigley, C. (2011). <i>Instructional teacher leadership roles in New York City public elementary schools: Theory into practice</i>. (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.</p>	
Literature Typology	Dissertation
Research Questions	How public elementary school principals in New York City implemented and evaluated the effectiveness of instructional teacher leadership roles in building teacher instructional capacity and improving student achievement?
Research Design	Qualitative: four case studies of four elementary schools in New York City using interviews of principals and teachers in leadership roles
Main Findings	<ul style="list-style-type: none"> •The four school principals identified their budgets and the needs and goals of the schools as determining factors in implementing instructional teacher leadership roles. •All four school principals reported that collaborative team work was important in developing instructional teacher leadership in their schools. •The school principals and instructional teacher leaders found that implementation processes were not consistently employed and evaluative measures often lacked formal structures, protocols, or processes. •These findings highlight the need to determine effective implementation and evaluation processes for instructional teacher leadership roles, given their expense in human and fiscal capital.
Keywords	<p>Supporting Teacher Leadership Development of Teacher Leadership</p>
<p>Stoops, B. (2011). <i>Teacher leadership as meaningful school reform: A snapshot of</i></p>	

<i>contemporary teacher leadership</i> . (Doctoral Dissertation). ProQuest Dissertations & Theses Full Text database.	
Literature Typology	Dissertation
Research Questions	<ul style="list-style-type: none"> •To identify and describe the teacher leadership skills that teachers perceive as most important in teacher-led schools. •To identify and describe organizational frameworks teachers perceive as supportive of teacher-led schools. •To identify and describe the personal and professional benefits of teacher leadership as perceived by teachers, and to identify and describe the barriers to the implementation of teacher-led schools.
Research Design	Mixed-methods study using a short survey instrument in which 32 teachers working in California schools subjects ranked the leadership skills most important to teacher leaders and answered 4 open-ended interview questions.
Main Findings	<ul style="list-style-type: none"> •The leadership skill perceived by the subjects as most important to teacher leaders is maintaining professional relationships. •Organizational frameworks, such as small grade-level teams, are perceived as most important to the implementation of teacher-led schools. •The perceived benefit of working in a teacher-led school is increased feelings of ownership. •The perceived barriers to the implementation of teacher-led schools are time and other teachers.
Keywords	Characteristics of Teacher Leadership Developing Teacher Leadership Supporting Teacher Leadership
Sanocki, S. J. (2013). <i>The process of how teachers become teacher leaders and how leadership becomes distributed within a school: A grounded theory research study</i> . (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.	
Literature Typology	Dissertation
Research Questions	To explore the characteristics and attributes of teacher leaders
Research Design	Qualitative: grounded theory study of eight teacher leaders in a mid-western state through interviews and email correspondences
Main Findings	<ul style="list-style-type: none"> •Teacher leaders are classroom teachers first, who are primarily focused on positively impacting students •Teacher leaders are introspective about their roles •Teacher leaders overcome their fears •Teacher leaders successfully navigate egalitarianism, seniority, and

	<p>administrative gate keeping on their path to action and agency</p> <ul style="list-style-type: none"> •Teacher leaders positively build, maintain, function and communicate in a learning community •Teacher leaders engage themselves and others in positive change within the school.
Keywords	Characteristics of Teacher Leadership
Ault, C. R. (2009). <i>A case study of leadership characteristics of teacher leaders in an urban literacy program</i> . (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.	
Literature Typology	Dissertation
Research Questions	To determine the perceived important leadership characteristics of seven teacher leaders serving as literacy specialists in a Reading First initiative in a Midwestern urban district.
Research Design	Qualitative: a self-survey instrument and focus group interview to gather the reflections of the teacher leaders on their perceptions of important leadership characteristics for their current roles. Peer teachers and administrators reported their observations through use of a separate survey.
Main Findings	<ul style="list-style-type: none"> •Consideration--building personal relationships •Tolerance and Freedom--sharing the leadership and decision making •Initiation of Structure--accepting the leadership challenge and holding peer teachers to high standards •Demand Reconciliation--dealing with conflicting demands.
Keywords	Characteristics of Teacher Leadership
Boyd, K. A. (2011). <i>High school principals' perceptions of teacher leadership</i> . (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.	
Literature Typology	Dissertation
Research Questions	To investigate high school principals' perceptions of teacher leadership, namely how they define "teacher leadership," how they facilitate it, and how they sustain existing teacher leadership structures to meet school goals.
Research Design	Qualitative: interviews of high school principals
Main Findings	<ul style="list-style-type: none"> •Principals tended to define teacher leadership through ideal qualities, and also through examples such as tasks, roles, and opportunities. •Principals facilitated teacher leadership through a highly collegial culture on campus, modeling leadership, and providing opportunities for teacher leadership despite certain obstacles. •Principals sustained teacher leadership through building capacity,

	cultivating a sense of shared vision, and organizational structures. •Principals reported their past experiences as teacher leaders influenced their development and approach as leaders.
Keywords	Definitions Supporting Teacher Leadership
Bonduris, J. (2011). <i>Who's leading now: A case study of teacher leadership</i> . (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.	
Literature Typology	Dissertation
Research Questions	to closely examine the teacher leadership phenomenon of one particular school site
Research Design	Qualitative: case study of one school with high amounts of teacher leadership activities; interviews of four teachers and the principal
Main Findings	•Teachers collaborated in both structured and unstructured ways •Important for administrative support from the principal and other organizational structures. •A positive climate and efficiently run school site was found.
Keywords	Definitions Supporting Teacher Leadership
Huth, M. D. (2002). <i>Teacher perspectives on teacher leadership</i> . (Doctoral dissertation). ProQuest Dissertations & Theses Full Text database.	
Literature Typology	Dissertation
Research Questions	•To develop a perspective on teacher leadership based on the teachers' understanding, creation and practice of leadership •To illuminate the effects of the cultures of their profession, their community, and the educational context in which they worked on their ability and willingness to be teacher leaders.
Research Design	Qualitative: nine classroom teachers and four administrator interviews
Main Findings	•Teachers defined teacher leadership primarily as "stepping out," which begins with interest in a subject and commitment to learning that subject, continues through the learning process, and culminates in the sharing of knowledge with colleagues. •Teacher leadership is being collegial, non-conflictual, non-hierarchical, collaborative, and open. •Lead by quiet example, in response to a perceived need, and through sharing and helping their colleagues.
Keywords	Characteristics of Teacher Leadership Definitions
Little, J. W. (1999). Organizing schools for teacher learning. In L. Darling-Hammond & G. Sykes (Eds.), <i>Teaching as the learning profession</i> . San Francisco: Jossey-Bass.	

Literature Typology	Conceptual
Research Questions	
Research Design	
Main Findings	<p>5 ways to support teacher learning:</p> <ul style="list-style-type: none"> •Emphasize teachers' individual and collective responsibility for student achievement and well being, and make inquiry into student learning a cornerstone of professional development •Organize time, teaching responsibilities, and other aspects of teachers' work in ways that demonstrably enhance opportunities for teacher learning, both inside and outside the school •Employ staff development resources in ways that increase teachers' ability to make well-informed use of ideas, materials, and colleagues •Conduct staff evaluation and program or school reviews in a manner consistent with teacher learning •Embrace an ethos genuinely conducive to teacher development <p>•Teacher learning arises out of involvement with students and their work, shared responsibility for student progress, sensibly organized time and space, access to expertise inside and outside of school, focused and timely feedback on one's own work – this is at odds with the organization with ordinary school</p>
Keywords	Professional Development Reform Efforts Developing Teacher Leadership
Lieberman, A., & Grolnick, M. (1999). Networks and reform in education. In L. Darling-Hammond & G. Sykes (Eds.), <i>Teaching as the learning profession</i> . San Francisco: Jossey-Bass.	
Literature Typology	Conceptual / Empirical
Research Questions	<p>How do networks evolve and take shape? How do they build commitment and common purposes? Who leads these networks? What is the nature of their work and their learning? What activities bind people together in these networks? How are they organized? What tensions and dilemmas do they face in the process of developing and sustaining these entities?</p>
Research Design	Qualitative (Interviews, Document Analysis)
Main Findings	5 key ingredients for networks

	<ul style="list-style-type: none"> •A strong sense of commitment to the innovation •A sense of shared purpose •A mixture of information sharing and psychological support •An effective facilitator •Voluntary participation and equal treatment <p>Common organizational themes</p> <ul style="list-style-type: none"> •Purposes and directions where initial goals left room for further learning, teaching, shaping, and inventing •Building collaboration, consensus, and commitment- derive great power and energy where members have a voice in creating and sustaining a group where their professional identity and values are valued •Activities and relationships as important building blocks- provide an opportunity for the exchange of ideas which may be adapted to individual environments •Leadership-cross-categorical brokering, facilitating, and keeping values visible- backstage and onstage work in the development of collaborative arrangements and activities which help stimulate the network and move it forward •Dealing with the funding problem- often contributes to how the network is constructed and operates
Keywords	Development of Teacher Leadership Supporting Teacher Leadership
<p>Parker, A. (1977). <i>Networks for innovation and problem solving and their use for improving education: A comparative overview</i>. National Institute of Education, School Capacity for Problem Solving. Washington, D.C.</p>	
Literature Typology	Empirical
Research Questions	What are the key factors in networks organized for school improvement?
Research Design	
Main Findings	<p>5 key ingredients for networks</p> <ul style="list-style-type: none"> •A strong sense of commitment to the innovation •A sense of shared purpose •A mixture of information sharing and psychological support •An effective facilitator •Voluntary participation and equal treatment
Keywords	Networks

Appendix D: Concourse Theory Statements

No.	Statement	Source	Theme
1	Teacher leadership is having a titled position in a school's organizational structure	Fitzgerald & Gunter, 2008 Interviews 3, 9	Formality of Role
2	Teacher leadership is being a mentor to another teacher	Gonzales & Lambert, 2001 Helterbran, 2010 Darling-Hammond, Bullmaster, & Cobb, 1995 Katzenmeyer & Moller, 2001	Providing Support
3	Teacher leadership is about developing curriculum	Darling-Hammond, Bullmaster, & Cobb, 1995 Katzenmeyer & Moller, 2001	Instruction
4	Teacher leadership is being a change agent	Darling-Hammond, Bullmaster, & Cobb, 1995 Gonzales & Lambert, 2001 Danielson, 2006	Improvement Efforts
5	Teacher leadership is having expertise in subject matter and pedagogy	Gonzales & Lambert, 2001 Pounder, 2006 Lieberman, Saxl, & Miles, 1988 Katzenmeyer & Moller, 2001 Interviews 7, 8, 14	Teacher Leader Characteristics
6	Teacher leadership occurs outside of teaching responsibilities	Helterbran, 2010 Little, 2003	Setting
7	Teacher leadership is communication between teachers and district leaders	Doyle, 2000	Targeted Actions
8	Teacher leadership is leading improvements without a holding leadership position	Reeves, 2008 Pounder, 2006 Interview 11	Formality of Role Improvement Efforts

(continued)

No.	Statement	Source	Theme
9	Teacher leadership is having a high work ethic	Jackson et al., 2010	Teacher Leader Characteristics
11	Teacher leadership is being open to new ideas and approaches	Jackson et al., 2010 Lynch & Strodl, 1991 Katzenmeyer & Moller, 2001	Teacher Leader Characteristics
12	Teacher leadership means being a team player	Jackson et al., 2010 Interview 9	Teacher Leader Characteristics
13	Teacher leadership is providing professional development	Brown, Fouts, & Rojan, 2001 Harrison & Killion, 2007 Hickey & Harris, 2005 Interviews 2, 3, 4, 5, 9	Providing Support
14	Teacher leadership is being able to navigate school structures	Silva, Gimbert, & Nolan, 2000	Teacher Leader Characteristics
15	Teacher leadership is the ability to develop positive relationships.	Silva, Gimbert, & Nolan, 2000 Ault, 2009 Stoops, 2011	Teacher Leader Characteristics
16	Teacher leadership is being able to lead others to make changes	Acker-Hocevar & Touchton, 1999 Danielson, 2006 Interview 14	Improvement Efforts
17	Teacher leadership is participating in school-wide decisions	York-Barr & Duke, 2004 Childs-Bowen & Scrivner, 2001 Ault, 2009 Katzenmeyer & Moller, 2001 Anderson, 2004 Interviews 1, 6	Decision Making
18	Teacher leadership is good classroom management	Ryan, 1999 Interviews 2, 10, 14	Teacher Leader Characteristics

(continued)

No.	Statement	Source	Theme
19	Teacher leadership is important for professional learning communities	Fennell, 1999 Danielson, 2006 Ackerman & Mackenzie, 2006 Boykin, Scrivner, & Robbins, 2004	Outcomes
20	Teacher leadership is about forming collaborative school cultures	Moller, 2006 Silva, Gimbert, & Nolan, 2000 Teacher Leader Model Standards, 2012 Interviews 9, 13	Targeted Actions
21	Teacher leadership is about improving teacher retention	Pounder, Ogawa, & Adams, 1995	Outcomes
22	Teacher leadership is organizing others around a particular issue	Lieberman & Grolnick, 1999 Ault, 2009 Danielson, 2006 Interview 13	Improvement Efforts
23	Teacher leadership is being a grade or department chair	Gonzales & Lambert, 2001 Helterbran, 2010 Katzenmeyer & Moller, 2001	Formality of Role
24	Teacher leadership is being on the school leadership team	Gonzales & Lambert, 2001 Katzenmeyer & Moller, 2001	Formality of Role
25	Teacher leadership is helping to implement decisions made by others	Pounder, 2006 Anderson, 2004	Decision Making
26	Teacher leadership is having a broader perspective and understanding the impact of decisions	Acker-Hocevar & Touchton, 1999	Teacher Leader Characteristics

(continued)

No.	Statement	Source	Theme
27	Teacher leadership is participating in budget decisions	White, 1992	Decision Making
28	Teacher leadership is participating in curriculum decisions	White, 1992 Gates & Siskin, 2001	Decision Making
29	Teacher leadership is participating in staffing decisions	White, 1992	Decision Making
30	Teacher leadership positions are appointed by the principal	Helterbran, 2010	Selection
31	Teacher leadership positions are appointed by peers	Helterbran, 2010	Selection
32	Teacher leadership positions are self-appointed by teachers	Helterbran, 2010	Selection
33	Teacher leadership is having excellent interpersonal skills	Lieberman, Saxl, & Miles, 1988 Krisko, 2001	Teacher Leader Characteristics
34	Significant teaching experience is required for teacher leadership	Lieberman, Saxl, & Miles, 1988	Teacher Leader Characteristics
35	Teacher leadership is promoting and sustaining a vision for change	Heller & Firestone, 1995 Danielson, 2006	Improvement Efforts
36	Teacher leadership is challenging the status quo for better student learning outcomes	Collay, 2011 Silva, Gimbert, & Nolan, 2000	Instruction
37	Teacher leadership is using data as the basis for decision making	Danielson, 2006 Teacher Leader Model Standards, 2012 Interview 13	Decision Making

(continued)

No.	Statement	Source	Theme
38	Teacher leadership is conducting action research	Katzenmeyer & Moller, 2001 Teacher Leader Model Standards, 2012	Targeted Actions
39	Teacher leadership needs to be supported by the principal	Weiner, 2011 Acker-Hocevar & Touchton, 1999 Wells et al., 2010	Principal's Role
40	Teacher leadership is having shared responsibility with the principal for decision making	Dauksas & White, 2010 Interviews 1, 6	Decision Making
41	Teacher leadership is improving student achievement	Harris, 2003 Teacher Leader Model Standards, 2012	Instruction
42	Teacher leadership is improving instructional practice	Crowther et al., 2002	Instruction
43	Teacher leadership is collaborating with the principal	Brooks et al., 2004	Principal's Role
44	Teacher leadership is building sustainable school organizations	Lynch & Strodl, 1991	Targeted Actions
45	Teacher leadership is making instructional decisions	Leithwood & Duke, 1999	Decision Making
46	Teacher leadership takes place in teachers' own classrooms	Mackiewicz-Wolfe, 2013 Ross et al., 2011 Riel & Becker, 2008	Setting
47	Teacher leadership shifts responsibility for student learning from individual to communal responsibility	Ross et al., 2011	Outcomes

(continued)

No.	Statement	Source	Theme
48	Teacher leadership is being motivated to keep learning	Dauksas & White, 2010 Interviews 2, 3, 4, 5, 8, 9	Teacher Leader Characteristics
49	Teacher leadership is being an exemplary teacher	Pounder, 2006	Teacher Leader Characteristics
50	Teacher leadership is providing outreach and collaboration with families and the community	Teacher Leader Model Standards, 2012	Targeted Actions
51	Teacher leadership is advocating for educational policy improvements	Teacher Leader Model Standards, 2012	Targeted Actions
52	Teacher leadership takes place outside the classroom at the school level	Riel & Becker, 2008	Setting
52	Teacher leadership takes place outside the classroom at the school level	Riel & Becker, 2008	Setting
53	Teacher leadership takes place outside of the school building in the community and profession	Riel & Becker, 2008	Setting
54	Teacher leadership is being a role model for others	Gonzales & Lambert, 2001 York-Barr & Duke, 2004 Interviews 7, 8	Teacher Leader Characteristics
55	Teacher leadership is career advancement through career ladders	Angelle & DeHart, 2011 Helterbran, 2010 Interview 12	Targeted Actions
56	Teacher leadership is something all teachers can engage in	Teacher Leader Model Standards, 2012 North Carolina Teacher Evaluation Process, 2009	Improvement Efforts Instruction Targeted Actions

(continued)

No.	Statement	Source	Theme
57	Teacher leadership is about demonstrating high ethical standards	North Carolina Teacher Evaluation Process, 2009	Teacher Leader Characteristics

Appendix E: Consent Form for Participants

Participant No. _____

North Carolina State University INFORMED CONSENT FORM for RESEARCH

Title of Study: Defining Teacher Leadership: Elementary Teachers' Perceptions of Teacher Leadership and the Conditions which Influence its Development

Researcher: Mark Kenjarski, under the guidance of Dr. Matthew Militello

You are being asked to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. The purpose of this research study is to gain a better understanding of teachers' perceptions of the essential elements of teacher leadership and the conditions which foster or inhibit teacher leadership development. You are not guaranteed any personal benefits from being in this study. Research studies also may pose risks to those who participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. If you wish, a copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher named above.

Purpose of the Study:

The purpose of this research study is to gain a better understanding of teachers' perceptions of the essential elements of teacher leadership and the conditions which foster or inhibit teacher leadership development.

What will happen if you take part in the study?

If you agree to participate in this study, you will be asked to sort 42 cards. These cards have statements printed on them and your task will be to sort them into a grid according to your own beliefs. This process should take no more than 20-45 minutes. During the process, I will ask you questions about why you placed certain statements in certain areas on the continuum. After sorting the cards, you will be asked to complete a brief questionnaire about the statements and to provide some general demographic data. Your card sort and your responses to the survey will remain confidential. If you agree to participate in this study, you may be asked to participate in a post-sort interview to explain your rationale for placing the cards in the order you chose at a later date. Interview participants will be determined once all sorts have been conducted and the data has been analyzed. Interviews should take no more than 30-45 minutes. The interviews will be recorded with a digital hand-held recording device. Your card sort and your responses during the interview will remain confidential.

Risks

There are minimal risks associated with participation in this study.

Benefits

Aside from adding to the body of knowledge about professional development, participants may enjoy thinking about and expressing their own opinions.

Confidentiality

The information in the study will be kept confidential to the full extent allowed by law. Data will be stored securely on a computer and in a file cabinet of which only the researcher has access. No reference will be made in oral or written reports which could link you to the study.

Compensation

You will not receive anything for participating.

What if you have questions about this study?

If you have questions at any time about the study or the procedures, you may contact the researcher, Mark Kenjarski.

What if you have questions about your rights as a research participant?

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator, Box 7514, NCSU Campus.

Consent to Participate

"I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled."

Subject's Name (printed) _____ **Date** _____

Subject's signature _____

E-mail Address _____ **Telephone** _____

Investigator's signature _____ **Date** _____

Appendix F: Q-Sort Instructions, Distribution Grid, and Questionnaire

Card Sort Instructions

Thank you again for your willingness to participate in this research study. In this process, you will sort and rank statements on a continuum from the statements you most agree with to those you most disagree with.

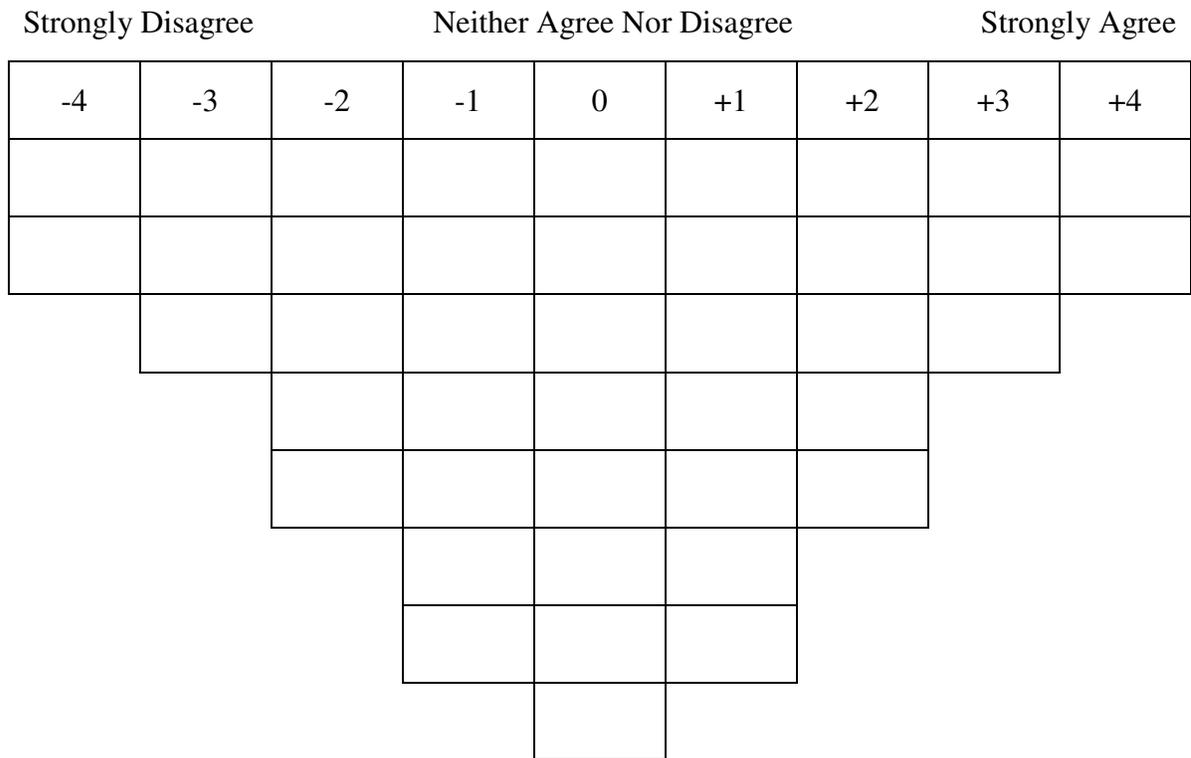
Instructions:

1. Lay out the column titles from -4 to +4 across the top of the table or desk.
2. Please read through all 42 statement cards to become familiar with the statements.
3. Please read through the statements for a second time. As you read the statements, please organize them into three piles:
 - On the right, place the cards with the statements of which you **strongly agree**.
 - On the left, place the cards with the statements of which you **strongly disagree**.
 - In the middle, place the cards that you feel more undecided about or you neither agree nor disagree with the statement.
4. Beginning with the pile on the right (strongly agree), place the 2 cards that you most strongly agree with in the far right column in any order.
5. Next, turning to your left side (strongly disagree), place the 2 cards that you most strongly disagree with in the far left column in any order.
6. Returning to the pile on the right, choose 3 cards that represent the next statements with which you agree and place these cards under marker +3, in any order.
7. Do the same with the pile on the left, following this pattern as you work your way to the center pile.
8. You are free to change your mind during the sorting process and switch items around as long as you maintain the requested number of items under each marker
 - You should have 2 cards under markers +4 and -4
 - You should have 3 cards under markers +3 and -3
 - You should have 5 cards under markers +2 and -2
 - You should have 7 cards under markers +1 and -1
 - You should have 8 cards under marker 0
9. Your sorted cards should match the diagram on the handout. After sorting the cards, please record each card's number onto the diagram in the same design as you sorted the cards.
10. After sorting the cards, complete the post-sort questionnaire on the diagram handout.
11. After the data is analyzed, you may be contacted to participate in a post-sort interview at a later date.

Sort Diagram

Participant No. _____

Your sorted cards should match the diagram below. After sorting the cards, record each card's number onto the diagram in the same location as you placed the card. Please complete the questionnaire on the bottom and back of this paper.



Post Q-Sort Questionnaire

1. Tell me about the statement(s) you placed in the “Strongly Agree” column. What do these statements mean to you?

2. Tell me about the statement(s) you placed in the “Strongly Disagree” column. What do these statements mean to you?

3. As you sorted the cards, did you feel that any statement about your beliefs was missing? If so, what? Where would you place that card and why?

4. Which statement, if any, did you have difficulty placing? Why?
5. Which statement(s) were the easiest to place? Why?
6. What do you think fosters or inhibits the development of teacher leadership?

Demographic Information

7. How many years, including this school year, have you been a teacher? Check the appropriate response.
- 0-4 years 5-9 years 10-14 years 15 or more years
8. What best describes your teaching role? Check the appropriate response.
- Classroom Special Education Specialist (Art, PE, Music, Dance, etc.)
- Instructional Support (AIG, ESL, Intervention, etc.) Other (please explain)
9. How many schools have you worked in? Check the appropriate response.
- 1 school 2 schools 3 schools 4 or more schools
10. What background knowledge do you have about teacher leadership?
11. Do you consider yourself to be a teacher leader? Why or why not?
12. What is your highest earned degree? Check the appropriate response.
- Bachelor Master Doctorate Other (please explain)
13. Do you hold any additional certifications (National Board, Mentor Training, etc.)? If so, please list them.

Appendix G: Post-Sort Interview Questions

1. Look at the +3 and +4 columns of this model sort. Why are these so important to you for teacher leadership?
2. Look at the -3 and -4 columns of this model sort. Why are these so unimportant to you for teacher leadership?
3. What would you name this sort to describe it?
4. What do you think fosters or inhibits the development of teacher leadership?
5. What role does the principal play with teacher leadership?
6. How do district initiatives impact teacher leadership?

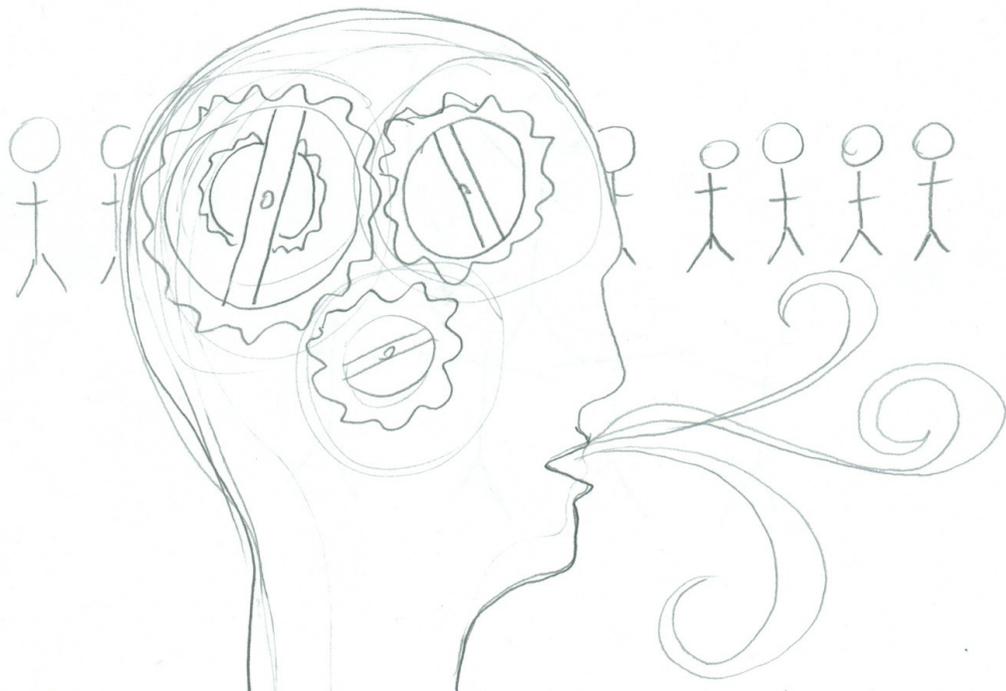
Appendix H: Post-Sort Interview Cover Art Examples

Factor One: Teamwork and Continuous Learning for the Classroom



Factor Two: Widespread Leadership of Others for Change

What to Effective
Teacher Leadership
Looks Like

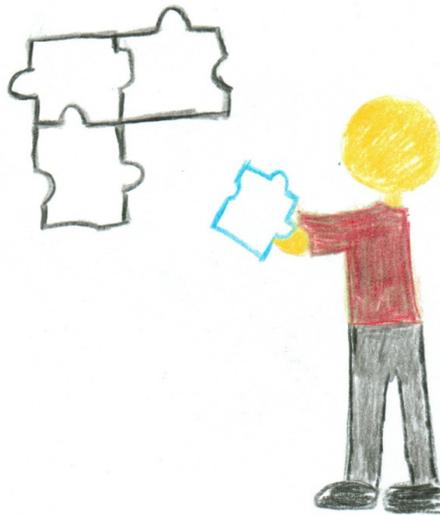


And How to Get Yourself There

Factor Three: Guiding Leadership which Bridges Organizational Levels

Teacher
Leadership:

Filling in the Missing
Puzzle Piece



Appendix I: Factor One Normalized Factor Scores

Factor One: Normalized Factor Scores		
No.	Statement	Z-score
11	Teacher leadership is being open to new ideas and approaches	+1.704
12	Teacher leadership means being a team player	+1.500
31	Teacher leadership is being motivated to keep learning	+1.377
10	Teacher leadership is risk taking	+1.206
9	Teacher leadership is having a high work ethic	+1.012
26	Teacher leadership is promoting and sustaining a vision for change	+0.936
29	Teacher leadership is improving instructional practice	+0.934
27	Teacher leadership is challenging the status quo for better student learning outcomes	+0.879
8	Teacher leadership is leading improvements without a holding leadership position	+0.846
34	Teacher leadership is being a role model for others	+0.831
40	Teacher leadership is something all teachers can engage in	+0.796
5	Teacher leadership is being an exemplary teacher	+0.624
41	Teacher leadership is about demonstrating high ethical standards	+0.598
32	Teacher leadership is providing outreach and collaboration with families and the community	+0.522
39	Teacher leadership shifts responsibility for student learning from individual to communal responsibility	+0.519
15	Teacher leadership is having a well-run classroom with strong classroom management	+0.514
17	Teacher leadership is about forming collaborative school cultures	+0.453
37	Teacher leadership is using data as the basis for decision making	+0.440
4	Teacher leadership is being a change agent	+0.357
6	Teacher leadership occurs outside of teaching responsibilities	+0.311
30	Teacher leadership is making instructional decisions	+0.256
16	Teacher leadership is important for professional learning communities	+0.246
24	Teacher leadership is having excellent interpersonal skills	+0.209
36	Teacher leadership is having a broader perspective and understanding the impact of decisions	+0.122
18	Teacher leadership is being able to organize and lead others on a particular issue	+0.011
38	Teacher leadership needs to be supported by the principal	-0.129
42	Teacher leadership is having expertise in subject matter and pedagogy	-0.200
2	Teacher leadership is being a mentor to another teacher	-0.372
35	Teacher leadership is helping to implement decisions made by others	-0.402

(continued)

No.	Statement	Z-score
23	Teacher leadership positions are self-appointed by teachers	-0.478
33	Teacher leadership is advocating for educational policy improvements	-0.739
22	Teacher leadership positions are appointed by peers	-0.867
3	Teacher leadership is about developing curriculum	-0.903
25	Teaching experience is required for teacher leadership	-0.942
14	Teacher leadership is having shared responsibility with school administration for making school-wide decisions	-0.959
21	Teacher leadership positions are appointed by the principal	-1.405
20	Teacher leadership is participating in staffing decisions	-1.422
7	Teacher leadership is communication between teachers and district leaders	-1.459
28	Teacher leadership is conducting action research	-1.793
19	Teacher leadership is participating in budget decisions	-2.206
1	Teacher leadership is holding a titled leadership position	-2.345

Appendix J: Factor Two Normalized Factor Scores

Factor Two: Normalized Factor Scores		
No.	Statement	Z-score
27	Teacher leadership is challenging the status quo for better student learning outcomes	+2.058
26	Teacher leadership is promoting and sustaining a vision for change	+2.023
36	Teacher leadership is having a broader perspective and understanding the impact of decisions	+1.722
4	Teacher leadership is being a change agent	+1.587
10	Teacher leadership is risk taking	+1.323
18	Teacher leadership is being able to organize and lead others on a particular issue	+1.162
11	Teacher leadership is being open to new ideas and approaches	+1.152
33	Teacher leadership is advocating for educational policy improvements	+0.949
17	Teacher leadership is about forming collaborative school cultures	+0.731
14	Teacher leadership is having shared responsibility with school administration for making school-wide decisions	+0.636
13	Teacher leadership is providing professional development	+0.605
2	Teacher leadership is being a mentor to another teacher	+0.518
31	Teacher leadership is being motivated to keep learning	+0.448
34	Teacher leadership is being a role model for others	+0.344
8	Teacher leadership is leading improvements without a holding leadership position	+0.258
41	Teacher leadership is about demonstrating high ethical standards	+0.250
40	Teacher leadership is something all teachers can engage in	+0.202
32	Teacher leadership is providing outreach and collaboration with families and the community	+0.144
24	Teacher leadership is having excellent interpersonal skills	+0.140
28	Teacher leadership is conducting action research	+0.097
37	Teacher leadership is using data as the basis for decision making	+0.020
29	Teacher leadership is improving instructional practice	-0.014
3	Teacher leadership is about developing curriculum	-0.046
16	Teacher leadership is important for professional learning communities	-0.166
23	Teacher leadership positions are self-appointed by teachers	-0.217
20	Teacher leadership is participating in staffing decisions	-0.244
7	Teacher leadership is communication between teachers and district leaders	-0.264
38	Teacher leadership needs to be supported by the principal	-0.279
39	Teacher leadership shifts responsibility for student learning from individual to communal responsibility	-0.469

(continued)

No.	Statement	Z-score
12	Teacher leadership means being a team player	-0.511
9	Teacher leadership is having a high work ethic	-0.537
30	Teacher leadership is making instructional decisions	-0.662
42	Teacher leadership is having expertise in subject matter and pedagogy	-0.692
5	Teacher leadership is being an exemplary teacher	-1.011
15	Teacher leadership is having a well-run classroom with strong classroom management	-1.084
19	Teacher leadership is participating in budget decisions	-1.154
22	Teacher leadership positions are appointed by peers	-1.192
6	Teacher leadership occurs outside of teaching responsibilities	-1.224
35	Teacher leadership is helping to implement decisions made by others	-1.380
25	Teaching experience is required for teacher leadership	-1.397
21	Teacher leadership positions are appointed by the principal	-1.740
1	Teacher leadership is holding a titled leadership position	-2.099

Appendix K: Factor Three Normalized Factor Scores

Factor Three: Normalized Factor Scores		
No.	Statement	Z-score
16	Teacher leadership is important for professional learning communities	+2.361
17	Teacher leadership is about forming collaborative school cultures	+1.620
38	Teacher leadership needs to be supported by the principal	+1.229
36	Teacher leadership is having a broader perspective and understanding the impact of decisions	+1.183
26	Teacher leadership is promoting and sustaining a vision for change	+1.158
12	Teacher leadership means being a team player	+1.051
8	Teacher leadership is leading improvements without a holding leadership position	+0.920
18	Teacher leadership is being able to organize and lead others on a particular issue	+0.882
11	Teacher leadership is being open to new ideas and approaches	+0.827
31	Teacher leadership is being motivated to keep learning	+0.795
14	Teacher leadership is having shared responsibility with school administration for making school-wide decisions	+0.789
5	Teacher leadership is being an exemplary teacher	+0.780
29	Teacher leadership is improving instructional practice	+0.760
30	Teacher leadership is making instructional decisions	+0.699
37	Teacher leadership is using data as the basis for decision making	+0.614
7	Teacher leadership is communication between teachers and district leaders	+0.264
2	Teacher leadership is being a mentor to another teacher	+0.178
6	Teacher leadership occurs outside of teaching responsibilities	+0.150
15	Teacher leadership is having a well-run classroom with strong classroom management	-0.020
13	Teacher leadership is providing professional development	-0.035
40	Teacher leadership is something all teachers can engage in	-0.073
4	Teacher leadership is being a change agent	-0.080
25	Teaching experience is required for teacher leadership	-0.093
22	Teacher leadership positions are appointed by peers	-0.132
19	Teacher leadership is participating in budget decisions	-0.206
9	Teacher leadership is having a high work ethic	-0.208
33	Teacher leadership is advocating for educational policy improvements	-0.337
34	Teacher leadership is being a role model for others	-0.402
27	Teacher leadership is challenging the status quo for better student learning outcomes	-0.463
20	Teacher leadership is participating in staffing decisions	-0.477

(continued)

No.	Statement	Z-score
42	Teacher leadership is having expertise in subject matter and pedagogy	-0.493
41	Teacher leadership is about demonstrating high ethical standards	-0.589
32	Teacher leadership is providing outreach and collaboration with families and the community	-0.623
21	Teacher leadership positions are appointed by the principal	-0.669
35	Teacher leadership is helping to implement decisions made by others	-0.695
39	Teacher leadership shifts responsibility for student learning from individual to communal responsibility	-0.791
10	Teacher leadership is risk taking	-0.882
24	Teacher leadership is having excellent interpersonal skills	-1.183
28	Teacher leadership is conducting action research	-1.283
3	Teacher leadership is about developing curriculum	-1.777
1	Teacher leadership is holding a titled leadership position	-2.183
23	Teacher leadership positions are self-appointed by teachers	-2.568