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UNIVERSITY OF CALIFORNIA, SAN DIEGO SAN DIEGO STATE UNIVERSITY CALIFORNIA STATE UNIVERSITY, SAN MARCOS

Distributing Leadership to Teachers through a District Level Math Council

A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Education

in

Educational Leadership

by

Melavel Odviar Robertson

Committee in charge:

University of California, San Diego Professor Janet Chrispeels, Chair Professor Carolyn Hofstetter

California State University, San Marcos Professor Jennifer Jeffries

The Dissertation of Melavel Odviar Robertson is approved, and it is acceptable in quality
and form for publication on microfilm:
Chair

University of California, San Diego

California State University, San Marcos

San Diego State University

2008

DEDICATION

This dissertation is dedicated to my husband, two daughters, and mom, who encouraged and supported me through this three-year journey. It is through your love, understanding, belief, and compassion that I kept going.

I would also like to dedicate this dissertation to my dad, whose spirit continues to inspire me to reach all my goals and dreams.

TABLE OF CONTENTS

SIGNATURE PAGE	iii
DEDICATION	iv
LIST OF FIGURES	ix
LIST OF TABLES	X
ACKNOWLEDGEMENTS	xi
VITA	xii
Professional Summary	
Education	
Professional Experience	
Professional Training and Development	
ABSTRACT OF THE DISSERTATION	xvi
CHAPTER 1: INTRODUCTION	1
Context of Problem and Rationale	1
Distributed Leadership	3
Factors Limiting a Distributed Leadership Perspective	4
Purpose	6
Overview of the Methodology	8
Significance of the Study	9
CHAPTER 2: REVIEW OF RELATED LITERATURE	11
The Roles of Leadership in Reform Efforts	11
Changing Role of the Principal	
District Reform: Do Districts Matter in Student Achievement?	13
School District and Teacher Union Leadership	18
Teacher Leadership	
The Role of the Principal in Developing Teacher Leaders	30
Challenges to Teacher Leadership	
Distributed Leadership	
Spillane's Types of Distributed Leadership	39
Collaborated distribution	39
Collective distribution	
Coordinated distribution	
Emerging Research on Distributed Leadership	
Limitations to Distributed Learning	51

CHAPTER 3: RESEARCH METHODS	55
Research Design	56
Context: District Setting	61
Role of the Researcher	62
Positionality	62
Data Sources and Collection	64
Interviews	64
Participants	65
Archival records and documents	67
Pilot Study	67
Data Analysis	67
Limitations of the Study	69
CHAPTER 4: DATA AND ANALYSIS	72
The Context for Distributing Leadership to Teachers	73
Historical Context of Distributed Leadership to Teachers	
Teacher Leader Development through Union and Management Partnership	
Mentor Program	
Professional Assistance Program	
Assessment Committee	
Homework Policy	
Elementary Progress Report	
Teaching and Learning Cooperative and Professional Development Advisory	Board
	83
Staffing and Budget	
Math Literacy Council	84
Math Council Membership Changes and the Charge	85
Year One: Math Council	86
Year Two: Math Council	87
Year Three: Math Council	89
Evolution of the Thinking and Reflective Process: District Leaders	91
Challenges	94
Summary	95
Perceptions of Teacher Leadership	
Superintendent and Union President	96
Participant Definition of Teacher Leadership	98
Principal Participants	
Teacher Participants	99
Collaboration	100
Systems Thinker	
Content Expert	
Mentor	
Represent Teacher Voice	
Continuous Learner	
Initiator	

Decision maker	. 103
Summary of Teacher Leadership Themes	. 103
Enactment of Teacher Leadership Through the Math Literacy Council	
Roles and Responsibilities of Math Council Members	
Distributing Leadership to Teachers through Curriculum	. 117
Leadership Roles at Schools	. 121
School level leadership	. 122
Classroom level leadership	. 123
System-Wide Outcome of Council Work	. 123
Distributed Leadership	
Conditions to Distribute Leadership to Teachers	. 125
Clarity of Task	. 126
Trust	. 127
Taking advantage of existing structures	. 127
Recognition	. 128
Collaboration	. 128
Components to Distribute Leadership to Teachers in the Organization	. 129
Focus on Collaboration, Teacher Voice, and Time to Learn	. 130
Thinking Forward on Distributing Leadership to Teachers	. 132
CHAPTER 5: DISCUSSION AND CONCLUSIONS	. 133
Summary of the Study	. 133
Overview of the Problem	. 133
Purpose Statement and Research Questions	. 134
Review of Methodology	. 135
Summary of Findings	
Summary of Math Council Work	. 137
Findings Related to the Literature	. 138
Building on Historical Models to Distribute Leadership	. 138
Trust	. 140
Key Participant Perceptions of Teacher Leadership	. 141
Teacher Leadership	. 142
Content expertise	. 142
Systems thinker	. 143
Mentor	. 143
Representative of teacher voice	. 143
Decision maker	. 144
Initiator	. 145
Collaborator	. 145
Continuous learner	. 146
Consequences of Differing Perceptions of Distributing Leadership to Teachers	. 147
Barriers to Distributing Leadership to Teachers	. 148
Clarity of Task	. 149
Roles and Responsibilities	. 151
Consistency of Membership	. 153

Time	154
Supports to Distributing Leadership to Teachers	156
Focus on Curriculum	
Compensation	158
Distributing Leadership to Math Council Participants	159
Spillane's Distributive Leadership Model	
Collaborative distribution	
Collective distribution.	161
Coordinated distribution	163
Rethinking a Model of Distributed Leadership	164
Leader/Follower	
Situation	
Three Additional Components for Distributed Leadership Practice	167
Time for organizational learning	
Collaboration	
Trust	
Enhancing Spillane's Distributed Leadership Model	171
Implications of the Study for Practice	
Recommendations for Further Research	
APPENDICES	176
Appendix A: Information Letter	
Appendix B: Participant Consent Form	177
Appendix C: Interview Questions	
Appendix D: Copyright Permission: Union Professionals: Labor Relations and	
Educational Reform	182
Appendix E: Copyright Permission: Distributed Leadership	
DEEEDENCES	19/

LIST OF FIGURES

Figure 2.1: From <i>Distributed Leadership</i> (p. 3) by J. Spillane, 2006, San Francisco:
Jossey-Bass. Copyright 2006 by John Wiley & Sons, Inc. Reprinted with
permission
Figure 2.2: From Elementary school leadership strategies and subject matter: Reforming
mathematics and literacy instruction by P. Burch & J. Spillane, 2003, The
Elementary School Journal, 103(5), p. 526
Figure 4.1: Relationships as a Foundation to Teacher Leadership
Figure 5.1: Needed System Supports to Distribute Leadership through a District-level
Math Council
Figure 5.2: Refinement of Spillane's Model of Distributed Leadership—A District Level
Perspective

LIST OF TABLES

Table 2.1: Industrial vs. professional unionism from A Union of Professionals: Labor	^
Relations and Educational Reform (p. 10), by Kerchner and Koppich, 1993, New	W
York: Teachers College Press. Reprinted with permission.	21
Table 3.1: K-12 Math Council potential participants	56
Table 3.2: Teacher and Principal Participants	66
Table 4.1: Development of Management and Union Partnership	76
Table 4.2: Principal Perceptions of Teacher Leadership	99
Table 4.3: Perceptions of Teacher Leadership	. 105
Table 4.4: Teacher Views on the Purpose of Math Council	. 112
Table 4.5: Principal Role on the Math Council	. 114
Table 4.6: Perceptions of Teacher Role on the Math Council	. 115
Table 4.7: Curriculum as a Venue to Distribute Leadership: Teacher	. 119
Table 4.8: Benefits of a Curriculum Focus to Develop Teacher Leaders	. 119
Table 4.9: Components to Support Distribution of Leadership to Teachers	. 130

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I would also like to acknowledge Dr. Jennifer Jeffries and Dr. Carolyn Hofstetter, committee members, who guided me through critical conversations that continue to frame my dissertation and caused me to continue to intellectually engage in the journey.

To my Cohort I colleagues of the Joint Doctoral Program, I thank you. The collegiality, spirit, energy, and commitment to one another and to educating kids continue to give me hope for the future. The support and expertise you shared with me has helped continue to mold me into the leader that I am.

And last, but certainly not least, I would like to acknowledge the incredible colleagues who I work with day in and day out. It is through your patience, belief, and encouragement throughout this process that I have been able to take this journey.

VITA

PROFESSIONAL SUMMARY

- Educational leader with 12 years of K-12 and district-level administrative experience, 10 years teaching, a Doctorate in Education, Education Leadership, and a Master of Arts in Education, Curriculum and Instruction
- Evaluate and supervise the leadership and operations of four comprehensive high schools, one continuation high school, six middle schools, and subdivisions in Learning Support Services
- Actively led district curriculum committees: Literacy councils, social studies adoption at middle and high school, University of California articulation, AVID, and textbook and course adoptions
- Instructional and curriculum leader using data for school- and district-wide staff development focusing on reading, writing, and math literacy
- District and site budget manager dedicated to meeting diverse needs of students, staff development, and college-ready initiatives
- Evaluated teachers, assistant principals, and classified personnel and guided development of professional growth plans
- Developed a school-wide culture and commitment to shared responsibility for literacy in all disciplines, anchored in reading and writing
- Collaborative partner; coordinated and participated in vertical articulation processes for elementary to middle school in writing and math and middle to high school science

EDUCATION

Doctor of Education, Education Leadership 2008

University of California, San Diego; San Diego State University; and California State University, San Marcos

<u>Dissertation Title</u>: *Distributing Leadership through a District Level Math Council, 2005-2008*: Committee Chair: Dr. Janet Chrispeels

Master of Arts in Education, Curriculum and Instruction and Administrative Credential *May 1991*

School of Education, San Diego State University

Bachelor of Arts in Biology, Minor in Chemistry *May 1986* University of San Diego, CA

PROFESSIONAL EXPERIENCE

Poway Unified School District

Assistant Superintendent, Learning Support Services

• Lead, supervise and evaluate leaders in the following divisions: comprehensive and continuation high schools, middle schools, Staff Development, Curriculum and Instruction, Student Support Services, Career Technical and Adult Education, and Alternative Programs

Director, Secondary Education

2004-2006

- Created, supported, and encouraged teacher-led and initiated staff development through Teaching and Learning Cooperative Governing Board and Literacy Councils, AVID, and book adoptions
- Coached, mentored, and supported seven new administrators at middle and high school levels
- Led district-wide curriculum initiatives: middle school social studies adoption, high school World History adoption, Introduction to High School Algebra, academic language, and work for middle school and 12th grade math
- Coordinated staff development days for middle schools; facilitated math articulation
- Initiated formation of new assistant principal group on standardizing curriculum and instruction issues: new course adoptions, UC articulation, board policies, high school credits, CAHSEE interventions, and alignment of curricular paths
- Managed multiple budgets: AVID and AP Summer Institutes, Literacy Council, AVID, IMFRP, AP Potential, and staff development
- Coordinated librarians in developing library plan, managing textbook budgets, and guiding to redefine role of libraries in schools

Principal, Bernardo Heights Middle School

2003-2004

- Led discussions and staff development around use of instructional time in rotating block schedule
- Refocused a site Literacy Council committed to reading and reflecting on research, instructional practices, and staff development
- Cultivated a culture and expectation for school wide commitment to reading literacy and use of data in making instructional decisions.
- Facilitated use of common assessments and alignment of standards in math
- Retooled job descriptions and expectations for 9 nine employees affected by budget cuts via reviewing and reprioritizing tasks
- Coached teachers, classified, and administration on successfully working with parents and students

Principal, Sundance Elementary School

1999-2003

- Trained staff on reading standardized test data and use of data to question curricular practices and write targeted goals; API scores steadily increased for four years
- Developed school wide vision using DuFour's model
- Led staff discussions and understanding around successful classroom models of multiage and looping
- Initiated development of an educational foundation
- Promoted an open door policy to students, staff and parents that increased communication and trust within the community
- Implemented CCR needs for school compliance

Assistant Principal, Rancho Bernardo High School

1997-1999

- Coordinated and participated in district curriculum development for all subject areas
- Led a team of teachers in the development of a professional time structure for staff development
- Wrote application and received distinction of California Distinguished Schools
- Supervised staff, curriculum, and instruction for ASB and English, foreign language, and social studies
- Evaluated second-year and tenured teachers
- Participated in visioning process for a new PUSD high school

Teacher, High School Science,

1986-1997

Rancho Bernardo and Poway High Schools

- Raised AP Biology passing test results each year taught (72%, 84%, and 94%)
- Served 2 years on development of 6-12 Life and Physical Science PUSD standards
- RBHS Interdisciplinary Team Leader for group of 10 teachers (3 English, 3 math, 3 science, and 1 Resource) to develop thematically based (Heidi Hayes Jacobs model) curriculum for ninth graders
- Developed ninth-grade science course through its evolution of earth science, chemistry, and physics
- Two years as department co-chair and served as WASC Accreditation lead for RBHS and PHS
- District Mentor Teacher focused on science academic standards development
- Evaluated textbooks for Biology and AP Biology textbook adoption process

PROFESSIONAL TRAINING AND DEVELOPMENT

Coaching for Excellence, Marilyn Tabor
ACSA Coaching, Clear Administrative Credential Coach
Understanding by Design, 5 day training by Grant Wiggins and Jay McTighe
Management by Walking Around, Carolyn Downey
Breakthrough Coaching, Malachai Pentecost
Professional Coaching, Steven Covey
A World of Difference, Human Relations and AVID Trained

ABSTRACT OF THE DISSERTATION

Distributing Leadership to Teachers through a District Level Math Council

by

Melavel Odviar Robertson

Doctor of Education in Educational Leadership

University of California, San Diego, 2008 San Diego State University, 2008 California State University, San Marcos, 2008

Dr. Janet Chrispeels, Chair

The publicly reported California Standards Test (CST) and No Child Left Behind annual yearly progress (AYP) reports create a laser sharp focus on achievement. These instruments of national and state accountability systems place instructional practice at the center of the debate. Schools can no longer tolerate this division of effort if they are to insure that each child achieves proficiency in language arts and mathematics. Leaders must find ways to capitalize on teacher expertise and develop teacher leaders among the ranks. Current literature conceptualizes distributed leadership as an organization where members possess expert knowledge and are empowered to participate in a collective action toward a common goal. As educational institutions seek ways to restructure themselves according to their primary functions, teaching and learning, distributed leadership emerges as an opportunity to recognize teachers as natural organizational leaders.

In this descriptive case study, a district superintendent, union president, four principals, and twelve teachers who participated in a three-year Math Council were

interviewed. Data analysis revealed how historical teacher leadership partnerships in the district, as well as the trusting relationship between the superintendent and union president, influenced the architecture and development of the Math Council, charged with improving math achievement. The Math Council included teachers and administrators, working collaboratively, to develop math recommendations for the superintendent. Further data analysis revealed that a curriculum focus was helpful to distribute leadership, at the district level, to improve math. However, the following areas surfaced as needing attention: clarity of the task, roles and responsibilities of the council, and clarity of expectations.

Nine components emerged, on a systems level, to distribute leadership.

Conclusions highlight the importance of three of these components: trust, collaboration, and time to learn. These three components have been adapted to James Spillane's model of distributed leadership. This addition strengthens the concept of distributing leadership at a district level, suggesting implications for practice and further research.

CHAPTER 1

INTRODUCTION

Context of Problem and Rationale

Since the 1980's, there has been an "explosion of school reforms" throughout the world (Cheng, 2002). Many changes have been stimulated by the effects of the rapid development of information technology, globalization, and high expectations to provide not only schooling for every child, but also ensuring high levels of student achievement. In the United States, shaped by federal, state, and local governments, schools are now expected to respond to set growth targets. The publicly reported California Standards Test and No Child Left Behind annual yearly progress (AYP) reports create a laser-sharp focus on student achievement. The process of school improvement to meet the graduated and ever increasing AYP expectancies is complex and places principal leaders on the point; thus, one of the challenges of leaders is how to best serve students in the quickly paced, high accountability world in which we live.

The academic achievement assessment instruments used in national and state accountability systems place curricular decisions and instructional practice at the center of rigorous discussion. Principals may need to look at a change in leadership practices in schools to respond to the moral responsibility and mission to educate each child to high levels. Under these circumstances, it may no longer be plausible for teachers to close their doors and teach in isolation. Schools can no longer tolerate the division of effort, administration, and teacher, if they are to ensure that each child achieves

proficiency in language arts and mathematics. Indeed, leaders and teachers should find ways to tap teacher expertise and develop teacher leaders among the ranks.

According to Urbanski and Nickolaou (1997), teacher leadership has not been widely practiced and has been narrowly defined. Teachers have felt that leadership roles belong to "someone else." Typically the education environment creates "classroom work" for teachers and "managerial work" for principals. Urbanski and Nickolaou argue that only sometimes did their worlds entwine. Teachers often were not encouraged or supported to question authority and viewed their job as a vocation, not a career. They further assert that the initial structure of the education system and policy did not create opportunities to empower teachers and did not provide the time to collaborate.

If historical views of teacher leadership are to evolve, there are two critical elements that must be in place to distribute leadership: a clear definition of the teacher as leader, which includes roles, responsibilities, and decision making influence, and a clear definition of the organizational structures in which teachers can exercise leadership. When these issues are addressed, the contributions of teacher leaders, working collaboratively with principals, have the potential to become a potent force in education reform efforts.

Fortunately, current research suggests that leadership is being reconceptualized. A number of authors argue that the school leader should no longer be defined by position, but by the product of the work of the leaders at the site, including the principal (Elmore, 2000; Sergiovanni, 1993; Spillane, Halverson, Diamond, 2001). "Hopes that the transformation of schools lies with exceptional leaders have proved both unrealistic and unsustainable ... leadership as distributed across multiple people and situations has

proven to be a more useful framework for understanding the realities of schools and how they might be improved" (Timperley, 2005).

Distributed Leadership

Distributed leadership stands as one of the strategies through which leadership can be shared among many individuals in an organization. Copland (2003) states that the roots of distributed leadership go back to the 1960's with McGregor's "X and Y" organizational theory: where "X leaders view people as lazy, work avoidant, and deviously opportunistic, and so have fundamental distrust of employees," and where "Y leaders view people as basically honest, industrious, responsible, and willing to take initiative ... share responsibility" (pp. 376-77). In this case, Y leaders would take on initiatives that help to transform the organization. The concepts of distributed leadership have been more clearly defined today. Spillane (2006), a noted leader in this area, defines distributed leadership as three pronged: leaders, followers, and a situation. Distributed leadership is about *leadership practice* between the leaders and followers in a situation over time.

Related to distributed leadership, but not the same, is research in the field of teacher leadership. Teacher leadership falls under three interrelated categories: (a) site and district leadership working to develop a learning community, (b) teachers willing to break the mold of working both inside and outside the classroom in a learning community, and (c) creating an infrastructure that supports and sustains teacher and administrator leadership. Lambert (2003), Barth (2001), and Urbanski (1997) speak strongly about the need for developing teacher leadership. Their work focuses energy on developing and sustaining teachers in leadership roles. This leadership role includes

taking on greater responsibilities, including a voice in decision making. Elmore (2000), Gronn (2000), Smylie (1990), and Spillane (2006) address the need for teacher leadership development in organized structures where leadership can be distributed. They contend that teachers have areas of expertise and should be in an organization where they can serve as both leaders and followers, depending on the situation. Such structures could provide opportunities for many to be involved in the process of making critical decisions and fostering a new mental model for most educational institutions.

According to a number of scholars, creating a culture of teacher leadership through a distributed leadership model holds the most hope for the achievement of each student and the collective learning of all students (Barth, 1991; Barth, 2001; M. A. Copland, 2003; Coyle, 1997; Darling-Hammond et al., 1995; Frost & Durrant, 2002; Smylie & Denny, 1990; Timperley, 2005). If schools are successful, each student benefits from the collective expertise of teachers and the leadership capacity created by a system that celebrates, honors, and supports a culture of ongoing learning for all individuals in the organization. On an even grander scale, Elmore (2000) boldly asserts that the survival of public schools is dependent on school leaders looking very differently than they do now in two ways: who leads and what they do.

Factors Limiting a Distributed Leadership Perspective

Since the early 1900's, school districts, especially those in urban areas and those serving more than 10,000 students, have evolved as hierarchical organizational structures and have frequently turned to the heroic, strong leaders with a vision to impact and sustain changes. Hierarchical structures tend to promote and give the illusion of an "in charge leader," although Copland (2003) and Elmore (2000) assert that this view of

hierarchical leadership is often more of an exception than the rule. Nevertheless, there is emerging evidence that this structure with a focus on the superintendent at the system level and the principal as leader at the school level may not be able to meet the ongoing demands of educational improvements required in America's increasingly diverse schools with many students from low-income families. One factor contributing to the failure of the "heroic leadership model" is the lack of sustainability of the change once the leader moves on.

To implement structures that support distributive leadership, however, would require paradigm shifts in how districts and schools are organized and current hierarchical relationships are typecast. Without a fundamental shift in the relationships and clear understanding of leadership responsibilities between teachers and administrators, this form of school restructuring may expire as another "fad" in education.

Key to enacting a paradigm shift and bringing about a fundamental change is the teacher union. Both the National Education Association and the American Federation of Teachers have turned their attention to the role of teachers in the process of reform. One of the forward-thinking school reformers is Adam Urbanski, president of the Teacher Union Reform Network (TURN). He, along with 21 districts (D. Raczka, personal communication, December, 10, 2005), is turning around the view of how management and unions can and should develop leadership, within a distributed leadership model. TURN comes together quarterly to reframe the role of teachers and unions in the educational system (Urbanski & Nickolaou, 1997). The key question posed by TURN members as they pursue a collegial work model is, "Can local unions convince members

to see themselves as change agents and can school management and board members support this thinking?" Even though Urbanski has helped to define teacher leadership roles through TURN, it has not had, at this point, a substantial effect in reforming school leadership.

As envisioned by TURN, one of the steps that may need to be in place to start to flatten a hierarchical leadership model, in an educational setting, is a partnership with a district superintendent and teacher union president. On a small scale, the potential for the partnership setting a common vision of leadership in a school district may have sustainable results. Such a unique partnership has developed in a suburban district in San Diego County, Beachside School District. If a common vision was communicated through both teacher and management leadership, could a district move forward with distributing leadership throughout the system? Most union-district negotiations and partnerships center on the "bread and butter" issues; i.e., salary and benefits. A focus on leadership and decision-making in the system can have some structural as well as cultural implications in a district and at the school level.

Purpose

Although there is much discussion in the literature and among practitioners about the concept of distributed leadership, it is still an understudied phenomenon. For the most part, the few empirical studies that emerge from the literature are studies from grade level teams in elementary schools. This case study examined district-union negotiated structures and processes that distributed leadership from the district level through K-12 teams of teachers and principals, focused on mathematics (Mathematics Literacy Council). The Math Council was tasked to assist schools, through district-level teacher

and administrator leadership, to improve math achievement through a coherent and wellarticulated curriculum.

The study was conducted to understand how a three-year, ongoing relationship and partnership between a superintendent and a teacher union president have supported or constrained opportunities for distributed leadership. Many times, distributed leadership and shared leadership are used interchangeably (Spillane, 2006), but distributed leadership has a broader meaning than shared. Spillane defines distributed leadership as *leadership practice*. He frames it as "A product of the joint interactions of school leaders, followers, and aspects of their situation such as tools and routines ... shifts focus from school principals ... to the web of leaders, followers, and their situations that gives form to leadership practice." Based on Spillane's thinking and Elmore's (2000) contention that all persons in the organization can lead through expertise, the following questions have been developed to guide this study:

- 1. What has been the nature of the relationship between the district superintendent and union president and in what ways have they worked together to implement a model to distribute leadership?
 - a. What opportunities for teacher leadership have been created through the union and management partnership?
 - b. How has the superintendent-union thinking evolved over the three years and how has that been translated into changes in the Math Literacy Council's organization, membership, and tasks?
- 2. How did the participants on the Math Council perceive teacher leadership?

- 3. How has the Math Literacy Council influenced the enactment of teacher leadership in the district?
 - a. How did the teacher and principal members in the Math Council perceive their leadership?
 - b. In what ways has a curriculum focus supported or constrained, or served as a barrier, to distributed leadership?
 - c. In what ways have Math Literacy Council teacher members played a leadership role in their schools?
 - d. In what ways have schools capitalized on the distributed leadership structures at the district level?

Overview of the Methodology

I used a case study methodology to examine the ways in which a district-union partnership has distributed leadership among teachers as key curriculum decision makers for student achievement. Over the past three years, Beachside School District's superintendent worked closely with the teacher's union and developed structures and roles within the system whereby teachers held district level decision making roles, affecting all teachers. In 2004, the Beachside School District developed Literacy Councils in both Language Arts and Mathematics that focused on making recommendations to the superintendent to improve math and languages arts achievement. This case study focused on the processes and experiences of participants on the Math Council. The councils included teachers and administrators as equals, working together on curricular and instructional issues.

Multiple qualitative sources of data were collected during this study: interviews, observations, documents, and artifacts. As a descriptive case study, the principle method of data collection was through interviews with the district superintendent, union president, teachers and administrators. The purpose of the interview, integrated with document analyses, was to gain a deeper understanding of the philosophical beliefs and leadership practices of the participants on the council and the ways they have influenced the district and their schools (Merriam, 1998). Each document and audio taped interview was transcribed and analyzed to identify themes and to compare themes across participants. The validity of the interview data was supported with observation and document data.

Significance of the Study

Since few empirical studies have been conducted on the enactment of distributed leadership at the district level, this study made a contribution to the limited studies of distributed leadership. Particularly important is exploring how a shared vision between a district superintendent and union president promoted or hindered the distribution of leadership. Leadership practice to improve student achievement is a complex mission. Because of its complexity, research is needed to help educators understand both the intended and unintended consequences of their actions. While many studies suggest that changes in roles and relationships among administrators and teachers result in higher student achievement and effective schools (Barth, 2001; DuFour, 2004; Krisko, 2001; Lambert, 2003), it is important to understand how this experiment in Beachside School District is distributing leadership to teachers and affecting their leadership actions.

Teachers are valuable and essential assets in reform efforts, and developing and

supporting a teacher's role to transform from classroom teacher to teacher leader is not easy. It is important to investigate how union leaders, working with district superintendents, can support teachers in new roles through district level structures and how teachers perceive these leadership opportunities to engage in leadership practice.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The Roles of Leadership in Reform Efforts

Changing Role of the Principal

The role of the principal in public schools has changed since the advent of increased accountability and No Child Left Behind (NCLB) in 2001. NCLB has stringent expectations on student achievement for all students. This requires all educators to have a sharp focus on each student's educational program rather than a general understanding of program content and delivery. Failure to meet the goals of NCLB can result in a school being labeled a "failing school." In addition, each student subgroup must also show incremental growth. The magnitude of the reform effort makes it difficult for one leader, the principal, to manage instruction in an elementary or middle school setting. It is almost impossible in a high school of more than 3,000 students.

Beyond their responsibility to the mandates in NCLB, principals of schools often have a vision to prepare all of their students for college entrance or postsecondary options. School authorities and governing boards correlate instructional improvement, student achievement, and high college entrance rates with principal leadership success (Lashway, 2003). In 2005, Jeanne Hargrove, UCSD Admissions Director and speaker at the University of California Counselor Conference in San Diego, painted a competitive picture of college admission and noted that preparing all students in the K-12 system for college is not an easy task. On top of the standards-based system that schools are immersed in daily and the ethical responsibility to prepare students for the *choice* of

college, principals now find their success, as well as their school's success, tied to NCLB targets, postsecondary college preparation, and standards based instruction.

In addition to instructional leadership responsibilities, principals work through multiple management issues and hourly fires that need attention to keep the school running smoothly (Bolman, 1990). The instructional leadership focus of the principal becomes fragmented and compromised in the goal to balance leadership and management (Southworth, 2002). This reality suggests that principals and other educational leaders rethink how instructional leadership is manifested in the school culture. One of the potential opportunities for a principal is to share, with the staff, the leadership and responsibility for realizing a school's vision for student achievement (Bolman, 1990; Harris & Lambert, 2003; Katzenmeyer & Moller, 2001). Sharing leadership may be not only critical to get the job done of creating successful schools and districts for all learners, but also to sustain effective changes that are made. There is some concern and urgency to revisit leadership practice because it is expected there will be an exodus of administrators and teachers (Polglase, 2003) in the next fifteen years, as the current education workforce reaches retirement. Education will be left with the issue of developing and sustaining leadership capacity.

Considering the leadership challenges districts and their schools are faced with today, this literature review will broadly address district reform efforts, labor and management relationships, and explore the current research on distributed leadership, Although the focus of this study is distributed leadership at the district level, most studies have explored shared and distributed leadership at the schools level. Thus this review includes a descriptive analysis of studies that have illustrated how leadership has been

distributed to teachers at the school level. In order to understand the role of the teacher in leadership distribution, the literature also addresses teacher leadership, revealing supports and constraints as a system, including the role of the principal.

District Reform: Do Districts Matter in Student Achievement?

For the last twenty years, reform efforts through national efforts such as Success for All, Accelerated Schools, and the Coalition for Essential Schools have focused on the school level as change agents. This is not surprising as accountability standards through No Child Left Behind have focused on the school level. As described earlier, a "failing" school can have federal sanctions upon it if the students, specifically subgroups, do not meet the minimum achievement levels described by AYP (Annual Yearly Progress). The increased visibility of failing schools within districts draws attention to districts as a unit of change and accountability. Thus, in recent years, reform efforts, research, and funding have been directed toward districts and their impact on schools (Iatarola & Fruchter, 2004). The large-scale reform work, at the district systems level, is gaining broad attention by the Pew Charitable Trusts, Annenberg Institute, and the Ford Foundation, just to name a few. "Yet improving learning opportunities for all children will require more than individual talents or school by school efforts. It will demand system wide approaches that touch every child in every school in every district across the nation" (Togneri & Anderson, 2003).

In 1997, Elmore and Burney conducted a study of Community District #2, New York City. The findings revealed that a district-wide effort to support a focused, system wide initiative on instructional improvement can have positive effects on student achievement. By replacing about two-thirds of the principals and half the teachers,

Superintendent Anthony Alvarado used staff changes to re-culture the district. In addition, Alvarado committed the financial support for staff development needed for teachers and principals to improve curriculum and pedagogical knowledge and practices in language arts and mathematics. Part of the finances came from eliminating district office positions and non-instructional positions at the schools. The culture created by the administrators and teachers working together on a focused systemic improvement on instruction yielded positive results in student performance.

The reform in Community School District #2 is significant in that there was a top-down district reform from the superintendent that refocused the work of the district and changed teachers and administrators low academic expectations of high poverty students through focused and sustained staff development on instructional improvement and a culture of high expectations for all. Important to the success in District #2 are the following values that framed the work of the district: (a) focusing on instruction, (b) committing to instruction that has multiple stages of implementation, (c) seeking expertise at both the teacher and administrator level, (d) concentrating on systemic improvement, (e) hiring talented professionals that generate great ideas, (f) defining expectations from the district level and allowing the schools to own it, and (g) taking care of one another as colleagues and humans.

Alvarado, with Alan Bersin in 1998, took the district-wide reform initiatives from the Community School District #2 and applied it to the San Diego Unified School District; specifically administering a strong district-led agenda focused on instructional improvement and staff development. The focus of redefining the culture in San Diego did not compare to the magnitude of culture change in New York City. While there were

changes in administration, elimination of district positions, and layoffs of non-instructional positions to direct resources to professional development, the district was not able to create the same systemic effects. However, there were system efforts that sought to "empower teachers and principals at the 'bottom' of the system to solve problems more effectively by organizing intensive professional development and creating a culture of shared norms of practice from the 'top' and 'bottom' simultaneously" (Darling-Hammond et al., 2003).

The quick and forced change process led to increased tensions and a deteriorating relationship between union and district. First, the district tried to enter into a peer coaching program and neither side could agree on how to select or supervise the teacher coaches. The district wanted to oversee the selection to ensure quality control. Second, in 2000, Bersin and Alvarado went to the school board with a district-wide Blueprint, an *exact* literacy plan for the district. Protests by teachers, classroom aides, and parents greeted the Board. The "act now, explain later" tactic did not invite stakeholders from the beginning (Darling-Hammond et al., 2003). However, despite the union and district rifts, the district was able to address "patterns of inequity" and have improved "the quality of teaching as well as the level of learning for the students who were previously least well served, and has created the beginnings of new capacity and infrastructure for teaching in the district" (Darling-Hammond et al.).

In 2003, Togneri and Anderson investigated five school districts across the country that met the following criteria: increased student achievement for three or more consecutive years, across all grade levels and ethnicities, in math and/or reading, strong professional development programs in place, and 25% or greater poverty as measured by

free and reduced lunch eligibility. Case study analysis of the five districts identified factors as critical elements for academic improvement. The following characteristics emerged:

- System ownership of low academic performance and a willingness to look for solutions;
- System commitment to vertically and horizontally articulated curriculum,
 with built in instructional supports;
- 3. Student focused vision;
- 4. Data-driven curricular and instructional decisions;
- 5. Systemic professional development program that is built around district identified initiatives to improve instruction;
- 6. Redefined leadership roles; and
- 7. Commitment of time to sustaining reform efforts.

The findings overlap with others that have also conducted studies on district reform efforts (Elmore & Burney, 1997; Iatarola & Fruchter, 2004; McLaughlin & Talbert, 2002). However, a finding from Togneri and Anderson that is of particular interest to this study is the redefinition of leadership roles. The redefinition of leadership extends to multiple stakeholders, including assistant principals, teacher leaders, district staff, union leaders and school board, in addition to the superintendent and school principals.

Stakeholders, of interest for this study, are union leaders and teacher leaders.

Togneri and Anderson found that union leaders, in some of the school districts they studied, established a role and responsibility for teacher professional development needs.

Teacher leaders were defined as teachers that provided the instructional expertise and

guidance needed by colleagues. Their professional expertise was utilized in specific curricular areas such as math and reading. In addition, teacher professional development skills in modeling and creating lessons and seeking resources also fell into the responsibilities of the teacher leader. As a stakeholder, teacher leaders at both district and site levels served on district level decision making committees where "teacher leaders were a crucial element of the instructional reform efforts of all the districts" (p. 42).

Conversely, the role of unions in the other districts studied were relegated to the factors that affect working conditions, including salary and benefits. Because of the systemic initiatives, teachers relied on the union to communicate their concerns; in response, union leadership in Kent County and Minneapolis worked cooperatively with district administration to provide the instructional support needed for teachers. The two districts had healthy relationships between labor and management; challenges were solved together with open and honest communication.

Iatarola and Fruchter (2004) conducted a study to illuminate district efforts that support high student achievement. They selected four school districts, two low performing and two high performing. Within each of these districts, they selected a sample of schools. After conducting interviews of district administrators and principals, they found that a focus on students needs, hiring strategies, and how resources were spent were factors that differed between high- and low-performing districts.

The high performing districts were clear about their achievement goals and used data to drive their instructional improvement, both formative and summative. In addition, parent communication about student progress and needs occurred on a regular schedule.

Low-performing districts, on the other hand, appeared to respond to district pressure

through programs and mandated interventions, using little data in a formative nature. Second, the high-performing districts were proactive in identifying and developing potential leaders among the administrator and teacher ranks, thus a strong pool was present to hire from when an opening occurred. There was lower teacher turnover and professional development was of high quality, integrating both school and district initiatives. Low-performing schools did not invest in developing a local pool of leaders. And lastly, high-performing districts directed resources to offer programs and support that meet the needs of their students; whereas, low-performing districts directed their resources toward mandated programs. The significance of this study from Iatarola and Fruchter illustrate three areas of district practices that can lead to higher student achievement: expenditure of resources, development of leadership, and focus on data for instructional decisions.

School District and Teacher Union Leadership

As described in the previous section, teacher unions often are relegated a small role, if any, in district reform. In an effort to distribute leadership at the district and site level with teachers, opportunities to include the teacher union representatives as part of the conversation and implementation of any structural models may be considered, but seems often not to be the norm. Their absence in the reform discussion often places the union in a reactive position. A historical walk into the development and purpose of unions begins in 1857, when 43 educators in Philadelphia started the National Education Association (NEA). The charge of the organization was to improve the conditions under which teachers work and students learn; the conditions include salaries, growing responsibilities, and addressing teacher shortages in the early 20th century. In 1916, the

American Federation of Teachers (AFT) was founded to also advocate for teachers. The AFT, because of its affiliation with the American Federation of Labor (AFL) and Congress of Industrial Organizations (CIO) adopted a more traditional union stance and was willing to sue or strike as a tool to gain improvement in working conditions. The "unionism" of the AFT, which initially grew rapidly in membership, pushed the NEA from a more professionally focused organization toward a stronger union-type stance. Teacher unionism, as equated to industrial unionism, strengthened throughout the 1960's and 1970's and collective bargaining became a common focus for both organizations. Interestingly, the AFT, under the influence of Albert Shanker, the AFT president in the 1980's, began to shift the union's position and toward what Kerchner and Koppich (1993) call a union of professionals. The AFT adopted a position that favored interest-based bargaining, adopted national standards, accepted the need for testing and accountability, and supported greater teacher-administrator collaboration (Kahlenberg, 2006, p. 21).

Both of these national unions in the 1990's adopted similar positions regarding teacher professionalism. At the same time, local unions, through collective bargaining, grew as powerful entities in that they impacted not only the work of teachers but also the operations of the district as an organization. "Unions affect both the written contract under which teachers and administrators interact and the psychological contract through which they define themselves as workers. Widespread teacher unionism ranks among the most powerful educational policy interventions in the last half century" (Kerchner & Koppich, 1993). Industrial mindsets have cemented the notion that the role of unions is to protect employees, via salaries and working conditions, much like the focus of the NEA.

The studies of Kerchner and Koppich suggest that unions need school districts to empower teachers to reform and reorganize schools, to impose professional standards, and to increase student achievement. Conversely, management should consider working with the union to reshape job descriptions, impact school reform, and change labor contracts. This is where the role of the AFT organization has played a critical role. Since the 1980's, the AFT has focused on reform efforts, with attention on how unions and management need to work collaboratively to change belief systems and current work practices, and to give birth to *professional unionism* (Kahlenberg, 2006; Kerchner & Koppich, 1990).

Professional unionism changes the emphasis of union work, with particular attention to these three areas: site decision making, team teaching and district-level councils and committees; a focus on care, dedication, and commitment during negotiations; and protecting the quality and integrity of teaching, with due process rights for individual teachers.

Professional unionism creates a new mindset around industrial labor laws. It asks for a joint commitment on district reform, union-management collaboration, and the belief that there is an expanded role for teachers. Kerchner and Koppich (1993) outline the following as beneficial to this new partnership: encourages teachers to act proactively when responding to students and families, encourages teachers to create an environment where they can be responsive to student needs and undertakes critical school and educational issues that impact student achievement, engages unions to work collaboratively to solve educational dilemmas, and shares in the ownership of decisions. The collaboration is centered on "Building the capacity of professionals within an

organization to diagnose and solve complex problems and to change systems; about building the capacity of the union to become the organization that speaks for teaching as well as for teachers" (p. 203).

Table 2.1: Industrial vs. professional unionism from *A Union of Professionals: Labor Relations and Educational Reform* (p. 10), by Kerchner and Koppich, 1993, New York: Teachers College Press. Reprinted with permission.

Old Industrial Style Teacher Unionism	The Emerging Union of Professionals	
 Emphasizes the separateness of labor and management: Separation of managerial and teaching work Separation between job design and its execution Strong hierarchical divisions 	Emphasizes the collective aspect of work in schools: • Blurring the line between teaching and managerial work through joint committees and lead teacher positions • Designing and carrying out school programs in teams • Flattened hierarchies, decentralization	
 Emphasizes adversarial relationships: Organized around teacher discontent Mutual deprecation – lazy teachers, incompetent managers Win/Lose distributive bargaining Limited scope contract 	Emphasizes the interdependency of workers and managers: Organized around the need for educational improvement Mutual legitimating of the skill and capacity of management and union Interest-based bargaining Broad scope of contracts and other agreements	
Emphasizes protection of teachers:	Emphasizes protection of teaching:	

In 1987, the first Trust Agreement Project, supported by the California Federation of Teachers (CFT), California School Boards Association (CSBA), California Teachers Association (CTA), and the Association of California School Administrators (ACSA), was created as an endeavor that encouraged management and union to partner together on educational issues outside of collective bargaining, embracing the "emerging union."

Issues of student achievement, teaching quality, and curriculum were the central topics addressed in the Trust Agreements, including a *trust* to set aside funding (time, money, personnel, and authority) to address mutually identified areas of need (Koppich & Kerchner, 1990). The focus of the project was to develop models of Educational Policy Trust Agreements in six California districts. These models included a focus on school reform through the development of new relationships with teachers and administrators and broadened labor-management discussions. The trust agreements led to some critical practices and actions for district-union relations: dialogue about mutual interests, a need for strong leadership from both union and district, context dependent agreements that serve as catalysts of change, shared decision making and responsibility over financially based achievement decisions, and the possibility of role changes for persons within the organization.

Koppich and Kerchner (1990) describe a three-generation process for unions to move toward professional unionism. Generation one gives the teacher little voice in labor relations; also known as "meet and confer." Second generation is distinguished as the "era of good faith bargaining," where there is a clear line between union and management and conflict is part of the bargaining environment; most school districts are second generation. Third generation labor talks are distinguished as "professional unionism." Bargaining exists in a collaborative environment where the union is viewed by management as part of the solution to respond to issues. The Trust Agreement may have served to move some districts to third generation labor relations and educational reform, especially in curriculum efforts.

An example of a Trust Agreement that is still in tact in a district is the Peer Assistance Review Program in the Poway Unified School District. Consultants, current tenured teachers, peer assist and evaluate first-year teachers. The consultants work closely with principals and district-level administrators to move a first-year teacher to second year or terminate the contract at the end of year one. While starting on rocky footing, the Peer Assistance Review Program is a strong, foundational piece of the evaluation process in Poway. In Petaluma School District, the Trust Agreement transferred the responsibility of staff development content to a decision-making body of teachers and administrators. As a result, the district staff development team is comprised mostly of teachers who have made changes in the district's reform efforts for student achievement, including vertical and horizontal articulation across schools and offering a selection of staff development offerings to meet teachers' needs.

Eight years into the Trust Agreements, two union leaders, Adam Urbanski and Helen Bernstein, gathered leaders from 21 school districts, both NEA and AFT affiliated, to discuss education reform and strategies to address financial cuts in education. They found that reform efforts and decisions were being made without the input of teacher unions. Earlier discussions of district reform efforts found teachers silent. In 1996, the Teacher Union Reform Network (TURN) was officially organized to address teacher roles in student achievement and educational reform. TURN is comprised of local unions from both the American Federation of Teachers (AFT) and the National Education Association (NEA) who come together quarterly to reframe the role of teachers and unions in the educational system (Urbanski & Nickolaou, 1997). "Thus the primary goal of TURN is to promote new union models that can take the lead in building and

sustaining high achieving schools through improving the quality of instruction" (Urbanski & Erskine, 2000).

Urbanski, president of the Teacher Union Reform Network (TURN), has broadened the view on how management can and should develop teacher leadership, within a distributed leadership model. The key question posed by TURN members as they pursue a collegial work model is, "Can local unions convince members to see themselves as change agents and can school management and board members support this thinking?" Even though Urbanski has helped to define teacher leadership roles through TURN, it has not had, at this point, a substantial effect in reforming school leadership or expanding teacher leadership roles.

The examples from Poway and Petaluma, districts in California, show how the emerging roles of unions and districts can potentially impact district-wide reform. It appears that a partnership of trust would be critical to have in place to start to build teacher leadership capacity in a school district through distributed leadership. The concept and definition of distributed leadership to teachers, as in these two districts, has entered the field of education; this could be due to the intensifying demands on the traditional role of principals. In the private sector, distributed leadership has gained a foothold in some successful companies like Saturn. Education, however, is in an embryonic stage of implementing the concept (Elmore, 2000; Gronn, 2000). Despite minimal empirical data supporting distributed leadership and its link to student achievement, it holds enough promise that some educational organizations are pushing on in its infancy. Lashway (2003) argues that school leaders should consider thinking and acting more broadly about leadership; distributed leadership may hold some promise in

this endeavor. The concept and definition of distributed leadership is currently in an evolving state. The literature is teeming with definitions of shared leadership, teacher leadership, and collective leadership as forms of distributed leadership.

Teacher Leadership

Another body of leadership literature, relevant to this study, is teacher leadership. In this section, the definition and research on teacher leadership is reviewed with an exploration on its relationship to the concepts of distributed leadership. In addition, attention is given to the role of the principal and the conditions that serve as supports and barriers to teacher leadership.

In 2001, the Institute for Educational Leadership in Washington, DC, published a report on teacher leadership. One evolving definition of teacher leadership states:

Teacher leadership is not about 'teacher power' ... it is about mobilizing the still largely untapped attributes of teachers to strengthen student performance at ground level and working toward real collaboration ... a kind of shared leadership, in the daily life of the school. (p. 4)

Historically, teacher leadership has not been widely practiced and has been narrowly defined. Teachers have felt that leadership roles belong to "someone else." The education environment creates "classroom work" for teachers and "managerial work" for principals. Only sometimes did their worlds entwine. Teachers were not encouraged or supported to question authority and viewed their job as a vocation, not a career. The initial structure of the education system and policy did not create opportunities to empower teachers and did not provide the time to collaborate (Urbanski & Nickolaou, 1997). The structure also shaped a system that identified a leader in a hierarchical

organization that caused teachers to be reactive rather that proactive in making curricular decisions (Smylie & Brownlee-Conyers, 1992).

The Institute for Educational Leadership (2001) quotes Paul Terry, "Principals have always told their subordinates how to act ... teachers have had little voice in workplace issues ... not exerted much control over their profession as a whole...affects productivity and commitment ... ultimately affects their teaching capabilities" (p. 7). Contrast this with Katzenmeyer and Moller (2001) who recognize teacher leadership as, "Teachers who are leaders lead within and beyond the classroom, identify with and contribute to a community of teacher learners and leaders, and influence others toward improved educational practice" (p. 5).

Andrews and Crowther (2002) added a new dimension to Katzenmeyer and Moller's concept of teacher leadership, "... principled pedagogical action ... derives from the distinctive power of teacher to shape meaning" (p. 154). The addendum caused them to further their work in the area of parallel leadership. Parallel leadership requires teacher leaders and principals to work collectively around a common shared purpose and respect, with each having an equal voice (Andrews & Crowther). The notion of collective work requires parallel leadership to be highly relational. Unfortunately, this aspect alone can serve as a barrier to its success, given the different roles and functions of their respective positions (Beachum & Dentith, 2004; Blegen & Kennedy, 2000; Polglase, 2003; Smylie & Brownlee-Conyers, 1992).

Consider for a moment the work of Smylie and Brownlee-Conyers (1992), who conducted a qualitative research study in a K-8 Midwestern suburban school district.

They investigated the interpersonal relations as well as strategic decisions made by seven

pairs of teacher leader-principal partners. The teacher responsibilities were primarily as instructional leaders to the school and district. Each teacher was assigned a full time contract, with part of the school day in the classroom with students. Interviews of the partners revealed that there were a number of factors that needed extended time to develop: (a) resolving ambiguities and uncertainties in the conditions under which their work needed to occur, (b) untangling interests and prerogatives they each brought to the new working partnership, and (c) defining expectations for teacher leadership, interpersonal obligations, and strategic interaction. It is worth noting that both principals and teacher leaders were concerned about their lack of interpersonal skills in their working relationships. Principals commented that teachers did not exhibit confidence early on in the relationship. As the pairs struggled with the defined factors, their four-year time "forced" them to work together. A shared vision became the foundation and glue that held together the development of the new relationships. They all found ways to trust one another and develop a mutual respect for the work of both teacher leaders and principals in shaping the work of the school.

This study is significant in showing the time it takes for teachers and principals to form new working relations. The challenges of learning new roles and developing working relations was confirmed in the work of Yep and Chrispeels (2004) and Shiu, Chrispeels, and Doerr (2004). Incorporating teacher leadership in the decision making, at both the district and school levels, has been purported to be a key building block to school reform efforts (Beachum & Dentith, 2004; Smylie & Brownlee-Conyers, 1992; Suranna & Moss, 2000; Urbanski & Erskine, 2000). As a foundational element in reform, it becomes necessary to reevaluate the relationship between teacher and principal, as well

as the relationship of site leadership to the district. Smylie and Brownlee-Conyers demonstrated in their study that it is the relationships between teacher leaders and principals that is the leverage point in developing a strong teacher leader cadre. All of these studies suggest that sharing leadership and encouraging teachers to take on new roles takes time and requires the learning of new knowledge, skills, and dispositions.

TURN recognized the work of Lambert and others developed the following foundational beliefs based on that work: (a) teachers and unions are catalysts for change, (b) teachers must accept responsibility for change, (c) unions must view themselves as leaders of reform, and (d) labor and management relations must be viewed as a shared responsibility and work beyond the "bread and butter" issues (Urbanski, 1988, p. 282-283). Smylie (1995) concurs with TURN's basic tenets of developing an organization of small leadership groups, in the areas of professional development, pre-service, educational issues, and teacher compensation redesign.

Lambert (2003) recognized that "when we define leadership as reciprocal, purposeful learning in a community, teachers are much better able to see the many opportunities for them to contribute" (p. 18). Teacher leadership at the site level is enhanced with ongoing staff development in content, concepts, and skills in both academic area of expertise and leadership building capacity. Lambert characterizes schools with high leadership capacity as more likely to exhibit distributed teacher leadership. These schools have learning and instructional leadership as part of the everyday fabric of work. A school with leadership capacity is distinguished by:

(a) community members, parents and students included, participating as learners and leaders in study groups, (b) sharing a common vision of results, (c) using inquiry to guide decisions and practice, (d) broad

involvement through collaborating and collective responsibility, (e) reflective practice, and (f) increases in student achievement. (p. 5)

According to Frost and Durrant (2002), teacher leadership "... needs to emphasize the collegial dimension which implies responsibility, mutual accountability, and collaboration" (p. 174); in contrast, teacher leadership is also often defined as "... the extent to which teachers can be persuaded to take on management roles" (p. 176). The points of view that Frost and Durrant illuminate provide little clarity as to the responsibility of the teacher when it comes to leadership efforts. The question of teacher leadership as taking on "management" responsibilities or teacher leadership as "leading" collaborative work appears to need attention and refinement. Both practitioners and researchers conclude that the need, however, for teacher leadership is clear. Teachers provide the dialogue necessary to define values and goals for effective schools, develop collaborative relationships necessary for school improvement, support teacher morale and retention, and allow teachers to have a voice to exercise their leadership in a democratic system (Frost & Durrant; Mullen, Gordon, Greenlee, & Anderson, 2002; Whitaker, 1997).

Compare this to the teacher leadership work by Beachum and Dentith (2004), where "Emergent theories of leadership urge school administrators to abandon ideologies and practices of linear management and control" (p. 281) as a reform effort. Teachers are encouraged to share their expertise in an environment of mutual respect and new innovations that do not require prior approval by the administration. The school atmosphere honors risk taking and failure is deemed a learning experience; a place where teachers have a role in decision making and management (Smylie & Brownlee-Conyers,

1992). As a summary to the research described, a working definition of teacher leadership is captured by Katzenmeyer and Moller (2001), "Teachers who are leaders lead within and beyond the classroom, identify with and contribute to a community of teacher learners and leaders, and influence others toward improved educational practice" (p. 5).

The Role of the Principal in Developing Teacher Leaders

Pivotal to the development of teacher leaders and its sustainability in a school culture is the principal. The principal sees that an essential element for successful school reform rests in the development of teachers by empowering them to lead, giving teachers meaningful leadership roles (Thompson, 2004). Terry (1995) cites a 1994 study done by Peel and Walker, that identifies strong commitment, risk taking, communication, and the ability to identify potential problems, as characteristics of principals who have had success with empowering teachers (Beachum & Dentith, 2004; Polglase, 2003; Terry, 1995). The culture and environment modeled and created by the principal is key to opening the doors for teachers to "volunteer" to lead (Smylie & Denny, 1990). In 2004, Beachum and Dentith conducted an ethnographic study of 25 teachers and their beliefs about their roles as teacher leaders. The findings of the study describe school structures and organizational patterns, processes practiced among teachers, and use of outside resources and strong community relationships as necessary to support and sustain teacher leadership. Their research approach and findings are relevant to this study, which explores how members of a district Math Council define teacher leadership and the factors that supported or constrained their work.

Challenges to Teacher Leadership

Some teachers learned to cope by honing their skills in creative insubordination...wrote lesson plans that would satisfy their supervisors...some teachers led dual lives. This eventually became second nature—and an expected aspect of a teacher's existence.... And for the sake of such autonomy in their own classrooms, teachers sacrificed their prospects for influence at the school level and beyond. (Urbanski & Nikolaou, 1997, p. 245)

A barrier to the success of teacher leaders is reverting back to the hierarchical structure of leadership (Harris & Lambert, 2003). In this model, teachers are involved in a task and social exchange where they impart a service to meet a group's needs. For example, a group of teachers may need some training on a newly adopted district assessment on writing. A teacher leader is "anointed" to train the group. The group complies during the training and the teacher leader's power is in providing a need for the teacher group. This type of leadership facilitates the personal growth of individuals and benefits the teacher leader, with *hopes* of having an impact on student achievement.

On a larger organizational scale, principals and superintendents find teacher leadership difficult to embed in a culture. Teachers value their autonomy and isolation and do not want to spend time developing their own leadership potential. The informal leadership that teachers value makes them reluctant to take on leadership opportunities (Krisko, 2001; Smylie, 1995). The evolving model of leadership work is described as authority loosening the hierarchical leadership power structure toward a more democratic structure which is challenging to attain (Barth, 1991; Elmore, 2000; Gronn, 2000; Hart, 1995; Silva, Gimbert, & Nolan, 2000).

The democratic structure itself has its own teacher barriers. Teachers are concerned that relationships with colleagues may diminish when in a leadership role.

"Caught in the social and normative contradictions concerning teachers' work with students, administrators, and other teachers, efforts to professionalize teaching through job redesign and organizational restructuring may be rejected or compromised by the very group these efforts are intended to serve" (Smylie & Denny, 1990). Teachers struggle with colleagues opposing their point of view, resentment toward their leadership role, and fears of being criticized (Katzenmeyer & Moller, 2001). There is peer pressure not to behave like "administrators," or be subjected to ridicule by peers. The lack of personal, interpersonal, and group skills needed for successful leadership, appears to be an even larger impediment (Barth, 2001; Lambert, 2003). Unfortunately, administrators and teachers who are committed to teacher leadership work for change will sometimes tire of the time needed to make the change and fall back on the hierarchical model by forcing change on the teachers (McGhan, 2002).

Other structures and attitudes that act as barriers to developing teacher leadership are time, testing, school structure, and not taking leadership responsibility (Barth, 2001; Blegen & Kennedy, 2000; Lambert, 2003). For example, when approached with the opportunity for teacher leadership, like heading the school improvement committee, teachers are not provided the time, nor may possess the leadership skills, to adequately prepare and run an effective meeting; it is usually an add-on to current responsibilities.

Coyle (1997) chaired a grant-funded project by the state of New Jersey. The grant's focus was to improve schools via the tenets of the Effective Schools movement by working collaboratively in school culture, curriculum, assessment, staff development, and community involvement. The eight lead teachers at the forefront found that teacher isolation and the yearly school calendar were their biggest barriers. Small dents were

made in breaking the barriers of teacher isolation by creating venues for increased collaborative discussions; however, the time structure of the school year continued to become an even bigger impediment.

TURN would support both creating a structure for teachers to become leaders and compensating them for their "extra" work through a career ladder or a compensation model (Hart, 1994; Odden, 2000; Rosenholtz & Smylie, 1984; Urbanski & Erskine, 2000). TURN has worked with twenty-four districts to develop structures for compensation on a career model; districts have yet to completely scrap the current salary schedule of steps for teachers. The political arena of teacher unions, teacher "buy in" of the compensation model, and district negotiations and priorities slow this process (Odden, 2000; Urbanski & Erskine). In progress, however, are various compensation models that are focused on the following: school-based performance award programs, National Board for Professional Teaching Standards, and knowledge and skills-based pay (Urbanski & Erskine). In addition, the restructured schedule should include financially rewarding teachers for their expertise in a content area, leadership roles, or expertise in technology (Odden., Kelley, Heneman, & Milanowski, 2001). Thus, expertise becomes an important dimension in defining teacher leadership and is critical to distributed leadership.

Although there are challenges to teacher leadership, students of both distributed leadership and teacher leadership suggest using the distributed leadership model as one of several approaches in a system that should be explored to meet the overwhelming instructional challenges in our classrooms. It is possible that if distributed leadership is implemented systemically, schools and districts will be able to respond to all levels

(local, state, and federal) of assessments imposed on the educational system, with specific attention to assessments related to individual student success. The purpose of this study is to explore how one school district worked with its teacher union leadership to develop a model of distributed leadership, discussed in the next section, through teacher leaders.

Distributed Leadership

Teacher leadership has its place at the core of distributed leadership. Similar to distributed leadership, research suggests that teacher leadership has two essential characteristics; many teachers in the organization who possess (a) leadership knowledge and (b) leadership skills (Snell & Swanson, 2000). As mentioned earlier, Andrews and Crowther (2002) add that distributed leadership, different from teacher leadership, flattens the hierarchy of leadership in schools whereby the leadership of teachers is equivalent to principal leadership. Couple these concepts together and the sum is that the responsibility of teacher leadership as related to student achievement, belongs to everyone (Frost & Durrant, 2002; Lambert, 2003; Richardson, 2003; Smylie, 1995).

In schools, teachers are a natural, expert, and available resource to turn to in efforts to distribute leadership. The concept and definition of distributed leadership has entered the field of education because the demands on the traditional role of principals are intensifying and because leadership research has shifted the focus from "leader" to leadership as a property of the organization (Ogawa & Bossert, 1995). Older concepts such as democratic leadership, shared leadership, participatory leadership, and site-based management (SBM) are more common in educational leadership research (Chrispeels, 2004). Each of these terms has a slightly different connotation and perceives the engagement of teachers and sometimes the broader community in different ways. As an

example, site-based management addresses the more specific involvement of teachers and parents in actual decision making at the school site. However, studies of SBM have shown the level of decision making varies depending on the willingness of the principal to share power and the skills and ability of the SBM committee members (Leithwood & Menzies, 1998).

The inconsistency in the formal definition of the concept makes it difficult to systemically observe distributed leadership in a school or district. Spillane et al. (2001), however, has defined distributed leadership as a way of thinking systematically about leadership practice. Despite the ambiguity that still riddles the literature, Spillane's definition and concept has guided other studies in exploring the distribution of leadership. The one commonality among experts in the field of leadership distribution is that the teacher is a critical component to the leadership practice.

Spillane notes that one of the earliest definitions of distributed leadership was in 1954 when Cecil Gibb, an Australian social psychologist, described leadership as tasks that are accomplished by a group of individuals, thus possessing a group quality. He also noted that situations will dictate who leads, therefore, different individuals can serve as leaders, depending on the task. Leadership is thus defined, by Gibb, as the sum of each person's contribution, taking on a group quality. This is not different from others in the field. For example, Elmore (2000) asserts that distributed leadership is based on the assumption that all members in the organization can lead where they have expertise and, therefore, leadership can be distributed or shared.

Gronn (2000) has taken the position that leadership should take on a different form, given the trend and organizational work that lies ahead. Currently, the dualism of

leader-follower notion of leadership may limit any gains that could result from a task focus. Some critics in education suggest abandoning leadership altogether; Gronn responds to them by rethinking leadership in the form of *activity theory or socially distributed activity theory*. Gronn suggests that activity serve as a bridge between organizational structures and actions (agency). Activity theory is the "division of labour" focused on the social constructs that occur during agency and allows for taking full advantage of teacher expertise as well as the use of tools like data and information. "The division of labour is the principal driver or generative mechanism for the restructuring of work and workplace relations" (Gronn).

Elmore's (2000) concept is also an interesting notion to explore. Recall that he defines distributed leadership through expertise (knowledge, skills, interests, predispositions, or aptitudes) that people within the organization either possess or develop. It is the complement of the competencies that all persons in the organization possess that allow for a fluid leadership. This fluid leadership allows for the organization to "glue" together toward a common goal. "Distributed leadership, then, means multiple sources of guidance and direction, following the contours of expertise in an organization, made coherent through a common culture" (p. 15). It appears to be "clear" in process and product.

Spillane (2006) has built his model of distributed leadership on the premises of Gibb, Elmore, and Gronn, asserting that it is much more than shared leadership. He would consider Elmore's rendering of distributed leadership as a *leader-plus* model and does not capture the complexities of leadership as it is distributed. Spillane depicts distributed leadership as a leadership practice, not just the roles that are held. It is the "...

collective interactions among leaders, followers, and their situation ... the defining element of leadership practice" (Spillane). With this, Spillane defines critical elements for distributed leadership: time, interactions of leaders and followers, and the situation. These critical elements result in leadership practice. Elmore's concept, in support of Spillane's, can be described as having many members of the organization with expert knowledge, resulting in empowerment and collective action in the organization. Foundational to mobilizing the organization is a focus on a common vision, common tasks, and shared common values.

The multiple leader effect inherent in distributed leadership and described by Elmore is further enhanced with the social distribution of leadership, which produces an interdependency of teacher leaders in guiding and rallying a staff around change, especially instructional change. In order for the multiple leader effect to be present, it is necessary for the leadership of the school to be decentralized and redefined as one that is fluid and evolving. The school leader should no longer be defined by position, but by the product of the work of the leaders at the site, including the principal (Elmore, 2000; Sergiovanni, 1993; Spillane et al., 2001). Spillane (2005) identifies and strengthens Elmore's social distribution of leadership in the following three categories: collaborated distribution, collective distribution, and coordinated distribution. It is in these categories of leadership that Spillane distinguishes distributed leadership as a concept more than shared leadership.

Before discussing the categories, it is essential to more fully elucidate Spillane's (2006) model of Distributed Leadership. The critical aspect of Spillane's model is that

distributed leadership is about leadership practice. Figure 2.1 provides a visual of his framework of Spillane's concept of distributed leadership:

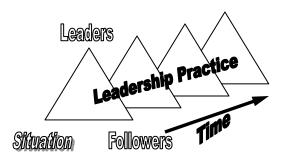


Figure 2.1: From *Distributed Leadership* (p. 3) by J. Spillane, 2006, San Francisco: Jossey-Bass. Copyright 2006 by John Wiley & Sons, Inc. Reprinted with permission.

As mentioned before and described by Figure 2.1, the nature of interactions between the leader, the follower, and the situation define leadership practice. It is important to note that there is an evolving interaction of leadership practice, over time, as depicted by the multiple triangles. This is a critical concept to capture as part of distributed practice. It may be assumed, in an educational setting, that the leaders are the principals and teacher leaders and the followers are whoever is on the committee. Spillane's model sets itself apart in that the definition of leaders and followers must expand beyond traditional, hierarchical models. The model stretches to a "web" of leaders, followers, and situations that require leadership work. The situations described by Spillane attempt to encompass the complexity of factors and use of tools that help to define the leadership practice. So often tools like data or organizational structure are taken for granted and are not identified as important to shaping leadership, when in fact, they are important tools that shape the interactions between leaders and followers.

Another clear distinction of Spillane's model is that the *leader plus* practice is not an example of distributing leadership. Adding a person to the team does not necessarily define a distribution of leadership, though it may lead to it. Spillane describes various opportunities through which leadership can be distributed: leadership through function or routine, subject matter, school type and size, and the developmental phase in which a leadership team is currently postured. In the case of this study, the focus is on distributed leadership through subject matter. This case study focused on the district-wide distribution of leadership in the area of mathematics. An interesting note that Spillane makes is that depending on the subject, the participation of leaders can vary. For example, he notes that if the subject matter is language arts, teachers, principals, and assistant principals were more likely to be involved in the curricular work versus a limited number of teacher leaders who will step up for areas like math and science.

Spillane (2006) describes three types of distributed leadership through which leadership practice is magnified. It is the *fine* difference in the models that leadership practice changes within the leadership structure in an organization. In addition to defining the different forms of distribution, attention will be given to Spillane's multiyear study in the Chicago area. His study, conducted in 1999, involved 15 K-5 and K-8 schools and is titled "The Distributed Leadership Study." For five years, Spillane and his colleagues employed a mixed methods procedure to unpack distributed leadership as practice. *Spillane's Types of Distributed Leadership*

Collaborated distribution. The key in collaborated distribution is the interdependency of leadership that occurs between two or more leaders in a particular place, time, and focus. It is a reciprocal relationship in which leaders' actions directly

impact one another immediately and can support or could potentially constrain, other leaders' actions in the room. In essence, the leaders work together as co leaders.

At Adams School, the literacy focus appears to have supported the leadership opportunities for teachers. An example of collaborated distribution at work is evident in the co leading work between a teacher and literacy coordinator during literacy committee meetings. It is not uncommon for both experts to strengthen and support each another in a meeting so as to increase the experience and curricular knowledge of the committee members. During one meeting, the teacher leader started discussing the use of graphic organizers and the literacy leader chimed in with the importance of the use of graphic organizers for student use. This interaction resulted in motivating and developing teacher capacity in using graphic organizers as an instructional tool.

Collective distribution. While collective distribution possesses the same mission as co-leaders, the interdependency does not occur in the same place and time as described in collaborated distribution. Collective distribution allows leaders to work outside, independently, yet communicating with one another and having a clear vision of the co-leadership work. The clear vision allows for this model to meet the same end. Collective distribution, through Spillane's example, can be seen at Ellis School through the evaluation process. Typically, teachers are formally evaluated twice a year. The principal and assistant principal felt that this provided a "dog and pony" show instead of really understanding instruction at the school. The strategy that they employed was that the principal performed the summary formal evaluation and the assistant principal visited classrooms regularly each day, observing lessons and offering feedback, as a formative assessment. The assistant principal's role was more of a formative evaluation role,

supporting teachers throughout the year. Both summative and formative evaluations, in this case, worked interdependently to improve and understand instruction at Ellis, yet the administrators were not in the same place at the same time.

Coordinated distribution. Coordinated distribution describes a more linear model of leadership. There are clear leaders and tasks that need to occur, where the leaders work either together or independently. The multiple, independent-ordered tasks are essential to co-leading. While there appears to be overlap in the construction of distributed leadership, it is what occurs among the leaders as the practice that defines the distribution. It also appears that this is an entity that can only illuminate through sequential leadership behaviors. It is a result of interactions and situations that follow from each involved in the task and responsibility.

An example of coordinated distribution can be seen at Adams School in Chicago. At Adams, the Assessment leadership team developed a five-week, step-by-step identified task that focused on improved instruction in reading and writing. The sequential steps started with the site's literacy coordinator developing a student reading and writing assessment to administration of the test to scoring of the test to multiple meetings between the principal and coordinator to teachers interpreting the data and implementing instructional classroom strategies. In this model, each of the steps depends on the previous step, thus the interdependency of the steps leads to leadership practice. In this particular case, leadership practice is spread through many in the organization—administrator, teachers, and literacy coordinator.

Furthermore, there appears to be agreement that distributed leadership, as Elmore(2000), Sergiovanni (1993), and Spillane et al. (2001) have described, is about the

dynamic work that occurs with colleagues in the system and is not necessarily task driven, but needs a focus. Who leads and who follows in the dynamics is a function of the problem, and not a hierarchical system. In defining the nonhierarchical system, the focus of leadership is on the *social distribution* of a task, situation, and the people involved, particularly in instruction (Copland, 2003; Timperley, 2005). In 1995, Urbanski stated, "Leadership is shared and defined by how many others are involved rather than how many others are affected. Administrators and managers view it as their responsibility to provide necessary top-down support for bottom-up reform" (p. 290).

A subset of the distributed leadership model focuses on the role of distributed cognition (Gronn, 2000; Harris, 2003; Lambert, 2003; Lashway, 2003). Lambert shapes the following about distributed cognition, "Leadership capacity involved an infrastructure for learning composed of roles and responsibilities, inquiry, reflection, and a focus on student learning" (p. 41).

There appears to be a direct link to the work of Gronn, Harris, Lambert, and Lashway and the development of the types of distributed leadership practice, as described by Spillane (2005), which involved distributed cognition. With distributed cognition, learning takes place in a social context where colleagues are integrating skills and knowledge, materials, and current organizational structures to forge into systems-thinking and work. Distributed cognition focuses on collective inquiry and serves as a catalyst that redefines leadership as the responsibility of everyone.

When beginning to consider the social context of distribution, the idea of structural relations emerges. According to Gronn (2000), there are five significant areas of consideration relative to structural relations: authority, values, interests, personal

factors, and resources. A balanced work environment creates and takes all these considerations and coordinates all work in concert with one another toward the completion of a task. The ambiguity affords teachers and principals the opportunity to emerge and create a new "type" of working relationship. The potential symbiotic relationship between teachers and leaders will reduce and eliminate individualism, and encourage construction of knowledge in social contexts that are meaningful (Chirichello, 2001).

Emerging Research on Distributed Leadership

Researchers have conducted studies to begin to empirically describe the effects of distributed practice. The research reveals most of the work through elementary grade-level teams. In 2003, Burch and Spillane published a paper based on a four-year longitudinal study built on distributed leadership through subject matter. This report focused on the first two years. Burch and Spillane interviewed and observed administrators and curriculum coordinators in eight elementary schools in a large urban district, pursuing data on leadership to improve mathematics and literacy instruction. In contrast to Burch and Spillane's study, this case study investigated a Math Council that was sustained at the *district* level, providing expertise in mathematics. The overlap in both studies is the subject matter focus for leadership distribution. In addition, Burch and Spillane's study describes some conditions that provided for distributed leadership in subject matter.

Burch and Spillane (2003) connected four interrelated fields of study that scaffold the framework of their work: teachers' subject matter beliefs, human cognition, social structures, and distribution of instructional leadership. The eight participant elementary

schools were selected using the following criteria: high poverty, diversity in student demographics, growth in standardized tests, schools in reform efforts (various time frames), and schools engaged in different reform efforts. In each school, three identified individuals (principal, assistant principal, and site curriculum coordinator) were observed and interviewed in their instructional leadership roles. Through an analysis of interviews and observations of thirty leaders, Burch and Spillane uncovered some distributed leadership practices as it relates to subject matter; a different response for literacy and mathematics. One finding that emerged is that elementary teachers are like high schools when it comes to teaching and leadership in subjects. According to their study, elementary schools approach subject matter expertise and leadership like high schools; as independent areas. Figure 2.2 shows the data collected from Burch and Spillane:

View (N=30)	Literacy	Mathematics
Subject is core to curriculum	80 %	83 %
Skills support learning in other subjects	83 %	17 %
Skills should be taught in a particular sequence	16 %	53 %
School has primary expertise for reform	80 %	13 %
External community has primary expertise for reform	2 %	63 %

Figure 2.2: From Elementary school leadership strategies and subject matter: Reforming mathematics and literacy instruction by P. Burch & J. Spillane, 2003, *The Elementary School Journal*, 103(5), p. 526.

The data reveals the attitudes and beliefs of leaders as it pertains to literacy and mathematics. While both areas show as critical to the core curriculum, who has the expertise for school-wide change and how it is instructionally integrated into the curriculum varies. Of particular note, the data show that for literacy reform, the site has the expertise and leadership through its teachers to work through changes. At one school, the principal "... emphasized the importance of teacher input via the literacy

subcommittee and the school's efforts to reward and acknowledge that input" (Burch & Spillane, 2003). At many schools, it was noted that the teachers' leadership was invaluable in their expertise and efforts to reform literacy.

Conversely, the percentage of leaders who viewed schools as possessing the expertise to impact academic change in mathematics is minimal. The data shows that the expertise for mathematics needs to come from external resources. When it relates to math, "...leaders placed much less emphasis on teacher participating in decision making and instead frequently attributed improvements at their schools to use of an established mathematics curriculum associated with a textbook" (Burch & Spillane, 2003). External resources, both human and material, were viewed by site leaders as strategies for math reform. While there were multiple leaders on each site engaging in the instructional leadership, Burch and Spillane found that the administrators were less engaged with math versus literacy instruction. Because of this, they concluded that in subject matter reform, "The work of multiple school leaders can mediate the progress of instructional reforms, and efforts to improve school leadership reform must move beyond the principal to include a wider array of school leaders" (Burch & Spillane).

Some of the data illustrated, but did not emphasize, the role that site leaders, specifically the principal, played in instructional leadership. As principals engaged with teachers in meetings, walkthroughs, and classroom observations, they gained insight on how they could support the curricular reform efforts at the school. Some supports include developing a university partnership so that teachers could engage in recent research as part of their work with writing, providing feedback as informal assistance as well as material needs, and supporting time and training to share best practices. Again, this study

focused on the distribution of site leadership through a principal, assistant principal, and curriculum coordinator. However, as quoted in the previous paragraph, there is a need to work through "multiple leaders," beyond administrators, to work through this complex work in student achievement.

Burch and Spillane's (2003) work have an impact on this case study. The attitudes and beliefs about subject matter expertise and leadership from administrators exposed a view that may emerge in this study from both the teacher and administrator leadership roles. This data may have the potential to focus the distribution of mathematics and literacy instruction, K-12 with principals and teachers, at the district level to impact curricular and instructional reform. There may be some overlap in the data as well in conclusions drawn.

Consider the work of Timperley (2005) and the 2005 dissertation of Harrison to provide a context and continued description of what we know about distributed leadership in practice. Timperley uses key concepts of distributed leadership, as defined by Spillane (2003), in relation to improved literacy. Of import is that leadership authority is defined by expertise versus a formal position, thus the implications is that the leadership is among the community (Copland, 2003; Day & Harris, 2002). The analysis from all the studies described will help to inform this study, however, the difference is the focus of the dissertation is on distributing leadership at the district level, with grades K-12 school level leaders.

Similar to Spillane, Copland, and Elmore, Timperley (2005) built her study on the belief "...that distributed leadership is not the same as dividing task responsibilities among individuals who perform defined and separate organizational roles, but rather it

comprises dynamic interactions between multiple leaders and followers" and further, she notes that, "distributed leadership is particularly important in relation to the instructional aspects of leadership." An assumption of Timperley's work is that distribution of leadership across an organization has the potential to build capacity in an organization (Camburn, Rowan, & Taylor, 2003; Day & Harris, 2002), focusing on activities and the social and situation distribution of tasks.

Timperley's (2005) four-year inquiry on leadership interactions among seven school teams comprised of the principal, literacy leader, and three first-grade teachers, takes a closer look at distributed cognition, elaborated on earlier in the review of literature. Literacy leaders served as boundary spanners, working to connect the beliefs and work of the principal as well as the teachers toward a common vision. The research has found that both Spillane (2006) and Camburn et al. (2003) also address the concept of boundary spanning to keep work focused toward a common end. In Timperley's study, data from observations at team leader meetings and transcribed and coded interviews of teachers and the principal, as well as student achievement, were analyzed. Five of the schools, known as Group 1, received aggregated data on student achievement and discussions with the teachers focused on programs and teaching approaches versus teaching implications. Group 2 schools were provided benchmarked student achievement data, with individual student data. As this study relates to Spillane's work, each of the groups was provided a different situation with tools (aggregated versus benchmarked and individual student data) that promoted potentially different discussions toward professional understanding and growth to improve student achievement.

Timperley (2005), first, analyzed the percentage of time spent in meetings to improve student achievement. In year one, Group 1 schools spent most of their meeting times on programs and teaching approaches and Group 2 schools spent more time on individual achievement data, with an affect on teaching practices. In both groups, teacher activity varied with professionalism as a leadership activity. Group 1 teachers trusted one another to diligently execute programs, with support in its implementation, and limited focus on student achievement; group two focused primarily on impacting student achievement. After this work, in both cases, principals put forth recommendations that came from the literacy leader, including staff development, release time, and support.

An inference that Timperley (2005) draws from the professionalism in meetings, which included a focus on vision, and the interactions between the literacy leader and principal, is that different artifacts can have a powerful impact on how a situation is carried out. For example, a focus on student data, as opposed to teaching and learning issues, allowed leaders and followers to professionally interact in a different manner. She found that artifacts, which Spillane (2006) argues are part of the distributed leadership situation and task, have a role at enabling practice and defining leadership. However, it could have had a negative effect on the dynamics of leadership in the meetings also. The achievement data constrained some meeting activities due to its narrow focus of student achievement and teacher responses to the achievement levels. In spite of this, teachers were able to engage in discussions on teaching practices to implement, affecting student achievement. Spillane's work would describe this as leadership practice, whereby the fluid interactions between leaders, followers, and their situation allowed them to practice

as both leader and follower. In addition, Lambert's 2003 work with distributed cognition describes the concept of redefining leadership as the responsibility of everyone.

Timperley's (2005) study has some crossover with the focus of this dissertation study. While this research focus is on the Math Literacy Council, I was involved in the Math and Language Arts Literacy Councils as a participant-observer the last two years. In looking back at Spillane's model of leadership practice through a distributed perspective, a team that included both teachers and administrators focused on improving language arts literacy. The Literacy Council was given a multitude of data and professional discussions about how to improve achievement ensued. As a facilitator and participant-observer for the councils during the first year and for the Math Council only in year two, my observations of the dynamics of the work in the literacy council align with what Timperley saw in her study. The group split and one of the subgroups spent time on programs and teaching and the other group focused strictly on data and classroom implications. Through time, both groups merged but the dynamic was the same as Timperley cataloged. As with Timperley's study, the Literacy Council, after two years, ended up focusing more of their professional dialogue on program and teacher instruction. As the district entered year three, the focus was on program and teacher instruction.

Another recent study on distributing leadership can be found in Harrison's dissertation (2005). The purpose of Harrison's study was to "determine how leadership becomes distributed among the positional and informal leaders in an elementary school" (Harrison). Harrison used Rost's framework to understand the movement of leadership between leaders and followers, focusing her study on how the principal develops capacity

with the elementary school staff and how this development is received and enacted upon by the teachers. Harrison's case study illuminates the following findings that continue to contribute to the field of distributed leadership:

- younger teachers chose to be active followers, instead of taking on informal or formal leadership positions, to their veteran teacher leaders;
- leadership is distributed through committees, expertise, and informal leadership actions;
- 3) leadership is focused on instruction;
- 4) site-based meetings (faculty, committee, and grade level) are part of the culture and allow for teachers to take on leadership roles;
- 5) respect of leadership depends on a teacher's position; and
- communication structures that support multiple leader engagement with colleagues is important.

The significance of this study refers back to the work with the principal as a key player to develop capacity at a school site. The culture created by the principal sets the leadership practices in place at a school site. It also demonstrated that there are many ways in which teachers can lead, based on different site structures. While it does not seem to completely align with the dynamic structure of leadership practice that Spillane (2006) and Elmore (2000), the site still appears to include multiple leaders in increasing the capacity of the site.

As studies move forward to examine education-based distributed leadership, teachers may need to understand and recognize that they, as members of a synergistic decision-making professional community of learners, are not only accountable for the

achievement of their own students in their classes but also for the achievement of all students in the school and district. Learning is cumulative from grade level to grade level. Each level and layer of a student's school experience integrates knowledge, skills, and concepts that scaffold and build the structure of wisdom that students continue to strengthen. From a global view, it is a huge undertaking for each teacher to own the responsibility for each student's education; from the classroom view, it is challenging.

Practitioners and some researchers argue that creating a culture of teacher leadership through a distributed leadership model holds the most hope of enhancing the achievement of each student and the collective learning of all students (Barth, 1991, 2001; M. A. Copland, 2003; Coyle, 1997; Darling-Hammond et al., 1995; Frost & Durrant, 2002; Smylie & Denny, 1990; Timperley, 2005). Theoretically, if schools are successful, each student is engaged in a strong, well-articulated core curricular program, with skill and concept integration from multiple subjects, and a variety of rigorous learning experiences. In a distributed learning community, each adult member of the learning community must be willing to take responsibility for and celebrate the achievement of each student. Similarly, each adult member must be willing to admit to failures and seek out solutions when those failures occur.

Limitations to Distributed Learning

Although the concept of distributed leadership is in vogue and has a great deal of logical appeal, there are challenges to operationalizing distributed leadership which have been identified in the literature. The most difficult challenge is that job distinctions between followers and leaders fall into a gray zone (Gronn, 2000; Spillane, 2005; Timperley, 2005; Zinn, 1997). As noted earlier by Timperley (2005), the current

hierarchical structure in schools is a barrier to distributed leadership. In this traditional hierarchical structure, the principal oftentimes distributes either responsibility *or* authority to practice leadership with others. In this case, the principal delegates a leadership job to the teacher, but the teacher remains in a relatively passive role and is still a follower (Silva et al., 2000; Smylie & Brownlee-Conyers, 1996; York-Barr & Duke, 2004). It is possible in many cases that a teacher can be given authority or responsibility and be "directed" as to how to carry the task out. In this case, the teacher becomes the named figurehead. Distributed leadership, however, not only involves tasks to get done, but also involves *true* delegation of responsibility and/or authority. This dual aspect has the potential to position the teacher to lead, implying that teachers have the ability to lead and guide change toward organizational development and improvement.

The reason why this gets gray is due to ongoing work in the area of teacher leadership. Teacher leadership falls into two categories: informal and formal. Informal teacher leadership is work that is done in the classroom (lesson planning or management of the classroom and school), while formal teacher leadership is work that includes department chairs, the ASB advisor, and other positions that require a move away from the classroom, yet are integral to the culture and workings of the school. Both types of leadership require time to collaborate and professional development of skills and knowledge. However, formal leadership calls for professional and personal skill development in leading groups, teaching adults, action research, and other capacity-building skills sets to increase the success of teachers as leaders (Ash & Persall, 2000; Harris, 2003).

Even with the categorical descriptions of teacher leadership, it is still often confused with distributed leadership and other forms of leadership. Furthermore, conflicts exist in validating teacher leadership. As an example, practitioners in England do not accept the concept of teacher leadership because they view education as a hierarchical system where teachers have a clear, distinct role. This role is clearly not one of the leader (Harris, 2003).

A second challenge is the potential for incoherence in improvement activities that may emerge from distributing leadership, with parties coming together to work but having two different agendas in their minds. Harris distinguished herself from scholars like Day and Harris (2002) and Camburn et al. (2003), and noted that distributing leadership "beyond the roles state" may result in "greater distribution of incompetence." Harris asserted that the role of distributed leadership is advantageous when the leadership focus is on supporting teachers with effective instruction to be implemented in the classroom.

Another area of concern is the ability of the formal leader, in the case of schools, principals, or district office leaders, to put egos aside and surrender authority to others. Dynamic tension is produced with the movement toward trust and developing teacher leaders, where the formal leader is placed in the vulnerable position of not fully controlling the direction and process that results in a quality process and outcome (Harris, 2003; Timperley, 2005). Once a teacher is in the leadership position, there may be other tensions, for example, with the teacher's union. The question of compensation for the teacher becomes a negotiation point as the leadership role is not part of the teaching contract. The school leader should consider ways to financially compensate teachers who

are key players in the leadership of the school (Kelley, 1997; Rosenholtz & Smylie, 1984; Urbanski, 1988).

Compensation may appear to be a small hurdle when reviewing the bigger challenge of how leadership can be distributed in education. The design of leadership practice must be intentional and ongoing. How leadership is distributed to different tasks, who takes on the charge, and how the situation defines leadership practice is one of the biggest challenges ahead as we consider the concept of distributed leadership in education (Spillane, 2006).

In summary, this chapter reviewed various levels of leadership that have an impact on student achievement; specifically, the literature of district reform, union-district relationships, and teacher leadership. Included in the review is the link of the levels of leadership to distributed leadership, the main focus of this study. Center to the discussion of distributed leadership is Spillane's model of leader, follower, situation, and time as necessary components. Studies by Burch and Spillane (2003), as well as Timperley (2005), were highlighted as examples of leadership through curriculum and serve as a research foundation of literature for this case study. The future of teacher leadership in making organizational decisions must include current best practices, as well as creative paradigm shifts and approaches from our current leaders, both administrators and teachers.

CHAPTER 3

RESEARCH METHODS

This study elucidated the effects of distributing leadership at the district level through union-district collaboration that established two K-12 literacy councils, tasked with improving language arts and mathematics instruction. Specifically, this study explored how a teacher's participation in the mathematics council at the district level supported or constrained teachers' leadership at both the district and site level.

The school district has been recognized nationally for many years for its shared interest-based collaborative bargaining model with the teacher union (Kerchner & Koppich, 1993). Through this process, the goal was always to achieve a win-win for both parties, specifically in the areas of salary and benefit negotiations. Within the last five years, this relationship extended beyond "bread and butter" and reached into teaching and learning. A vision that included distributing instructional and pedagogical leadership through teachers in district councils became a structure to distribute leadership. Table 3.1 delineates the membership of the councils. Each year, the structure was revisited and reconstituted, based on district and union leadership discussion and agreement.

As the review of literature in the previous chapter suggested, the last few years of research have surfaced important district level factors that support district and school reform. Except for the early work of Kerchner and Koppich (1993) and Bascia (1998), in general the studies are silent on the role of the teacher union. When unions are mentioned, reform is discussed (Chrispeels & Gonzalez, 2006; Darling-Hammond et al., 2003; McLaughlin & Talbert, 2002) rather than their role in the reform process. This study filled a gap in the literature by exploring a district in which collaborative working

relationships between administration and union in the reform process are in place. Furthermore, the literature review indicated that there have been few empirical studies of the concept of distributed leadership. The few studies conducted focus on distributed leadership at the school level. In contrast, this study examines distributed leadership at the district level. This chapter presents the methodology to be used in addressing the research questions to try to address research gaps. Five critical components of case study methodology will be presented in the research design: (a) the context of the study, (b) the researchers role, (c) the data sources and collection procedures, (d) data analysis, and (e) limitations of the study.

Research Design

This single case study explored the nature of the union/district partnership that led to the creation of the Math Council and uncovered how principals and teachers, who served on the Math Council, perceived teacher leadership roles.

Table 3.1: K-12 Math Council potential participants

Participants	Year 1	Year 2	Year 3
Teachers	16 K-12	10 K-12	11 6-12 Mathematics
	Mathematics	Mathematics	8 K-5 Mathematics
Site	6 K-12 Mathematics	3 K-12 Mathematics	None
Administrators			
Facilitators	2 Union and 2	2 Union and 2	2 Union and 1
	District	District	District

Council member selection was facilitated through a union-district agreement.

During years one and two, all district teachers were given the opportunity to apply for a math council position. Union leadership screened the applications and interviewed teachers, making recommendations to the deputy superintendent. The deputy superintendent and union president finalized the teacher membership list together. The

negotiated work for the councils included 17 days of pay and moved teachers to a *career ladder* salary schedule. Also during the first two years, all site administrators were given the opportunity to serve. Six stepped forward in the first year, and three in the second year. In the third year, no principals were asked to serve.

Year three participants were selected by their leadership roles at their sites. At the 6-12 level, the council members were the school math department chairs. At the K-5 level, eight representatives were selected from the 25 schools. The eight were selected via an application and interview process as described above, with seven extra days of pay on a career ladder salary schedule. District and union leaders in charge of curriculum and instruction served as facilitators. There was participant overlap in years one and two and, with the exception of a four-teacher overlap in year three, the council members were all new.

Given the membership description above, the Math Council provided the setting of this study through which the concept of distributing leadership to teachers was investigated. The phenomenon of interest was district-level distributed leadership. This descriptive case study attempted to unfold and understand how a distributed leadership structure, Math Council, supported or constrained distributing leadership to teachers, in teaching and learning decisions, at the district level. As a review, the research questions addressed were the following:

1. What has been the nature of the relationship between the district superintendent and teacher union president, and in what ways have they worked together to implement a model to distribute leadership?

- a. What opportunities for teacher leadership have been created through the union and management partnership?
- b. How has the superintendent-union thinking evolved over the three years and how has that been translated into changes in the Math Literacy Council's organization, membership, and tasks?
- 2. How did participants on the Math Council perceive teacher leadership?
- 3. How has the Math Literacy Council influenced the enactment of teacher leadership in the district?
 - a. How did the teacher and principal members in the Math Council perceive their leadership?
 - b. In what ways has a curriculum focus supported or constrained, or served as a barrier, to distributed leadership?
 - c. In what ways have Math Literacy Council teacher members played a leadership role in their schools?
 - d. In what ways have school sites capitalized on the distributed leadership structures at the district level?

To address these research questions, I used an embedded descriptive case study methodology as outlined by Yin (2003) who defined a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 13). In this case, the phenomenon of study is distributed leadership within the three iterations of the Math Literacy Council, formed and annually renegotiated by the superintendent and teacher union. Although the district forms a bounded context (Miles & Huberman, 1994)

and is a key aspect of a case, the fluid and changing nature of the literacy council suggest the blurry boundaries between context and phenomenon identified by Yin. The study explored the nature of the relationship between the superintendent and the union that led to the development of the Math Literacy Council. This relationship is explored to establish the larger context in which the council was created. The focus for this study was the Math Literacy Council and how the council evolved over a three-year period as it was socially constructed by the participants through the ongoing interactions and negotiations of the superintendent and teacher union leadership.

Case studies represent an appropriate methodology because they "concentrate attention on the way a particular group of people confront specific problems, taking a holistic view of a situation. They are problem centered, small scale, entrepreneurial endeavors" (Shaw, 1978). The use of an embedded descriptive case study approach allowed me, the participant-observer and researcher, to gain significant insights into how the superintendent and the union leader perceived their roles in the creation of the councils as part of the larger union-district interest-based partnerships. In addition, their perceptions were compared with those of the Math Literacy Council within and across the three iterations. The nature of the qualitative embedded case study allowed me to spend a "substantial amount of time in the natural setting of the study, often in intense contact with participants," allowing for a rich, "thick" description of the phenomenon under study (Merriam, 1998).

Merriam (1998) explained that a descriptive case study in education is one that presents a detailed account of the phenomenon under study—a historical study that chronicles a sequence of events. In this case, the initial discussions of superintendent and

union leader are critical in understanding the establishment of the councils, but it was through tracing subsequent discussions during the council's tenure that brought changes in the council composition and tasks that provided new insights into the phenomenon of distributed leadership. Descriptive case studies are helpful in presenting basic information that can often form a database for future comparison and theory building. A well-designed descriptive and exploratory case study permits a holistic and context sensitive lens, two of the major themes of qualitative inquiry (Patton, 1990).

According to Yin (2003), a major strength of case study research is that the researcher has the opportunity to use multiple sources of evidence, allowing for the inclusion of a broader array of issues (pp. 97-98). This case study provided a rich array of data sources. These included observations of the Math Council over the three years, interviews of key players, and council minutes and documents. It was important to gather data from a variety of sources because every data collection method has some weaknesses and if utilized alone would not provide sufficient information to capture the full perspective. For example, Patton (1990) highlights that observations are limited by the researcher's lens, interviews are limited by participants' personal perceptions and biases, and documents can be inaccurate and variable in quality. The multiple data sources increased validity and reliability through triangulation of data (Patton; Yin, 2003). These sources also enabled me, the researcher, to create a more comprehensive picture of how the literacy councils came into being, how and why they were modified over a three-year period and how those changes influenced teacher perceptions of teacher leadership.

One of the strengths afforded by exploring the research questions through a case study is that the contextual conditions of a district/union leadership team are unique. As a descriptive case study, a rich "thick" description of the phenomenon (Merriam, 1998) under investigation exposed key characteristics in a process to distribute leadership. In addition, this descriptive case study included studying social units and the variables and interactions that lie within. The interactions were important to understanding the distribution of leadership. Collecting evidence for the variables and interactions within the social units was achieved through multiple sources.

Context: District Setting

The setting of this study was a suburban K-12 district in a southern California county, Beachside Unified School District. The district draws students from within the city boundaries as well as surrounding communities. Beachside is known for its excellence in student achievement, is the third-largest K-12 district in the county, and serves 30,000 students. A breakdown of the schools is as follows: 25 elementary schools, 6 middle schools, 4 comprehensive high schools, and 1 continuation high school. The district employs 1,500 fully credentialed teachers who provide instruction for students in the following subgroups: 3% African American, 0.5% American Indian/Alaskan, 14.7% Asian, 6.7% Filipino, 10% Hispanic, 0.6% Pacific Islander, 59.9% White, and 4.4% Other.

Beachside, for many years, has shared an interest-based working and bargaining relationship with the teacher union. The goal of this process was and continues to be to achieve a win-win for both parties, specifically in the areas of salary and benefit negotiations. Within the last five years, this relationship extended beyond the "bread and

butter" and has reached into teaching and learning. As a result, a vision that included distributing instructional and pedagogical leadership through teachers followed. The vision included a restructuring of the district-level Math Council that responded to student achievement. Each year, the superintendent and union leader revisited the work of the council and reconstituted them in ways they thought would better meet mutually agreed-upon goals.

The Math Council emulated a process and structure that Beachside had in the past, the difference being time allocation, selection, and a broader spectrum of task. Prior to the establishment of the Math Council, Beachside's district-wide curricular process asked principals to designate a representative at their school to serve on specific committees, for example, the social studies adoption process or the review of a new course description be added to the middle or high school offerings. The committee would meet, at the discretion of the Director of Curriculum, and come to consensus around a task, and the "decision" would be implemented district wide. Some of these meetings were held after school or during the school day. Implementation of any curricular changes included informing the principals of the impact and supporting teachers with staff development from the district level. Curriculum committee teachers were not financially compensated and reported when requested.

Role of the Researcher

Positionality. During the first two years of the Math Council, I served as one of four district facilitators. In relation to this case study, I served as a participant-observer, with a focus on the participant end of the continuum (Spradley, 1979). Yin (2003) identifies the role of a participant-observer as one who participates in the social structures

and setting within the organization. The benefit of contributing as a participant-observer is having access to the unit of study in the everyday settings. Primarily as a participant during years one and two and an observer during year three, I was afforded many research opportunities to have both an insider and outsider perspective. I was able to attend all the meetings of the council and was able to document the dynamics of the work among the participants; I was also invited to participate in some district-union leadership meetings. This provided me the opportunity to hear and observe, firsthand, reports from the participants, presenting insights to the leadership process. In addition, my involvement meant that I had the opportunity for many informal conversations with council members since the level of trust in our relationships provided an environment of honest exchange of thought. In essence, I also served as a key informant to the study.

Yin (2003) points out the limitations of being a participant observer: (a) the potential of researcher bias to enter into the data and analysis, (b) the researcher may advocate for the group, and (c) limited notes, for analysis, may be taken as an observer due to focused time and energy as a participant. Although Yin brings up critical points that can dispute the validity of a participant-observer study, I took several steps to mediate these concerns.

First, the data that I used from the last two years are archival documents. The documents were written by a team of four facilitators, including myself, as a historical record of the work of the councils. Not only were the documents written by the team facilitators as a record of the meetings, the minutes, agendas, and other supporting documents were approved at each meeting by the council members. Any discrepancies were modified in the records. These documents provided an independent record of the

Math Council's work before the study began. Second, I did not serve in any capacity on the Math Council during year three; I attended meetings only as a researcher and participated strictly as an observer, thus giving me some distance from the council's work during the data collection year. Third, the study drew heavily on the interview data from superintendent, union leader, and members of the Math Council. Finally, the purpose of the study is not to judge the merits or worth of the councils, but to understand how and why these councils came into being and how members perceived they contributed to distribution of leadership at the district level.

Data Sources and Collection

Multiple primary data sources were used to inform this study: interviews; archival records of meetings and other district documents, such as the district-union MOUs (Memorandum of Understanding) and contract; and observation notes from Math Literacy Council meetings.

Interviews. Merriam (1998) discussed the importance of developing interview questions using an interview guide to carry out an effective interview session. The strength of the interview guide is that it required thoughtful development of the both structured and open-ended questions that required deeper probing. The questions developed for the interviews were intended to illuminate the nature of the union-district partnership that led to the formation and reformation of the literacy councils over a three-year period and how teacher participation in the district-wide Math Council have either supported or constrained distributed teacher leadership at the district. Interviews were tape-recorded and transcribed using a software program, Dragon Speak.

In this descriptive case study, I employed a combination of a standardized open-ended interview with an interview guide approach. One of the main reasons I selected a standardized open-ended interview is that it is highly focused on the research question, thus illuminated important data to be interpreted (Patton, 1990). However, the strength of including both of these approaches is that it allowed me, the researcher, to gather data from specifically phrased questions, following a particular sequence so that the data unfolded, and it allowed for flexibility to explore deeper within the constructs of the question. What emerged were other levels of inquiry that may not have emerged in the standardized open-ended interview (Patton, 1987). Within the interview, there was an opportunity to probe for deep responses where I was able to "...ask key respondents about the facts of a matter as well as their opinions about events" (Yin, 2003).

Participants. The primary participants in this study were the superintendent, the union president, and the teachers and administrators from each year the council existed, with representation from elementary, middle, and high schools. Table 3.1 displays the membership of the Math Council during the three-year tenure and Table 3.2 exhibits who, of the total membership, participated in this study. All council members were invited to participate in the study. However, in the invitation letter, I indicated that I would select teachers on a first-response basis. This randomized process took away any potential negative effects of the researcher's "position" in the district. All participants who responded, except for one, were interviewed for this study. The one exception was not included due to the limited time the teacher had to participate. The one-and-a-half hour interviews were held at a place and time mutually agreed upon by interviewee and the researcher.

Table 3.2: Teacher and Principal Participants

	Year 1	Year 2	Year 3	3-year participants	
Teacher Pool	16	10	19	4	
Number of Participants, by level					
Elementary	0	2	1	2	
Middle School	1	1	1	1	
High School	0	1	2	0	
	Year 1	Year 2	Year 3	3-year	
				participants	
Principal Pool	4	3	0	0	
Number of Participants, by level					
Elementary	1	1	0	0	
Middle School	0	1	0	0	
High School	1	0	0	0	

Before conducting the interviews, I discussed with each potential participant the research questions explored through this dissertation, explained the consent letter and why they were sent an invitation to participate, and asked them to complete a preinterview survey, inquiring about the professional background of each participant. The interviewees were told the interviews would take about one-and-a-half to two hours. As the researcher, I took notes, audio taped the sessions, and provided them, at any time, the option to stop the interview process.

Another important data source used were the field notes that I took in year three of the Math Council. I observed three of the Math Council (February-May, 2007) meetings. I interviewed members of the third-year Math Council last, which provided an opportunity to do member checking with the group and my observation notes. Notes taken were coded for analysis.

Archival records and documents. An important source of information for a case study, according to Yin (2003) and Merriam (1998), are documents such as formal agreements, agendas, and meeting minutes. As an insider, I accessed council meetings and superintendent and union joint meeting documents from the last two years. I also collected and analyzed any work products form the Math Council, coding them for patterns and unveiling themes.

Pilot Study. Before conducting the full study, the interview questions were piloted with two teachers who served on another district-wide committee, English Language Arts Literacy Council, with a role to make curricular and instructional "decisions" for students, complimentary to the role of the Math Council. The interview scripts were coded to identify questions that needed refinement before the full interviews. Data Analysis

Once data were collected, a disciplined process was implemented to bring order to the information (Patton, 1987). Merriam (1998) and Miles and Huberman (1994) believe that qualitative data and its analysis can be overwhelming. Miles and Huberman suggested "interweaving data collecting and analysis from the start" (p. 50) as a strategy that not only strengthens data collection throughout the study but also allows for the management of the qualitative data. Both Merriam and Patton would concur with Miles and Huberman. Merriam describes the "... process of data collection and analysis is recursive and dynamic" (p. 155) with Patton stating that "overlapping of data collection and analysis improves both the quality of the data collected and the quality of the analysis" (p. 144).

One of the analytic strategies that Yin (2003) suggests to analyze data is the use of a *theoretical proposition*. This case study is built upon Spillane's model of distributed leadership presented in Chapter 2. This model shaped and focused the interview questions and the development of the case study and literature review. This was helpful in guiding and prioritizing the analysis, elevating relevant data and minimizing other data. This, however, did not discount any patterns and themes that emerged from data that do not directly link to Spillane's model. It had the potential of linking to the model in patterns and relationships that informed the interpretation of the data.

The second step used to analyze the data was to organize it into related categories. Field notes and interviews were transcribed within three days. The transcripts were then imported into the software program, NVivo. NVivo allowed me, the researcher, to collect all the interview responses to a particular question for coding. It simplified the same process described by Miles and Huberman (1994): (a) writing analytic notes (observations, thoughts, other areas of inquiry) in the right-hand margin, (b) coding the data in the left-hand margin, (c) organizing the data by related categories, and (d) summarizing interviews and observations using a Contact Summary Sheet. NVivo helped me to refine the collection and synthesis of all the data, catching missing areas or identifying deeper levels of inquiry. The codes were used to start to categorize the data into meaningful constructs that led to "emerging themes or concepts" (Merriam, 1998). The data were kept on a computer, in files, and facilitated the sorting and accessing of critical information (Merriam; Miles & Huberman; Patton, 1987).

After the initial process described above, the next steps included identifying quotations and observations that were linked together around a concept. This was brought

together through NVivo, which gathered together all the data related to a specific research question. Through this inductive process, patterns and themes emerged and served as central to developing a richer coding process used to analyze and connect the interview and documents.

In addition to the interviews and observations, archival documents were also used with the same content analysis process. Multiple sources of data minimized any "potential problems of construct validity" and strengthened the interpretation of the data (Yin, 2003). Patton (1987) identified the use of collecting and analyzing different data sources related to the research question as a valid strategy to triangulate data. As mentioned earlier, the types of archival documents that were used in this study included meeting agendas and minutes from council meetings and superintendent/union president meetings, teacher contract, and Memorandums of Understanding (MOUs) to the contract.

Once the data were analyzed, interpretation of the organized data followed. Interpretation provided meaning for the study. Once all the data was organized into a sorting structure of concept "bins" (Miles & Huberman, 1994), the connections between and within the bins emerged. It was through sorting, refining, and classifying of the data that I developed a matrix, or network, that best described the qualitative work that occurred. Within the data display format, many types of entries are acceptable: text, quotes, symbols, arrows, etc. (Miles & Huberman).

Limitations of the Study

The study had a number of limitations that must be considered. The participants were a purposeful sample from one suburban school district and volunteered to participate in the study. As a single case study focusing on one council, I wanted to make

sure that the participants who volunteered represented each year the Math Council was in existence, as well as each level: elementary school, middle school, and high school. This district, however, represented an important unique case that has been previously studied and noted as an exemplar in union-district relations (Koppich & Kerchner, 1990).

Because of these distinctions, this study is not trying to generalize the findings to other districts but attempts to make a general theoretical contribution to Spillane's distributed leadership concept.

A second limitation is the role of the researcher. The researcher has collegial relationships with principals and teachers who were interviewed for the study and was a member of the Math Council for the two years prior to the proposed study, serving as a facilitator and participant-observer. As noted in an earlier part of this chapter, this gave the researcher important access to the study participants as well as inside knowledge of the system. This ease of access also required that steps be taken to guard against potential preconceived ideas and to let the data speak for itself. The potential bias was guarded by validating the interviews with archival documents in the system and researcher field notes, as well as the minutes and agendas that served as council artifacts.

In addition to serving as a participant-observer, there was the potential limitation that this role may have affected the carefulness or openness of participants during interviews or as they were observed in council meetings. The researcher took steps to minimize this limitation by assuring participants that the goal was to tell the story of the Math Council and not to judge their work. Furthermore, the researcher has excellent working relationships with the members of the council. This limitation may be mitigated by the high levels of trust.

A third consideration is that the participants may have served on the Math Council for one, two, or three years. These teachers were self-selected to apply for the council positions and were confirmed by the teacher union as its representatives to serve. These teachers were perceived as teacher leaders in the system; thus they represent a purposeful sample of predesignated leaders and may not be typical of other leaders in the system. However, the focus of this study was not on these teachers as representative or not representative of teacher leaders in the district in general but on the role of the council as a structure for distributing leadership.

There may not be a clear linkage between the work of the council and Spillane's distributed leadership. There may be some inherent flaws in the structure and the process of distributing leadership through this model that may limit the ability of the subjects to clearly articulate their understanding of the work they accomplished during the two years. In addition, the structure of the councils has changed each year, making it difficult to untangle the relationships between distributed leadership in the district and at the school sites.

CHAPTER 4

DATA AND ANALYSIS

The intent of this research study is to unfold the effects of the forces and factors that support or constrain the development of teacher leadership, to distribute leadership, from the district level. Through district negotiations, a core group of teachers and administrators have been meeting for the last three years, focusing on a curricular issue. This research study is based on the work of the Math Literacy Council. Part of the negotiations was that teachers would be compensated for their time beyond the school day on an alternative prime salary schedule. Central to the data, which occurs later in the data presentation, is to highlight the parts of Spillane's (2006) model that may have been illuminated from the interviews. The purpose for bringing out this data, specifically at the end, is to overlay Spillane's model on top of the working district model to test it's viability in distributing leadership, in this one case.

The research questions for this study will be addressed individually, revealing all the data that addresses each one. In addition, historical data and practices will be woven throughout to provide important background knowledge. As the data is unfolded, some preliminary connections will be made between the data and will be addressed more in depth in Chapter 5. There are three main questions that this dissertation study focused on: "What has been the nature of the relationship between the district superintendent and the union president, and in what ways have they have worked together to implement a model to distribute leadership?", "How did participants on the Math Council perceive teacher leadership?" and "How have the literacy councils influenced the enactment of teacher leadership in the district?" Data for the research questions will be explained through three

main research questions and supporting questions within each research question. Each of the sub-questions is aimed at gaining an understanding to the purpose of this research.

The Context for Distributing Leadership to Teachers

This section addresses the first major research question of this study: What has been the nature of the relationship between the district superintendent and the union president, and in what ways have they worked together to implement a model to distribute leadership? The first part of this chapter presents data on how the superintendent and the union came together to establish the Math Literacy Council. As part of this discussion, the first part of this chapter focuses on the historical backdrop that influenced the formation of the council and the ongoing thinking that influenced the yearly change in council structure and work. The second part of the chapter focuses on the data from superintendent, union president, teachers, and administrators who participated in the Math Council, illustrating their perceptions and experiences in a district council environment to distribute leadership to teachers.

Historical Context of Distributed Leadership to Teachers

Before the distributive model of literacy councils came to fruition, much groundwork had been done between the district's superintendent and the teacher union president, as described in Table 4.1. Unique to this process was that the model emerged from Interest-Based Problem Solving contract negotiations. Also worth noting was that both leaders had a respectful and trusted relationship, dating back to relationships developed in the late 1980's and early 1990's, and had student learning as central to their mission. Both leaders were working under a context that led to their discussions about creating capacity through leaders. The superintendent expressed:

I was pretty clear coming here we had a union that really wanted to play a role well beyond just the traditional bread-and-butter issues and there was an opportunity to try to get meaning at the table and think about quality thinking, about quality curriculum, about best practice and that while that was unusual and beyond the normal bounds, we might make better progress...

The union president brings forth a different point of view and strategy. This view helps to illuminate the focus of his leadership, "We were struggling budget-wise, we hadn't given any raises and I was looking for wins that wouldn't be very costly, that would move a progressive agenda forward." There were other contextual frames that impacted the negotiations toward a common goal. One is the personal, professional relationship between the leaders and the budget backdrop.

The professional relationship can best be captured in this quote by the union president:

Another context was the personal relationship between the Superintendent and I. There was big trust that neither party was out to slip the biscuit by the other. That was important because we could have honest discussions, and I could talk about my view of site leadership and he could talk about the system not ready to go there and looking at different policy things.... It was easier to talk about this because there was no money to do anything else.

Both leaders noted the readiness of the system and the conditions through which the discussions could flourish. At the onset of the literacy councils, the teacher contract settled at 0%, compacted the salary schedule, and supported temporary teachers moving to probationary status, sooner than later. In addition, the union president notes that the superintendent had decreased the staffing of the learning division of the district and was concerned about how the curriculum and instruction work was going to move forward. Under these conditions, a new relationship and model followed.

The relationship between the two leaders, over time, built such that, "...there was a level of trust to be able to say, 'Let's stop here'. We made some mistakes but the context was we were ripe for it. We had developed a sense of trust...we kind of knew the system wasn't quite working well..." Because of this relationship, the strategies brought forth by the union president were to *change site leadership* to a model that will compete with the current department chairs model in the secondary schools whereby this team would be in "charge of learning" at individual sites. The superintendent's vision for the development of the council was to bring in teacher voice and teacher credibility to curriculum work, breaking down the barrier of "us versus them" (teachers versus district). Both leaders came to the partnership with an overall common vision, but with different strategies. As a focus to this common vision, there have been many examples, throughout the years, that signify the critical work done together.

Teacher Leader Development through Union and Management Partnership

Within the district, and building from a trusting relationship between district leaders, there are embedded examples where teacher leadership and teacher voice appear to be part of meaningful work, district wide. Actions and partnership work that has been in place will be addressed in this section, responding to the following support question: What opportunities for teacher leadership have been created through the union and management partnership? Table 4.1 is a brief description of the partnership work in the district, as identified by both the superintendent and the union president.

Table 4.1: Development of Management and Union Partnership

Time Frame	Interest	Process	Participants
1975-1976	Rhodda Act	Collective Bargaining negotiations with proposals, counter proposals and lengthy caucuses. Parties physically sat on opposite sides of the table.	District represented by Counsel as Chief Negotiator
			Members of both negotiating parties
Late 1980's	District Superintendent interested in creating	Beginning of statewide initiatives for other forms of negotiations. An interest based process was implemented.	Contract facilitator
	less adversarial negotiations	Meetings were held offsite, creating opportunities to build and strengthen social and business relationships.	No attorneys
		The process was issue specific, with a mutually agreed upon	Superintendent
		statement of the problem. Each party developed their interests	Members of both
		in the issue; alternatives were developed and became the main discussion points. The discussion focused on how the alternatives met or violated party interests. Both parties jointly prepared and distributed communications.	negotiating parties
		This style spilled into labor relations through NAPS (Non-Adversarial Problem Solving) which had common features. When a need arose, contract sections could be reopened with	
		either party.	

Time Frame	Interest	Process	Participants
Mid 1990's	Interest in working	There was an interest to expand and train new negotiating	Contract facilitator
	through "tough issues"	members, of both sides, landing a new facilitator and process.	
		A manual, Interest-Based Problem Solving (IBPS), written by	Superintendent
		Bill Haney, was a mechanistic and cumbersome process. The	
		superintendent and the union president used this process to	Members of both
		continue their discussions, openly discussing and "trading	negotiating partics
		issues" and political considerations.	
		A critical outcome was the development of trust with both	
		parties. This allowed the IBPS process to become less formal	
		and process specific. This process worked well for all non-	
		fiscal issues; there was a mutual understanding of the problem	
		and one another's interests.	
Present	Work with fiscal issues	This process includes facilitation and/or mediation from an	Expert on state and
		outside party with fiscal issues. The person brings information	district fiscal
		and serves as a sounding board to everyone's ideas; validating	information
		information about the state or district's budget.	
			Superintendent
			Members of both
			negotiating parties

Notes:

- 1. The historical data was collected from a district official, November 2007.
- 2. Not all negotiating members were listed. Those that were changes and/or are key from previous negotiating teams were listed.

These partnerships serve as the foundation for ongoing work together within the system. It is "hallmark" work in that it is embedded in the culture and practices and how the district and union approach developing leadership to focus on student achievement.

As mentioned earlier, there is a commitment and responsibility for resolving educational problems through an Interest-Based Problem Solving (IBPS) model. The model provides for a process that is open, flexible, and encourages all participants to understand the interests of all parties. It encourages the group to think about options to address the issues as well as come to consensus. IBPS has evolved throughout the years, with attention to it as a practice stemming back to 1986 when the Beachside Professional Assistance Program (BPAP) was explored. The work for BPAP was from a model in Toledo, Ohio, and was adapted to meet the needs of the district. While the concept of IBPS was part of the culture in the district, in 2001 the IBPS model was formalized through a Memorandum of Understanding for Negotiations (B. Chiment, personal communication, November 17, 2007).

Mentor Program

In 1983, Senate Bill 813, Hughes/Hart Educational Reform Act of 1983, established the Teacher Mentor Program. The reform act was developed, "to encourage teachers currently employed in the public school system to continue to pursue excellence in their profession, to provide incentives to teachers of demonstrated ability and expertise to remain in the public school system, and to restore the teaching profession to its position of primary importance within the structure of the educational system." Historically, the Teacher Mentor Program represented the teacher leader program in the district. Teachers were selected through an interview process that included a district and

teacher recommendation team. In general, through this program, individual teachers developed projects or programs to be implemented by themselves or others. Within the district, there are many mentor projects sitting on the bookshelves. Every now and then, someone remembers a program and it finds some life within the system. The challenge of the mentor projects was that it was a teacher "project" and attempts to embed them in the system or take them to scale seemed to stall, as they tended to reflect the work of only one individual. A middle school mentor teacher recalls, "The idea of leadership that leads the people and trying to get teachers to change involves more than you out in front leading, doing what you're doing and when possible try to share this with teachers. By pushing from behind is not leading them and to say things like you really should be doing this, that's pushing."

Mentor projects facilitated teachers leading in various areas but did not require teachers to work in teams toward a common goal. This teacher goes on to clarify how the work may have been done, "Here's what I'm doing, here is a success I've had doing it. It's really been working and if some of you could try this and give me some feedback, we can then collaborate. It's so easy to do electronically. But it's hard to do for someone to send this because it says, 'I'm a leader.'" The Teacher Mentor Program found its usefulness waning as work through the district was moving toward a more collaborative approach. The district and the union took the Teacher Mentor Program model and used the concept, developing teachers as leaders in a system, to continue its work, through a Peer Assistance Program (B. Chiment, personal communication, November 17, 2007).

Professional Assistance Program

Each year, the Beachside Professional Assistance Program (BPAP) invites teachers throughout the district to apply to become a BPAP teacher consultant, released for two years to coach, support, and evaluate new teachers in the district. The number of BPAP teachers selected is dependent upon the number of teachers hired for the year. Each BPAP consultant is provided a caseload of teachers and works closely with the principals at each school, updating the teaching and learning progress each teacher is making. Teachers are evaluated on a Teaching and Learning Continuum, developed ten years ago by both district and union leadership. It is the driving document for teacher evaluation in the system. At mid-year and end of year, a governance board made up of the BPAP Consultants and district leadership come together to report on the progress of teachers, and in the end, the consultant makes the final recommendation on whether to move the teacher on to a second year or to terminate. In addition, a program to support the ongoing success of teachers that need extra coaching in the profession, but are tenured and do not meet the criteria of the BPAP program, has been set up through the Peer Assistant Review (PAR) process. Consultants work closely with teachers who have requested the extra support due to an "Unsatisfactory" on their evaluation, which is performed by a site administrator.

Of all joint teacher leadership efforts, the BPAP is the one that is anchored deeply into the culture and continues to be a model that is referred to when discussing teacher leadership. Both district and union are committed to the mission of having quality teachers serving our students. Given that deep commitment, a model to openly articulate the evaluative process was put in place. In addition, the singular focus on the Teaching

and Learning Standards as a document to collect data from and have common conversations regarding teacher performance helps to minimize any subjective evaluative perceptions. Discussions are based on real data and joint recommendations are made for dismissal. Principals are a critical piece of this process throughout the year, with BPAP consultants meeting frequently with site administration.

BPAP consultant selection is highly selective through an application and interview process. The application requires letters of recommendation for both teacher and administrator colleagues that focus on the high quality teaching and leadership that the applicant has demonstrated throughout the years. If the pool does not meet the criteria, the application process is opened again. The impact of consultants on the teaching and learning culture is critical to the academic success of students and, therefore, there is no "settling" on who will be selected. This respected process, the successful experiences of teachers assisting teachers, and the open discussions by the joint governance board have created a highly respected teacher leadership role in the district and seems to have created a culture of teacher leadership.

Assessment Committee

Since the Teacher Mentor Program, there have been numerous joint committees that have worked together, focusing on educational issues that directly impact student achievement. In 1999, the Assessment Committee worked for two years to review the use of assessments to impact student learning. Representative teachers from all levels were encouraged to apply through principal support, interviewed, and selections were made based on both district and teacher union consensus. Leaders from the union and district facilitated the process and recommendations were made to the district, as a system, as to

what assessments need to be implemented. After the two years of work, the committee recommended not implementing any assessments district-wide, inviting sites to localize this work.

Homework Policy

Three years later, district and union leadership embarked on a district-wide process to rewrite a homework policy that guides homework practice throughout all grades and levels. A study group, led by a union teacher and a district leader, used an Alternative Evaluation process as a method to engage teachers at school sites in this issue. Ten teacher leaders were awarded stipends for serving as facilitators, selected and named by the union. Each facilitator engaged interested teachers, district-wide, in the study. In addition, focus groups with parents were held throughout the district. The data gathered from the focus groups and the alternative evaluation resulted in the Homework Policy, and Administrative Procedures, that is the guiding document in Board Policy. A similar process was used in a Time and Learning project, focusing on research on year-round calendar and the use of time in the classroom. Board Policy was not the end product of this effort, however; the learning from this project continues to surface in district work.

Elementary Progress Report

In 2006, the Elementary Progress Report was rewritten to reflect the rigorous academic expectations described in state standards. Lead by a district-level administrator, teachers at each elementary school were involved in improving the first rubric-based progress report for the district. Teacher representatives served as leaders making decisions as well serving as conduits of two-way communication to their school sites,

gathering data and representing their staff throughout the year. Once the document was complete, implementing the report card in an electronic form became the next hurdle. Staff development on implementation, through the leadership of the site level teachers, a classified staff programmer, and district-level leadership, produced an electronic progress notice that is being used in all 25 elementary schools.

Teaching and Learning Cooperative/Professional Development Advisory Board

More formalized work is seen through the development of the Teaching and Learning Cooperative (TLC) and the Professional Development Advisory Board, formerly known as the Teaching and Learning Cooperative Governing Board. Their roots began in 2004 and with the intent to work in partnership, once again, to develop teacher leaders through distributing leadership responsibilities at both the site and district levels. The Teaching and Learning Cooperative (2004) focuses on teacher-driven staff development, focused on academic achievement. It encourages teachers to develop their own staff development plan and to invite others to collaborate together, promoting reflective practice. It is recognized that teachers know best about their own staff development and should be given the opportunity to either present a plan or choose to participate with colleagues on an approved proposal. Within the TLC program, teachers have offered a series of workshops district-wide, serving as facilitator and learner in the process.

The Teaching and Learning Cooperative is a voluntary program that is administered and supervised by the joint district/union Professional Development Advisory Board (PDAB), formalized in 2006; teachers are compensated for their participation. In 2007, responsibilities broadened for PDAB; responsibilities with district-

wide impact include planning and organizing district-wide staff development days, using research to make recommendations on best practices for use of site (school) time to develop powerful staff development, and helping the district, as a system, think, focus, and process effective staff development from a macro level.

Staffing and Budget

Other more "managerial" tasks are processed through a joint effort. Staffing ratios, grades 4-12, have been negotiated together. The common understanding of class size helps both administrators and teachers at school sites to work together to schedule students into classes. In addition, the district's budgets have been part of the IBPS process, guiding the team to reconcile revenue, expenditures, and ending balances. In support of this ongoing partnership and work, the district pays the salary of the union president as well as two additional staff persons.

Math Literacy Council

Three years ago, literacy councils in language arts and mathematics were developed, with focused work on academic achievement, specifically identifying the gaps in the system where the district is not meeting student needs and exploring ways to close the math achievement gap. Artifacts that have been guiding math changes in the system have increasingly become evident since the inception of the Math Literacy Council.

These artifacts include the following courses and documents that are "live" in the district. Three new courses have been developed to support academic achievement in both middle and high school. At the middle school level, a Math 7 course was developed for students who are not ready to take on Pre-Algebra. At the high school level, two courses, College Algebra for seniors and Introduction to High School Algebra for freshmen, were

developed and implemented. Both courses serve as stepping stones to higher level math, either in high school or college. In addition, district standards maps, grades 4-9, are in place for teachers to access and use, and a math staff development model, to create teacher capacity and expertise, has been developed.

As work has progressed together with district and union, these artifacts, both process and documentation, serve as the foundation through which math focus has moved, adapted, and changed within the district. The teacher leadership efforts within the Math Council, the focus of this research study, will be unfolded and explained throughout this chapter, potentially disclosing how the council model distributed leadership to teachers. Additionally, two years ago the Special Education Council was added. Their responsibilities were similar to the other councils, but use the lens of the special education student within the larger system.

The literacy councils have taken a forefront as the conduit and initiative to distribute leadership to teachers. As mentioned earlier, the focus of this study is the Math Literacy Council. Their work and processes will be addressed in the section titled, "Enactment of Teacher Leadership through the Math Literacy Council." First, attention will be given to continuing to describe the contextual picture through which the distribution of leadership to teachers continues to structure and form in the district.

Math Council Membership Changes and the Charge

This section of the research is to clarify the evolutionary process of the council membership over the last three years and their tasks as it relates to the reflective thinking of the district and the union leaders. Specifically, their reflections focus on the clarity of the communication of the tasks to the council. The question to be expounded on is: *How*

has superintendent and union thinking evolved over the three years and how has that been translated into changes in the literacy councils organization, membership, and tasks? At the first meeting of the council, in October 2004, both superintendent and union president jointly addressed the teacher/administrator council team. An excerpt of the critical message communicated focuses on the collective commitment of both district and union.

A breakthrough initiative often requires bold action. It is incumbent upon the District and Federation leadership and council members to make a collective commitment to do everything within our power to build a successful new model and way of doing our work that better serves the learning needs of our students. In collaboration with the Federation, we can provide another model of successful practice to be emulated across the state and country. The upside potential is tremendous in our quest to move from good to great" as an institution supporting learning for all.

Year One: Math Council

In Chapter 3, Methodology, the composition of the council was charted. The membership stemmed from a 2004 negotiated contract agreement for two leadership curriculum councils: K-12 Literacy and K-12 Mathematics. Each of the district's 10 secondary schools had a representative as part of the council and the 23 elementary schools were represented by 6 elementary teachers; in addition, 9 administrators and 4 facilitators also participated, totaling 29 participants. The 4 facilitators were comprised of 2 district administrators and 2 union leadership members. The first year had the largest membership of teachers and unpacking two large charges. The 2004-2005 work for the Math Council entailed making recommendations to address the following two charges:

1. Identify the strengths and weakness of the district's support for student mathematics learning and make consensus recommendations to improve student readiness for algebra success and participation in advanced mathematics.

2. Support the district's Culture Change Initiative by participating in collaboratively accomplishing the work of the councils.

In May 2005, the council presented recommendations to continue the work of the council. It was the role of the four facilitators to work with the council to develop the agendas for each meeting and to bring the tools the council needed to meet the charge. The recommendations spelled out, in detail, work that needed to be continued in the following areas: staff development for systemic improvement, consistent vertical and horizontal articulation, standards-based content maps and assessments, and development of district-wide structures that provide for a hierarchy of interventions for students that need to engage deeper in mathematics. In addition, a new intervention Pre-Algebra course was developed for ninth graders, supported by district resources, time, and staff development.

Once the teams started to meet, the facilitators coordinated the agenda, providing for the time spent for members to report out to one another math practices throughout the district and external to the system, at all levels. It was a learning process for all members. By December 2004, council minutes revealed the formation of two subcommittees within the large group: Scope and Sequence and Graphing for Algebraic Thinking, K-12. The latter became an instructional and staff-development focused study group. The facilitators split up, working with each subgroup. When the facilitators came together, they helped to coordinate the work focus and agenda for the larger group's next meeting.

Year Two: Math Council

The membership composition and the work of the councils returned to the negotiations table in spring 2005. In August 2005, the superintendent took the

recommendations and honored the work in a memo to the Math Council. "I would like to thank you for your thoughtful research based recommendations. You have hit on some new thinking and made some important, revealing findings that will clearly shape our work in mathematics in the years to come." The superintendent reflected on the work of the councils and shared the following perspective:

A frustration with the council is that it has been surprisingly slow. In part, they are self organizing groups and so their work not being clearly directed causes them to spend as much time figuring out what their work should be as much as time doing the work.

One of the agreements between the superintendent and the Federation is that the superintendent would determine the "what" and the Federation the "how." Year two started with this understanding, with the superintendent communicating to the new council of ten teacher members, "During the 2005-06 school year, I would like to see the council devote the bulk of its work to the development of math scope, sequence, and curriculum as well as student placement for grades 4-9 that assures every student is, minimally, prepared for Algebra concepts and skills as a ninth grader and can successfully complete this course as a precursor to higher level mathematical study."

Thus, the second-year Math Council was reduced from 29 to 15, 10 teachers and 13 administrators working along with 2 district and 2 union facilitators with a more limited scope of work. The membership of 15 was set to focus on the "how" to meet the charge. Some teachers and administrators continued from year one; others interviewed and joined as new voices on the council. Interestingly, the council minutes reflect that the 10 teachers continued to focus in two subcommittees: staff development and concept mapping 4-9 algebraic standards. As a result of this work, a middle school course, Math

7, was created and implemented in 2006-2007 to provide the time necessary for students to reach algebraic standards mastery.

The recommendations made to the superintendent from the 2006-2007 year focused on developing a strong systemic staff development program that involves identifying and compensating teachers at each school site to serve as a Mathematical Instructional Leader (MIL). A multiyear placement of teachers at each school site would be necessary, as described by the council, to facilitate the recommendations of the council around vocabulary and strengthen the math map of standards, adding exemplars and best practices (exemplar lessons), as well as lead dialogue, coach, and support math articulation. Attached to the MIL's is release time at each school site. This idea was not implemented in 2006-07, but was reconsidered by the next council.

At the end of year two, one of the teachers reflected on the council experience as:

The first two years were really stimulating as far as professionally having the discussions that you don't get to have on a day to day basis as a teacher. Saying what you really believe about kids learning and looking at what the research says and looking at what other people do, that was all very stimulating and exciting to be involved in.

Year Three: Math Council

As the superintendent reviewed and assessed the recommendations and work from year two, his lens focused on results. As achievement data rolled out for the two years that the council was in place, shifts in proficiency and advanced were not evident. "I'm still results oriented enough that I'm looking to see if the results gets at changes that represent a significant shift and I think I'm hearing that they haven't yet. So that would suggest that with whatever we're doing, we haven't gotten there yet." In partnership with union leadership, the administrator, teacher, and facilitator composition of the council

changed again from years one and two. The union and superintendent argued that the secondary representatives should be department chairs from the schools. The change was an effort to impact achievement at a more local level for students; six representative elementary teachers were selected through an application process by the union. The change moved the leadership to site representatives working at the district level.

Two challenges were evident at the onset of this third year council. The elementary challenge is that not every school was represented. The secondary challenge was that the department chairs were not necessarily the "best thinkers" about district wide math and are department chairs because was their "turn" to function as "managers" of the site academic team. One teacher commented:

The first two years, I did feel there was more expertise on the councils. I think the math knowledge was huge in those rooms and I think people got frustrated with sometimes lack of product, like 'where are we going?' and 'what are we getting done', but the knowledge was there. This year, I feel like there's not as much knowledge and so, it's more difficult to get things done. It was more difficult in the beginning because the people were really focused on discussions of philosophy and this time it's more difficult because they don't have the expertise.

However, this was an opportunity for the retiring union president to negotiate for and move to site leadership for future efforts. It has been his focus to change the structure of department chairs to a governing body that leads the site; other changes included the new facilitator team moving the council work year from January 2007-January 2008, allowing for a brief hiatus, Fall, 2006. As a dynamic, changing group, a new elementary teacher member expressed her experience:

In this year, I've grasped what they are doing. At first, I just kind of sat there and was trying to figure out what they were doing and I really was just a listener at that time. I didn't say anything. And then, as I started to understand what they were doing and we were changing things to more fit

what our group wanted. Originally, they had this plan in place with their MIL and this is what they were going to do. That wasn't something that was really doable financially, so we had to change the whole plan. Before, we were kind of stepping into someone else's plan. Then, once we were kind of changing the plan, I was like, okay, now I can take more ownership of the things. I was able to express more of my ideas.

Unlike past years, the superintendent and the Federation did not address the council.

Council work continued on the content math map and staff development; however, the impending state math adoption quickly consumed the work of the council. Now, many of the members are involved in the adoption work.

Three teachers involved in the adoption work served on the councils for three years. Two of the teachers summed up the membership changes in the following two ways:

I look at the people who are serving and I can't speak for the elementary but I can speak for the middle and high school. Many of those people are seen as leaders on their campus. They drive curriculum or they drive testing or they do things on their campus; they are seen as leaders on their campus. Now, whether or not they've been involved in district-wide pieces is different, but at least on their campus, they are driving forces.

You had K through 12 and you had a good selection from elementary, middle and high school, too. You had a really a good, a large group and they came from different school sites. That was very effective.

Evolution of the Thinking and Reflective Process: District Leaders

At the district and union leadership levels, there were some barriers that became clear as the councils evolved from year one to year three. One of the challenges that both leaders note is that they were not clear in articulating the task of the council. "I don't know how good of a job we've done over the years of communicating the work to the councils. For the people who were on the councils, that work is very real and is very

important," states the union president. Corroborating the union reflection described above is this notion from the superintendent, "We had more of a vision than we had a sequential, practical structure.... I think we got clearer in year two and through time, to try to delineate the work that needs to move forward coming out of the groups."

Part of the environment for negotiations was set once the councils came into place. About \$200,000 had been spent during year one on the councils and as council configuration was revisited during year two, the union president was not interested in renegotiating this money away. The union president asserts,

I'm going to go with the pragmatic sense. I had 200 grand or so; money already being spent here. In a union sense, that's money being spent on my unit. If we weren't going to spend that money there to kind of promote this, then what would we do? Plus, there was a sense that the work was incomplete. We got off to a shaky start, but now we're kind of gathering steam. We don't want to let it fall over. The second year was more of a "we haven't finished this experiment yet so let's just kind of keep it going" year.

The councils continued into year two but with more limited membership. From the superintendent's view, "The creation of another committee really became another committee, which is what the councils are. It's another way of picking them in a slightly different pay schedule and it's not quite clear yet when you talk about teacher leadership that that has worked well." As described earlier, the second year had a clearer task and a smaller committee of ten teachers and three administrators. The superintendent articulated a clearer focus to work on Algebraic Readiness, grades 4-9.

While clearer in the charge, the communication connect between the council and the superintendent's cabinet still appeared to be weak. "There was a disconnect between the district directors and union trying to negotiate agendas. They were trying to negotiate

what should be there, what shouldn't be there, and it was much more cumbersome than some of our other efforts," maintains the superintendent. In retrospect, both leaders agreed that they should have spent more time on defining the work of the council. It can be asserted, based on experience and reflection, that with other projects described earlier, one factor to their success might be linked to clearly defined work for the new leaders; in addition, it can be inferred that the work of the council appears to have systemic implications.

The superintendent shared a concern that continuing the councils in their current process might result in "another set of ideas that are marginal". The councils are not the "turbo supercharger" that was hoped for to increase academic results in mathematics.

Union leadership comments, "I'm not sure we've done a good job at integrating the work of the councils with the work of the district." These two statements do not position the councils in a place that helps to distribute leadership in the system. There is a desire, on the part of the superintendent, to turn over the work faster than what has been done, using data to drive the actions more rapidly.

Every year, the configuration of the councils has changed. The conditions and frustrations created by negotiations and the work have been the guiding forces of the membership and model of the councils. As described earlier, year three broadened to include representatives, current department chairs/team leaders from each middle school and high school, and six representative elementary teachers. By naming the department chairs as council members, there appeared to be some leadership roots in place from district to schools sites, aligned with the original vision of the union president. The union president's vision for teacher leadership is not captured by the "managerial" work that is

usually performed by the department chairs. His hope was that the selection and job description for site leadership from the traditional department chair model would start to change.

The evolving nature of the councils continues to be deeply thought through by the superintendent. In a February 2006 meeting with district and Federation membership, the superintendent's comments can be summarized, from meeting field notes, as follows:

My interest is to do better work on behalf of kids. The system view is interesting to look at. It appears we've created parallel tracks. That is my learning. Maybe the council is not the right model; the model is flawed in that teachers are to give input and not decide on everything. We needed to set people up by defining their leadership, which may have set people up for failure; it appears the task continues not to be focused enough. After a year, it is not changing our culture of work.

We're really in uncharted waters with the councils. We are doing something different and to move forward; we need to change the structure. The council is not the right structure. We need to think about two levels: implementation and strategic. The structural issue is about broader, long term leadership. We have a need to redefine roles and responsibilities. It's worthwhile to think about transitioning the council to department chairs.

Additionally, using field notes from the meeting, the union president's participation in the conversations can be summarized as follows:

We need to remember that our major interests that drove the creation of the councils are to create a new role for teacher leadership, to bring diverse voices to the table, and to compensate teachers for their participation. In my mind, leadership is about an equal voice around policy level and site level decisions focused on staff development, specifically with curriculum and instruction. We need to break the role of the department chair. We may need to consider a different role for the two different councils. If the new model works, move forward.

Challenges. One of the aspects being considered is to process council work at a different time, June through August. "It's very hard to pull people late in the afternoon and have them do productive work for 5-6 times a year." Second, it appears that only a

handful of teachers have ownership. There are another 200 to 300 teachers that do not even know what the work is all about. Gathering teacher leaders who are exceptional as lead teachers working with other teachers in training; teachers that can help facilitate staff development, facilitate TLC's, and help with the overall work might be how the model evolves. Conversely, the union president is hoping that the council continues to shape leadership at the school sites.

Summary

The math councils were initiated by the superintendent and the union president to improve student math achievement and foster teacher leadership. Because of these goals, Math Council implementation evolved over the last three years, as did the thinking of these two leaders. The long history of union and district collaboration to support teacher involvement has created a context to distribute leadership to teachers. Through this relationship, various "work" partnerships to develop teacher leaders have been developed and sustained. Areas of work focus include assessment, staff development, and curriculum. Interestingly, the council journey to create curricular capacity and develop teacher leaders, in its short existence, was revisited and revised each year as a structure in the system. It seems to be less well-conceptualized compared to earlier initiatives. From the data, it appears that the lack of specific clarity on the charge, the changing dynamics of the participants, and the evolving thinking of district leadership may have contributed to results that did not meet the academic achievement expectations that was expected from this work. In the next section, the perspectives of the council members who participated in each of the three years are presented to explore their understanding of teacher leaders.

Perceptions of Teacher Leadership

This section addresses the second major research question of this study: *How did* participants on the Math Council perceive teacher leadership? It is important to refer back to the three-year historical membership of the Math Council described in the previous section. It is from this context that an additional opportunity to act as teacher leaders was created in the district. It is from the council experience, as well as previous leadership experiences, that each participant defines his or her perception of teacher leadership. The purpose of the council was to distribute the activities and practices of leadership regarding closing the achievement gap in mathematics to teachers. This study attempts to explore how the hierarchical leaders of the system, superintendent, and union president, as well as the recipients of the distributed leadership, principals and teachers, define this leadership role.

Superintendent and Union President

The superintendent creates his definition of teacher leadership with a context where leadership is developed specifically within the areas of curriculum, instruction, and assessment. The notion is that teachers would be part of the decision making process in these areas as teachers serve as local experts in the district. As the union president engaged in developing teacher leadership at the district level, the operating definition of teacher leadership, from his thinking, was more facilitative work. His description of teacher leadership is captured in the following two quotes:

He (Pat Doland) was the first one who brought up the notion of a new role for teachers. And then, Linda Lambert's work...she's had two or three books and the last one called *School Leadership That Matters*. I think Doland has done a terrific job of describing the existing system, and Lambert gave me a contextual piece of what I was trying to think about for

leadership. Both of those had decision making around the school- school leadership and not this kind of broad policy. Frankly, that's where I wanted to take it ... my vision for teacher leadership is what's happening at the site. The councils were the first step to get there for me.

I thought the (2 district and 2 union representatives) was a good example of teacher leadership. (2 union representatives) were equals, along with you (district). That kind of equality is part of my notion of teacher leadership. There's not a hierarchical command structure but more of a facilitative structure. Lambert defines a school leader, principal or whatever, as a more of a facilitator and gentle guider of the work, rather than the decider, which I think is a wonderful description.

This quote adds two dimensions to teacher leadership. It now adds the level of working with administrators to lead and guide the work and moves the work to the site level.

What is different about this is that there is a flattening of the structure through which work is done. What does not appear to be clear is, "What is the work?" The superintendent adds a level of specificity and dimension to the work of teacher leaders. His vision is captured in the following concept:

Teacher leadership from my vantage point focuses on ensuring that teacher voice is heard. And by teacher voice, I mean areas in curriculum planning, thinking about best instructional practices, and assessment, and it tries to reach beyond just voice and adds in a part of the decision-making process in helping us ... not only troubleshooting and helping us implement, but also helping us make good decisions.

The other part about teacher leadership is that, I'm pretty convinced that if we don't engage teachers, that we can create all the good work that we want, but ultimately they may well continue to act as independent consultants ... and thereby, we may have a better idea ... may be, but it's less likely to be implemented and so I would rather engage them in the process. And even if it distorts itself some, my sense is that it moves our collective practice forward.

Participant Definition of Teacher Leadership

The vision to distribute leadership to teachers through the Math Council served as a structure within the district to work deeply through issues pertaining to math achievement and in particular, in year two, to Algebra Readiness success. When teachers and principals were asked specifically about their definition of "teacher leadership," their perspectives varied. Eight main themes emerged: collaboration, representing teacher voice, mentor, continuous learner, content expertise, systems thinker, listener, decision maker, and initiator. Both teachers and principals overlapped in every theme except listener, which was identified by teachers as an additional key. Data supporting these themes are presented in Table 4.3 and will be discussed throughout this section of the chapter.

Principal Participants. The four principals interviewed for this study each have a view of teacher leadership. Each of their definitions captured some element mentioned by the teachers, but no definition captured the whole. Some of the themes overlap but for the most part, principals have their definition of teacher leadership. Their frame of reference comes from their experience as a principal as well as a former teacher within the district. Taking a closer look at the interviews illuminates the following: building relationships, understanding and working at the bigger system level, being a learner, and being a decision maker.

Table 4.2: Principal Perceptions of Teacher Leadership

Principal	Definition of Teacher Leadership
1	Teacher leadership is figuring out what it is people want,
	what they believe in, what they need, and then the how
	and it starts with relationships.
2	I think it is a very global term and can mean lots of things
	but really to me, this is a person who's willing to do more
	than just what's confined to the four walls of their own
	classroom and is really looking to support and help the
	bigger picture of the school staff and the district.
3	Teacher leaders have to be learners be at the forefront
	today and rally the troops and all that stuff. But if you don't
	keep learning yourself, that's not going to happen.
4	Teachers have a huge impact on determining the systems
	that are developed and the processes developed on site to
	support student learning results are always depended
	upon teacher input a curriculum decision, an assessment
	decision, and intervention decision.

It can be inferred from the quotes that principals have their own views of teacher leadership and they each support teacher leaders a little differently at each of their schools sites, based on their definition or concept of the role. The themes, however, that glue their concepts together are similar to the collective voice of teachers. However, a couple of points that stand out from what principals describe are the teacher leader's ability to take initiative to look outside the school "box" to support the organization in moving forward, the ability to take a systems view on the work, and the ability to lead change work with staff. These elevate the role of the teacher leader, from the overall description described by the teachers, by moving the work to group facilitator as well as decision maker.

Teacher Participants. As noted earlier, eight themes emerged from the interviews of both teachers and principals. In the following section, each of the themes will be listed and defined by the participants in the organization. The definition to be used will include

key actions, behaviors, or concepts that capture the essence of the theme. Data supporting these themes are presented in Table 4.3.

Collaboration

The theme that came up most frequently for participants was collaboration; 67% of the teachers noted this as important for a teacher leader along with 75% of the principals. As collaborators, teacher leaders described the need to work intimately with colleagues on a team. It's a more dynamic process of sharing knowledge, interacting with others so that it is clear how others are thinking, communicating clearly, and understanding and being comfortable in the dynamics of working with others who bring different strengths to a meeting or a process. In the case of collaborating, both teachers and principals agree that this work is highly relational.

To be a leader, you have to work with a team, so you have to collaborate, you have to work, you have to walk the extra mile and don't expect too many "thank you's" at the end. Sometimes, you have to make tough decisions that people are not going to care for. You can't sit and wait for people to approve of everything you do. You just have to keep your eye on the bigger picture.

Systems Thinker

The second area commented on by 42% of the teachers is the ability of a teacher leader to feel comfortable navigating the system as a whole, serving as systems thinkers (big picture); interestingly, 50% of the principals also noted systems thinking as a quality of teacher leaders. A systems thinker has the time and ability to identify leadership in many arenas beyond the classroom; going beyond the curriculum aspect that teachers are most engaged in with students. It is about having a vision and being open to new ideas

and progressive thinking. Both groups attribute the need for teacher leaders to be a part of site systems, and even more importantly, working to serve the district.

Content Expert

Thirty-three percent of the teachers described having knowledge in their subject to lead colleagues. Content knowledge builds credibility and respect and helps to build instructional knowledge and expertise. As content experts, teachers gain credibility and leadership from their colleagues as they lead groups and serve their colleagues with the academic and instructional knowledge. One principal noted that as experts, teachers serve as leaders in their content area. The difference in the two perspectives is that with teachers, it appeared to be earned from one another and with the principal, the expertise was a given.

Mentor

Serving as a mentor also came up for 33% of the teachers and 25% of the principals. According to the teachers, mentoring can take a couple of forms. One of the four recognized the need for teacher leaders to take on the responsibility of accelerating the development of teachers in the rigor of their work, while two others identified support (building confidence, encouraging, and helping) as their role in moving teachers toward excellence. A fourth teacher noted that the mentor would be one that people in the system would go to. One of the principals focused the mentoring much like the first teacher, specifically mentioning "training."

Represent Teacher Voice

This is the third area that illuminates for 33% of the teachers. This leadership entails sharing information with colleagues and representing their voices on larger

committees, school or district. It is a true connection to a practitioner's work and point of view. Fifty percent of the principals felt that teacher voice is important as serving as communicators and liaisons for various committee levels. An important aspect of this is to honor the voice. Representing teacher voice can be as simple as communicating information between teachers and other entities in the system to making sure the teacher leader represents the perspectives of the teachers to a district group. In addition, one teacher surfaced representing teacher voice to include providing input to the system's issues, for example, serving as the school site's union representative.

I think in my case, in particular, I don't know how my leadership skills are perceived by others, but I think, in my case, in the leadership roles that I undertook came from. One, volunteering to be the PFT representative. And two, not being afraid to be outspoken and to state my piece when I thought that someone who was in a position to make decisions was not correct, and offer alternatives, not be an obstructionist, but to offer alternatives that were perhaps better from a practitioner's point of view.

Continuous Learner

Seventy-five percent of the principals listed leaders as continuous learners. As a continuous learner, being open to diverse perspectives and to take risks, despite what colleagues may say. Two of the 12 teachers felt that learning can lead to personal growth. This personal content learning could develop the teacher leader to share with others, creating a motivating and collaborating environment for colleagues. Principals see the continuous learning as expanding perspectives beyond "what we know" to "what we don't know" as well as being open to diverse perspectives. One principal illustrated a teacher leader learner in these words:

I think teacher leaders have to be learners. I don't think that you can be a teacher leader if you're not in a learning mode yourself. Because there's

always the "ah-ha," there's always something new out there. And you may be at the forefront today and you may be able to rally the troops and all of that stuff. But if you don't keep learning yourself, that's not going to happen. So, I think being the learner is one of the keys to teacher leadership ... being a learner yourself.

Initiator

A teacher leader needs to be self-motivated, as surfaced by two teachers and one principal. The teacher must be able to recognize when something needs to get done and just takes charge to do it. There is no wait time and the teacher can figure out how to do it successfully. It is someone who takes on the responsibility to help the system move forward. As one teacher described, "No one else volunteered. We sent around emails and I was, 'Well, if no on else wants to do it, I'll do it.'" In addition, two teachers briefly pointed out that teacher leaders are listeners and decision makers.

Decision Maker

It is noteworthy that one teacher and one principal mentioned decision making as part of their definition of teacher leadership. Of note, the teachers' voices on curriculum, assessment, and other instructional areas should be respected. Decision making is seen as a conduit to increase collaboration throughout the system, increasing teacher capacity as teachers serve at the school site and throughout the district.

Summary of Teacher Leadership Themes

Seventy-five percent of the principals accentuated collaboration and continuous learners as teacher leader traits. The patterned emergence of collaboration by both teachers and principals speaks to a process that strengthens teacher leadership. What is not overtly apparent is the relationships and respect that two teachers speak to as an important foundation to collaboration. Principals add the dimension of communication as

part of the dynamics of collaboration. Upon closer examination of the data from collaboration and being a continuous learner, what emerged are more complex descriptions of a teacher leader. Complex in that relationships with colleagues come into play. As a continuous learner, teachers highlighted the teacher leader as one who is not only learning personally and professionally, but also shares the learning, motivating others to be continuous learners. Later in the chapter, data from council interviews will illustrate how district-level literacy councils have served to support participating teachers to develop as teacher leaders.

Table 4.3: Perceptions of Teacher Leadership

Theme	Response from Teachers (frequency of theme emerging from 12 teachers)	Responses from Principals (frequency of theme emerging from 4 principals)
Collaboration	"To be a leader, you have to work with a team, so you have to collaborate, you have to work, you have to walk the extra mile and don't expect too many thank you's at the end." "You know, you can't just be the master of everything You're not a leader if you're not sharing." "I think that collaboration piece, you know, being able to work with people, always talking to other people, making sure you do know what other people are thinking." "I am a firm believer that two heads are better than one and I'm much happier to work collaboratively. I just think it's very valuable. I think the product for a larger group of kids is richer because you do it." "You need someone who is definitely a collaborator. You have to have people who collaborate and work with others and are willing to work with others." "It's all about teamwork. I think that's it time and team." "you have to have a way to build that relationship, whether it is personal power and personal interaction or whether you build that relationship to get to a common goal." "I think I conduct myself professionally and treat my colleagues with respect." (8)	"Teacher leadership is figuring out what it is people want, they believe, in, what they need, and then the how and it starts with relationships." "teacher leaders will have to be able to communicate and build relationships." "you've got to understand where people are coming from and you've got to be able to acknowledge and accept and complement their strengths." (3)

Theme	Response from Teachers (frequency of theme emerging from 12 teachers)	Responses from Principals (frequency of theme emerging from 4 principals)
Represent	"Leaders are not being the boss, but like being	"act as a communicator and liaison
Teacher	the person who's sharing information with	between organizations and the rest of the
Voice	people, taking their information, and getting it	staff"
	where it needs to be It's representing pretty	"the teachers strongly felt that this was
	much everybody."	necessary (middle school math course) that
	"volunteering to be the union representative	was necessary and had data to back
	not being afraid to be outspoken offer	themselves up difficult for me
	alternatives that were perhaps better from a	philosophically. I had to get out of the way."
	practitioner's point of view."	(2)
	"a teacher leader is there to bring and really	
	connect the schools to the committee. At the	
	committee, we're representing the various schools." (3)	
Mentor	"So my job as teacher leader is to bring those I work	"Someone who's willing to work with
Memor	with to where I am and to give them insights to	their peers to support them, to train them,
	speed their development."	to help them" (1)
	"You first gain their (new staff members)	(5)
	confidence that you are there to help them. You give	
	them encouragement, you show them you're there to	
	help them all the way"	
	"We have such strong faculties at all schools and I	
	think it's that faculty member who consciously or	
	subconsciously, while they take on a role within the	
	grade level take on a role of helping other	
	teachers see the direction that instruction needs to	
	go."	
	"It would be a person that other people would go	
	to." (4)	

Theme	Response from Teachers (frequency of	Responses from Principals (frequency
	theme emerging from 12 teachers)	of theme emerging from 4 principals)
Continuous	"Someone who, first of all, is continually learning,	"Someone who's willing to look outside of
Learner	is willing to share that learning with other people	their own classroom willing to do more
	who can motivate people to want to do something	than just what's confined to the four walls of
	differently than they are currently doing it."	their own classroom"
	"As someone who talks very little about what the	"And they'll have to be open to other
	exact right way is, and speaks more of how to	perspectives."
	actually be more introspective and look at yourself	"I think being a learner is one of the keys to
	for growth." (2)	teacher leadership." (3)
Content	"has knowledge of whatever subject that they	"What's unique is that teachers are the
Expert	are asked to lead any grouprespect of their	experts on how to put this all together; to
	peers well organized."	provide leadership in this area." (1)
	"When people have asked them questions,	
	they've been credible with the knowledge they	
	have."	
	"has good content instructional knowledge,	
	experience and the ability to work with	
	others"	
	"I would try to support expertise and	
	knowledge so that would help build respect."	
	(4)	
Systems	"It's leadership in just about anything."	"Really looking to support and help the
Thinker	"I have been teaching in this district for so many	bigger picture of the school staff as a
(Seeing the	years and have not seen the whole picture as I see it	whole and the district."
Big Picture)	now."	"We have some very well-defined
	"I'm a leader on my campus we're a little island	systems developed by teachers they
	really neat to be a part of the bigger picture."	get results because of the model we
	"I think that if you go back to the notion that a	employ here." (2)
	teacher leader has a bigger picture than just this little	
	piece (referring to focus on curriculum) a teacher	

Theme	Response from Teachers (frequency of	Responses from Principals (frequency
	theme emerging from 12 teachers)	of theme emerging from 4 principals)
	leader needs a broader picture than just this tiny	
	little focus."	
	"People who have progressive thinking, are open to	
	change, and listens to new ideas; able to see	
	weaknesses and strengths and have a vision." (5)	
Initiator (Self	"Isn't afraid to step up and take control. If	"Someone who's willing to step up and take
motivation)	somebody has to get something done, step up and do	on additional responsibility at a school site or
,	it."	within the district." (1)
	"As a teacher, you see a need and you go ahead and	
	do it. You're not standing back and waiting for	
	someone else to do things. You see it, you just do	
	it." (2)	
Decision	"Accommodate, but not be scared to make	"Teachers have a huge impact on
maker	decisions if you accommodate too much, you're	determining a curriculum decision, an
	not a leader any more." (1)	assessment decision, and intervention
	•	decision." (1)

Taking a global view of teacher leadership from these teachers' perspectives describes a teacher that leads in all aspects of the profession. A teacher leader is one who can lead and mentor in a content area. This teacher is empowered through sharpening his/her craft through continuous learning and engagement in the learning. It is a person who is comfortable with dissenting voices on an issue but, in the end, can confidently represent the voices of the teachers at the table, in any forum.

As noted in Table 4.3, council members identified a number of key behaviors important for teacher leaders: collaborator, visionary, decision maker, expert, and being respectful. An underlying foundation for each of these behaviors is the ability of the teacher to build and sustain relationships. It appears that it is through relationships, as a foundation, other themes that emerged.

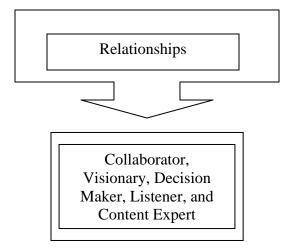


Figure 4.1: Relationships as a Foundation to Teacher Leadership

Interviewees noted it is through relationships that teachers can behave as teacher leaders. The teachers elicited the following as important personal characteristics of teachers as leaders, "You have to be a really good listener and listen to

everybody around you." The first quote provides the overall importance of building relationships and listening. The following quote unveils the importance of the relationships to enact leadership, "You have to have a way to build that relationship, whether it is personal power and personal interaction or whether you build that relationship. It's all about getting to this common goal." On the importance of relationships to collaborate, the following two comments, of four, shared by teachers:

I have had different partners and different people but I am a firm believer that two heads are better than one and I'm much happier to work collaboratively with people. It's time consuming and I think a lot of people would rather not do it because it takes up time. I just think it's very valuable. I think the product for a larger group of kids is richer because you do it.

You need someone who is definitely a collaborator. You have to have people who collaborate and work with others and are willing to work with others.

Content expertise, as a venue to respect, was noted as a quality of a teacher leader as well as the ability to make decisions. "You need someone who has a strong character who's not afraid to take a leadership role, who's not afraid to make decisions that not everybody is going to love," and "I would try to support expertise and knowledge so that would kind of help build the respect." Being a visionary emerged in one interview, "You need people who have progressive thinking, are open to change, just to listen to new ideas. Also, be able to see weaknesses and strengths and have a vision." This quote unveils the summative effects of relationships, collaboration, decision maker, and content expertise.

Enactment of Teacher Leadership Through the Math Literacy Council

This section addresses the third major research question of this study: *How has* the Math Literacy Council influenced the enactment of distributing leadership to teachers? Recall that the first part of chapter presented data on how the superintendent and the union came to establish the Literacy Council. An unveiling of data in the second part of this chapter presented how each of the key participants perceived teacher leadership. The focus of the data in this part of the chapter is on the roles and responsibilities of council members, leadership roles from council to school site. The last part of this chapter addresses the identification of optimal conditions to distribute leadership.

Roles and Responsibilities of Math Council Members

The last question uncovered the district council members' perceptions of teacher leadership. Serving on the council provided a structure through which teachers and principals could serve as a leader at the district level. In order to understand a potential connect with the perceptions of teacher leadership as described and the distribution of leadership to teachers at the district level, the following question will be explored: *How do teacher and principal members on the Math Council perceive their leadership? What were their respective roles and responsibilities?* Understanding this connection may provide data to support the distribution of leadership at the district level, through teachers.

The Math Literacy Council, as mentioned earlier, is an aggregate of teachers and principals that came together, on a periodic basis, to discuss increasing mathematics achievement district-wide. The purpose of the council was shaped and determined by the

district math achievement data. Four participating principals viewed the purpose of the council in the following global statements: bring together voices of teachers and administrators to review district math data and collaborate on next steps toward increasing math achievement, develop a sequence of courses to improve math achievement, and forward recommendations to the superintendent on how to address high school students who are not successful in math. While global in nature, it can be inferred that in order to address the purposes described, attention to the purposes identified by the teachers would need to be in place.

After reviewing interviewee data, six of the 12 teachers noted that the purpose of the council was to develop a well-articulated and aligned common math curriculum for students across the district. Four teachers noted their role as an advisory role by making recommendations to the district, noting that there needed to be a greater understanding of the current practices within and outside the district in order to make the recommendations. Two teachers commented that their work with reviewing research was important to provide the "thinking" needed to be thoughtful about increasing math achievement. The other three responses, as noted in the chart below, addressed the development of a plan (course of action) or a review of resources to increase math achievement.

Table 4.4: Teacher Views on the Purpose of Math Council

Purpose	Responses
District-wide alignment of math curriculum	7
Make recommendations to district	4
Review of research	3
Investigate new materials	1
Professional Development Plan	1
Plan for Algebra success	1

The question that follows is, if the data collected in Table 4.4 are the purposes, what is my role to achieve this outcome? Both teacher and administrator council members viewed their roles in different capacities. While there is overlap in the purpose and the roles that teachers identified, the principals distinguished themselves with leadership roles while working collaboratively within the council. In working collaboratively, the principals viewed their participation as providing and guiding clarity to the charge, "Identify the strengths and weaknesses of the district's support for student literacy and make consensus recommendations to improve literacy for all students," was put forth by the superintendent and the union president. In addition, the charge included supporting "the district's culture change by participating in collaboratively accomplishing the work of the Council" It is believed that a culture that engages teachers, principals, and district management would result in rich dialogue and collaborative decision making that would ultimately impact teaching practice and increase student achievement. To provide clarity, the principals indicated they not only engaged in the conversations, but modeled listening, accepting of divergent views, paying attention to the big picture, and keeping on track to move forward.

Table 4.5: Principal Role on the Math Council

Principal	Role on the Math Council
1	At that time the councils were just getting started, their role was not clearly defined. But the concept was that we were these teacher leaders and administrators getting together to look at the math achievement in our district and to make recommendations on improving math scores in our district.
2	I think my role was to, was to try and bring some degree of clarity and consensus around those issues that are defined as the nonnegotiable and try to move the council from discussion about math philosophy. And to identify what the problem is and get them beyond identifying the problem.
3	My leadership role was to, first of all, help clarify what the charge of the group was and then listen to the ideas that people had as well as contribute my own and then work to say what are the final recommendations we're going to bring forward. I also saw my role as in places where we would get stuck, and we will always get stuck, how I could step in to kind of help move us forward.
4	I think my role or from I think the district's perspective was to provide the administrative, the bigger picture, the overview of the entire thing. I felt that my role was to ask questions, to "keep it real," so to speak. And probably to be a role model in terms of the leadership piece. I hope I was modeling communication and valuing people's opinion.

Within the council, the teachers described their roles into two categories: representation of teacher voice and developing artifacts. Seven of the 12 responses articulated their role as representing their colleague's views and expertise at the district level; the other six articulated a commitment to bringing clarity to the work and defining, through recommendations, as to how the district would accomplish the work through staff development. While delineated into the two categories both represent artifacts and processes that point to representing teacher voice.

Representation of Teacher Voice		Artifact	
School site to	5	Staff development	4
district		recommendations	
Assessment	2	Establish purpose	2
Committee to			
district			
Decision maker	1		

Table 4.6: Perceptions of Teacher Role on the Math Council

A middle school teacher that has served on the Math Council for three years viewed the role on the council as

...fact find and learning myself; a representative of the beliefs and philosophy of the teachers at my site. By being that representative, helping the District come up with a game plan to try to bring the whole district a little bit more in line.

Another teacher who had served on the district Assessment Committee and Math Council isolated the role as, "I was there to make sure that any aspect of assessment correlated with the guidelines we had set and established ... so I was like a watchdog, you might say, to make sure things didn't get far out of hand."

As teachers defined their roles on the council, they also identified areas of concern as the council progressed through the work. Below are some perspectives from teachers that encompass teacher leadership development, big picture, and time:

It's an interesting year because I'm working in the part that I finally feel needs the attention—staff development. But I feel so disconnected from the work of the learning council because I don't really know what's going on in other subgroups. I don't see how things are connecting and how that is changing leadership, in general.

One of the biggest problems has been that teachers are trying to do literacy council work on top of the teaching day. It's not the time, because everyone's willing to put in the time, but it's the time for details and the organization and follow through that is difficult for a teacher.

One of the elementary principals, like the teachers, expressed concern about the council's role and purpose. "Do not ask a committee to do something they are not qualified to do. Determine what the role of the committee rightfully should be. Give them a proper direction and let them go to work." Conversely, there was an example of teachers in year two who felt that their role on the council was about being teacher leaders. During year two, the literacy group formed and met outside of the Literacy Council meetings to focus on a group-identified task. A high school teacher describes this experience:

I feel I played a significant role in talking to anyone about what Algebra looks like across the curriculum, grades K-9. When we met, I would sit down and talk about curriculum; we would take out books and our mapping piece.... I was the only high school representative at the time. In fact, we had all middle school people there. Our group (group of three teachers within a larger group) sat as facilitators with all the middle school people and some elementary people. So this literacy council was a stopping off point for many of us because we would be the leaders within that group and augment it with additional meetings at other campuses. So I see that that was a phenomenal piece. I think that was the true vision and that the literacy council was just a sample leadership.

The data point to the need for clarity of the role and purpose of the council. The administrators and teachers had overlapping expectations around the purpose of the council: providing clarity of the task, understanding math achievement at a deeper level through the use of data, and making recommendations. The data also illuminate that the "how" and "behaviors" to achieve a common purpose was defined by differing voices. Because of this gap, some barriers surfaced. These barriers will be addressed in the last section of this chapter which addresses the distribution of leadership to teachers at the district level.

Distributing Leadership to Teachers Through Curriculum

The content focus of council work was not in question at the onset. Math teachers were serving at the district level to analyze the forces, both internal and external, that accounted for the math achievement of students in the district. This section of chapter 4 surveys the potential role of curriculum in developing teacher leadership through the following question: *How has a curriculum focus supported or constrained, or served as a barrier, to distributed leadership?* It can be quickly ascertained that a focus on curriculum is a potential vehicle to consider when distributing leadership to teachers.

In the district, as mentioned earlier, two councils were formed. The focus of this study is the leadership of the Math Council; however, a language arts council also existed. Both councils focused some of their work around the curriculum in these two critical areas. As teachers, their work is implementing a strong curricular program for students. The question about using this focus to distribute leadership to teachers provided some mixed responses from the teachers, yet *all* principals felt that a curricular focus supports distributing leadership as described in the following quotes from three different principals.

Well, I think it's supported it because you have math people there because obviously they have a vested interest in that it is about their teaching in math. So I think it gave them a common topic to talk about. They all had experience with it so that was certainly going to be talking from knowledge that they have. So I think it was more supportive than detrimental.

I don't think that the current focus of the literacy Council has constrained leadership in the district. I think we have a history of teacher involvement especially in curriculum so I think it's been a way to formalize this involvement, a way to acknowledge it and continue it. There may be times that I feel like the progress is slower because the councils involve a lot of voices of a lot of people in a lot of joint decision-making so things don't

always move as quickly as I would like. I think that hopefully the buy-in from teachers in the end makes for a better implementation of anything that is recommended by the Council.

I think it supports, especially if the configuration like what we had, K-12. Any time we can get a comprehensive view across a curricular area for teachers, which is a plus. The ones I'm thinking specifically for Math Council, we talked about algebraic thinking and we looked at how that started in kindergarten and totally was tied in and connected and grew and developed over time.

The last principal linked the curriculum focus on leadership to an example of his teacher on the council. During the council process, the principal left for another school. That is his reference to not being sure about the outcomes.

He (teacher) would actually bring some of the things that were discussed here around course sequence and different things like that. He'd go back and have conversations with the math department. I'm really not sure what eventually came out of that. And there may have been some kind of decisions that were made ... collaborative decisions around sequencing or stuff like that.

Nine of 12 teachers, at all levels, agreed that a curricular focus supports distributing leadership; three of 12 teachers reported that the curriculum focus did not. One middle school teacher viewed a curricular focus as too narrow. "Having a broader view and then coming back to the classroom and thinking about what you used to think were so important, really aren't that important. In the grand scheme of things, it's about making connections with kids and sharing a little math content with them". A second teacher, elementary, remarked, "I don't know whether it helped me develop more as a teacher leader. I liked the curriculum focus. It's an easy one to start with". The other 10 teachers talked about their leadership in the area of curriculum.

Table 4.7: Curriculum as a Venue to Distribute Leadership: Teacher

Teacher	Curriculum Focus to Distribute Leadership
Elementary	"If teacher leadership is teachers taking leadership roles and leading
	other teachers, then yes, because they are going to develop curriculum
	around the ideas that come out of the literacy councils."
Middle School	"The more you train teachers in curriculum and with its content it
	pedagogy and everything else, they are really capable to become
	creative from there on. I really think you can create leadership with
	teachers who are really specialized in the fields and open door for
	creativity."
High School	"The curriculum is what we do so if you're not involved in it, then
	you're not a leader, you're a follower. You've got to want to do it, so it
	seems to me, if you're a leader, you have to be involved in developing
	curriculum."

The curriculum focus allowed teachers to develop as leaders; however, the teachers identified other benefits from focusing on curriculum in the literacy council. A summary of the benefits can be captured in the following themes: modeling, big picture, personal growth, and increase in knowledge.

Table 4.8: Benefits of a Curriculum Focus to Develop Teacher Leaders

Theme	Support (Frequency/12)
Model	"I watched the facilitators and how they facilitate. Keeping us on track, getting to what they want. Sometimes even through the back to get what you want. Also watching the (teacher leaders within the sub-groups. Watching what they do and say brings us together or pulls us apart." (2/12)
Big Picture	"It gave me time to really talk about philosophy. The first two years were really stimulating as far as professionally having the discussions that you don't get to have on a day to day basis as a teacher it deepens your knowledge and kind of pushed me back to a more global perspective because we come from our classroom perspective and from that, your school's perspective." (3/12)
Personal Growth	"It helped make me more confident (participating in the council). I did leadership roles and I'd get up and talk, but now I feel I'm representing at the district level. I really have to know what I'm talking about. I'm really representing my staff." (3/12)
Strengthen Expertise (Knowledge)	"I need someone who's going to push my thinking, make me think differently, put new ideas on the table, that maybe I haven't thought about because then it pushes my thinking about how it relates to my own classroom. I need that interaction with adults who are like minded, like myself, in that we're here to do work for kids." (4/12)

One main advantage of bringing colleagues together in the council was the discussions that occurred during meetings. There appeared to be a professional and personal benefit for the teachers from their participation in the councils. Each one of the representative quotations focused on the personal and professional development of the teachers as a teacher leader through their participation in the collegial discussions or processes that occurred during the meetings.

It is important to note that 33% of the teachers specifically described in the openended responses that they benefited from a curriculum focus from the mutually respectful
discussions that provided each the opportunity to strengthen their own expertise and
broaden their concept of ideas and knowledge to reach the learners in the classroom.

They appreciated the opportunity to be able to interact with "adults" who have a common
focus. It appears to have been a strategic focus that helps to build attention to student
achievement. This aligns with the experiences that the principals had within the councils.

Part of these discussions is the ownership of the work, as a larger structure, as voiced by
two of the principals. An additive feature to strengthening a knowledge base through
cross-fertilization of thinking is what 25% of the teachers referenced – gaining a better
grasp of the big picture of mathematics in a K-12 system. The data collected support
broadening the scope of curriculum discussions as an important factor to developing
stronger systems of leadership in support of student achievement.

Interestingly, 42% of the teachers cited a more personal benefit to participating in the councils, which the themes of modeling and personal growth capture. The teachers maximized their participation on the council to build upon their own skills as a leader. Some did this through observing and analyzing the behaviors of the facilitators in the

process, and utilizing these behaviors in their own capacities at their sites. Other teachers benefited from the encouragement of other peer teachers to develop their own confidence in developing as a leader. The targeted focus on discussions in a "structure" has facilitated the continued development of teachers. The question that follows is, "How have teachers used the skills and knowledge they have been immersed in to lead at the district and school levels? Has it had an effect on teaching and learning at the student level?"

Leadership Roles at Schools

One of the challenges that emerged from both principals and teachers, within the structure of the literacy councils, is that the elementary school membership was limited to a few representative voices. In response to this challenge came the question: In what ways have Math Literacy Council members played a leadership role in their schools? A revisit of the methodology charts the membership of the councils in years one through three. While year one had the largest membership, the secondary schools were each represented and the elementary schools were not. Because of this, the council conversations were limited to schools that had a voice on the council. One elementary school teacher states, "The sites that aren't my own site wanted e-mail correspondence so I've been e-mailing them. But at my site, I've shared at staff meetings about the work that we're doing." Conversely, a middle school teacher commented, "The all year meeting regularly allowed for a much higher level of communication. A much higher level of understanding from site to site; from individual to individual ... and much more continuity, consistency, and deeper understanding." The middle school teacher's experience can be supported by the view of this elementary teacher:

It [Math Council] brought teacher voices to the table, without a doubt. But I think a teacher's leadership was primarily distributed to those teachers who are closest to what we perceived as the biggest problems we were dealing with, the biggest challenges for our district. That would have been middle to high school teachers. They assumed leadership roles and I think they were listened to and heard.

As mentioned earlier, one of the council benefits is the collegial discussions that are powerful for learning and developing teacher leadership. These data speak to the engagement of teachers in the work. With both middle and elementary teachers, the engagement level appears to be higher when the work is closest to the teacher.

School level leadership. There are specific examples of leadership roles of the Math Council members at their schools. All teachers reported out to their colleagues, but in varying degrees. Some met once during the year while others reported out to their site teams the work of the council on a regular basis. In all cases there was limited evidence of participation of the teachers at the school providing input to the council process. A high school teacher captured the sentiment of the group best, "I was certainly reporting out because they would be very curious about what was happening and in what we did. I did not engage them in the process and ask them to participate in any capacity."

Some other school level actions that resulted from the Math Council work include the following four examples from the 34 schools, represented on the council over the first two years. An elementary school teacher used the work to help guide people through their math work. One-on-one mentoring was more of the focus of his work. "My leadership roles have been the same as they have been throughout my career, just trying to help people get through." Two other elementary teachers capitalized on the council work to push the development of a Teaching and Learning Collaborative focused on Algebraic

Thinking, with participation of school site teams. They also demonstrated a couple of lessons at the school focused on Algebraic Thinking. A high school teacher was thoughtful about the council work and used the data and discussions to help guide the teaching assignments, particularly in two critical courses, Algebra I and Algebra II. These actions are a result of the first two years of the council.

Classroom level leadership. Teacher participants also described benefits to students in their classroom. Two of the teachers have done a personal curriculum audit of their courses based on standards and have adjusted the content they presented to students. Two teachers reported using the experience and knowledge gained to impact placement of students in the next level math course; another teacher incorporated math vocabulary in lessons. In each of these instances, students are benefiting from the council work. The hope is that this work would have been more systemic and widespread. The challenge is to encourage this type of leadership work at our schools, distributing the work to others in the system, but the question still remains if the council is the structure to successfully engage and empower leadership to teachers so that there is a direct impact on student achievement. This outcome will be tested in the next few years from the major outcome of the council in year two, the adoption and implementation of a new middle school Math 7 course.

System-Wide Outcome of Council Work

The data in this chapter has illuminated the perceptions and experiences of teachers and principals in the council, specifically focusing on the distribution of leadership to teachers through a curricular focus, math. Some examples of teacher actions as a result of their participation in the council were described earlier; it was personal and

directly impacted the students in the members' classroom. Knowing that the council was a district math leadership team, a question was asked about the leadership: *In what ways did schools capitalize on the distributed leadership structures at the district level?*

The schools benefited from the Math Council leadership work with differentiated intensities. While representatives from all levels served on the council as leaders, there was a smaller representation, as described in chapter 3, of elementary teachers. The smaller representation and the focus on Algebra may have contributed to the limited impact of the district council on elementary mathematics. As mentioned in the previous section, there were some classroom impacts at schools where there were council representatives. The effects of the Math Literacy Council did have a systemic effect at the elementary level.

Conversely, the secondary schools had systemic representation in years one and three, with representatives from each of the middle and high schools serving on the council. The work appeared to benefit the secondary schools. Three secondary courses were developed. *Introduction to High School Algebra* was developed during the first year of the Math Literacy Council and was put in place at the high schools during year two. In year two the Math Council developed a new math course in seventh grade, which was implemented during the third year. In addition, the council developed a third algebra option in its third year. The development of these courses represented important products created by the council, recommended to the superintendent, and eventually adopted and enacted by the district. Through district and council discussions, the level of engagement in decision making by teachers increased. Two of the middle school teachers captured the impact on schools and the system from this increased participation:

Instead of just the district making decisions about the classes, you had teacher representatives. For the most part, we discussed, we decided on something, we took it forward and then the district office accepted it. So you feel like you have some power and people are listening to you. The district people were there, sitting at the meetings and taking your ideas and things forward for you.

I think the work of the literacy council, in creating the Math 7 and really demanding it be supported to the level of the Introduction to Algebra class has changed our seventh grade. They [the teachers] collaborate, talk, and all want the same prep next year. I think the group has come closer together as a result of the work at the learning council because they're all teaching a common course with some common expectations across the district about the course. They have become a tighter knit group as far as working together now.

In addition to the mathematics courses that were implemented in year three, a district-wide staff development plan was also finalized. To date, this plan has not been implemented. Thus, those who served on this subtask of the Math Literacy Council had little system-wide impact.

Distributed Leadership

Conditions to Distribute Leadership to Teachers

Analysis of superintendent and union president interview data surfaced four conditions that they felt would support the distribution of leadership to teachers: belief systems, collaboration and sharing, formative assessments, and teacher voice. The superintendent was most interested in the belief system for both teachers and managers as a condition to distribute leadership. In his mind, the belief system would lead to leadership practices at all levels. The union president focused primarily on collaboration and sharing as the processes and methods for distributing leadership. He believed espousing the issue of leading the learning is the main way to distribute leadership.

Principals considered processes and structures they currently have in place and added their experiences on the council to identify conditions necessary for distributing leadership. As a group, they noted the following conditions as necessary for distributing leadership: staff development and training, structures in the system, clarity of task, collaboration, trust, commitment, and accountability.

Clarity of Task. An overarching statement that was noted throughout the principal and teacher interviews, and represented by the following quote, was the clarity of task.

One principal cited, "I think in retrospect, a more effective use of this distributed leadership model would have been that the district leadership, the superintendent and the superintendent designees, should be the ones that take responsibility for identifying what the challenge is or what the problem is, identifying what the end result is, and make those decisions as a leadership team at the district." As noted earlier, the superintendent recognized that more clarity in the task was needed earlier in council formation; one third of the teachers echoed the same need. Another principal noted, "Clarity of the work, protection of the teacher leadership and communication." Interesting to recognize here, a principal used the term "teacher leadership."

One-third of the teachers echoed the same need for clarity of expectations as a condition that supports the distribution of leadership. The comments made bore out of a sense of some frustration with the process in place at the council meetings. Frustration is noted in the change in tone and voice as well as intensity with which it rolled out in the interviews:

If we had a task, you need to do this and figure out who will lead. We will need accountability and it could not be voluntary. I know that's a sensitive

thing and everyone needs to participate. It's all about team work. I think that it's time and team.

You have to know what the expectation is. What is the end result? That becomes that product piece.

I think that person has to be involved in how you are going to get there, how are you going to help your group get there? I'm thinking more like produce, process, and there has to be that relationship piece.... I see all three of those in place if you're going to be a successful leader.... I you were going to give me leadership, say, take over and run this group, I need to know what the expectation, what that outcome has to be.

It's nice if there's a lead captain moving us in the same direction.

Trust. Trust appeared in both the relationship of the superintendent and the union president and from the principals. A principal captured trust in the following:

Conditions that must be present in an organization to distribute leadership to teachers is first and foremost, trust, that comes form both sides. Administrators have got to be able to trust that the teachers are looking out for the greater good, that they do have the big picture of all students learning in mind, and that they are going to make the best decisions based on the good of all students. Teachers, in turn, have got to trust that it is not an exercise in futility that their ideas, recommendations, and thoughts are going to be authored and that they're going to be supported in a leadership role.

Looking forward, the teachers will also note that trust is a condition upon which distributing leadership can flourish.

Taking advantage of existing structures. Distributing leadership at the district level, the macro view, might have been best served thinking about, strengthening of, and taking advantage of what is currently in the system. From a principal's viewpoint, the district may not have paid attention to current structures that might have helped to create the system to maximize the distribution of leadership. "And so I think we have to be more selective on who we encourage to be teacher leaders. I think we have to have

structures in place that will develop the leadership before we even give them the task that we want them to lead." This concept, from the perceptions of the district groups in the study will be unfolded in the next subsection.

In addition to the conditions noted by superintendent, union president, and principals, teachers reported additional conditions that they felt supported the distribution of leadership to teachers. The conditions include: administrative support, collaboration, and vision.

Recognition. One-third of the teachers illuminated recognition of "good teaching." The following two teacher quotes serve as examples of precursors to distribute leadership:

I think that we're empowered to try things at our own site, but I think for teacher leadership to flourish, because of the culture of teaching and the people who go into teaching, it almost has to be recognized and then people coaxed forward.

I think that looking for it, because it's there every day at every school, there are teachers who are maybe doing a better job or doing an exemplary job and when you see that, you've got to start to nurture it and see if you can help them become leaders of other teachers. That's where we are going to have our greatest impact as teachers. Our impact is not going to be on administrative policy, it's going to be on better teaching.

The recognition can be linked to an earlier statement by a principal who commented, "... more selective on who we encourage to be teacher leaders." Teachers align with this notion, creating more responsibility on principals to nurture and recognize good teaching and supporting the development of their leadership from that point.

Collaboration. The notion of "how" does not come up as a necessary element to distribute leadership. What does come up, inherent in all of the quotes, is the expectation that getting to the end product will require teamwork. Within this team, there appears to

be a leader that is leading the work through nurturing teachers. This can be an administrator or a teacher.

An outcome elaborated on by one of teachers begins and ends with,

Teachers are taking ownership of this, not only me as a team leader, me as a council member, but it does funnel down to the teachers. I didn't update our Algebra and Pre-algebra curriculum our team did as I was giving them ideas from the council. So, they're assuming leadership but everybody is taking a different chunk. As a matter of fact, the people who are the teachers, they are the actual leaders, they are the ones who are putting everything together ... you're just supervising the whole process. So, as they are getting all the work done, as leaders, you are supervising it and reporting on it to another leader and so on and so forth. I think the leadership starts form the bottom up.

This teacher presented an insight to leadership that will be supported in the next section as the concept of teacher leadership continues to be defined as it is distributed to teachers in the organization.

Components to Distribute Leadership to Teachers in the Organization

The data presented in the second research question explored and represented the perceptions of teacher leadership and the distribution of leadership from district to school in Beachside School District. A second question was asked of the participants. In reflecting on what they shared with the conditions to support distributed leadership, the following question was asked: What three conditions would need to be present in a system (school or district) to optimally and successfully distribute leadership to teachers? Table 4.9 summarizes the themes that emerged from the interview responses. Also noted in the chart are the membership groups that responded to a particular theme. Three areas came up in all three participant groups interviewed: collaboration, time to learn, and teacher voice. The notion of systems involvement showed up for the superintendent, the

union president, and the principals; three areas, belief systems, site leadership, and formative assessment, emerged for superintendent and union president only. Principals and teachers voiced their common themes through clarity of expectations and accountability, trust, commitment and initiative, and time to learn; teachers added their own dimension through the theme of ownership.

Table 4.9: Components to Support Distribution of Leadership to Teachers

Components	Superintendent and	Principals	Teachers
	Union President		
Belief System	✓		
Clarity of Expectations and Accountability		√	√
Collaboration	✓	√	✓
Commitment and		✓	✓
Initiative			
Formative Assessments	✓		
Ownership			✓
Site Teacher Leadership	✓		
Systems Involvement	✓	✓	
Trust/Teacher Voice	√	√	✓
Time to Learn	√	√	√

Focus on Collaboration, Teacher Voice, and Time to Learn

The question about what essentials in a system would best support teachers as leaders surfaced three areas for this district to pay attention to: collaboration, teacher voice, and time to learn. As mentioned above and charted, these themes were brought forward by all three groups. To grasp the depth of meaning each of these themes brings to the system, quotes from the interviews will be presented. In reference to collaboration, the superintendent stated, "One culture piece to work through is embedding collaboration and best practices in our daily work." While the superintendent views collaboration as a cultural artifact, two principals noted the following about collaboration:

When you have a situation in a school district that requires a combined input of many individuals to resolve a problem, there are several facets of the process that need to be considered. First of all, the problem needs to be identified. Secondly, the desired outcome needs to be identified. And third, the process for getting to that desired and outcome needs to be worked through and identified. From my very simplistic perspective, those three issues needed to be dealt with.

Once the endpoint has been determined, the appropriate role as teachers at that point is to figure out how we are going to get there and where we need to be. Now you have teachers working together, getting together using their experience and skills, make appropriate approaches to the problem at hand and presumably an outstanding result.

Earlier in this chapter, the theme "collaborator" showed up as an important characteristic of being a teacher leader. Linking that data with what is presented in the chart adds to the need for a culture of collaboration within the system.

While time is needed to collaborate, time to learn is also a factor. "I think a group of smart people could get together and talk about what are the skills and what is the literature we want folks to understand about becoming leaders," affirms the union president. The superintendent addresses the time from a structural position, "I think building in time that it takes to be a leader. Some of the best teachers are limited by time. For example, many teachers are moms who are struggling to raise their kids and work. I think we miss out on a huge group of people because of time." A secondary principal declared, "I really do believe [distributed leadership] can be a critical and complementary and extraordinary piece to come out of our district, helping the schools to enhance learning like crazy. I think that like all of us, time is a real factor." Additionally, teachers were prolific in their support for time and teacher voice. The time to learn and voice about pedagogy, content, and leadership is the framework through which time scaffolds throughout this chapter.

Thinking Forward on Distributing Leadership to Teachers

Many of the conditions corroborate with the data about perceptions of teacher leadership and Math Council work presented throughout this chapter, just like time to learn and teacher voice. As the system moves forward with leadership through teachers, the many voices in the system must be captured. In summary, the superintendent and the union president, respectively, provide these reflections of the three-year council work and the future of distributed leadership through teachers:

I [superintendent] think there is the one piece I'm most intrigued with right now is how do you have a teacher voice on system wide policy? And if I think about all we are trying to do in our work and the system ... is really to try be more systemic about the key improvement efforts created in strategies to drive the organization. Having teacher voice to drive the organization, I think is going to be one of the things.

I [union president] don't know if we were successful. We did a trial and we did it at a large level in the district. I would like to be part of the conversation of how it's going to be done at the site. That's where I think change happens. We would really have to be cautious about the center pulling back in. That it's just another one of those things. I think you need to blow up the department chair. I don't think you can run it as parallel things. You've got to say, "We're not going to have this anymore, it's going to be this" and kind of throw ice water on the system. Because if you have parallel structures in place, people are going to tend to what was.

CHAPTER 5

DISCUSSION AND CONCLUSIONS

Summary of the Study

The scope of this study described in the previous four chapters connects the study with research in the field on distributed leadership, specifically Spillane's framework for distributing leadership. A qualitative research design and methodology was used for this case study to describe a model of distributing leadership to teachers in one district.

Chapter 4 unfolds the data collected from a superintendent and teacher union president, principals, and teachers that participated in a district-wide math literacy council over a period of three years, from 2004 to 2007. The data presented attempt to address the research interest of this study, which is distributed leadership. Included in the data is a discussion of the relationship between a superintendent and a teacher union president and how it has shaped opportunities for teacher leadership in the school district.

This chapter will summarize the study and discuss the findings in relation to other relevant research. In particular, the major focus of this chapter will be a discussion of the connections of the data with the three groups interviewed (district superintendent and district union president, principals, and teachers) to the literature and potential implications for distributing leadership at the district level. In addition, implications for policy and practice and recommendations will be made for further research.

Overview of the Problem.

No Child Left Behind has created an expectation that all students will reach academic proficiency in both language arts and mathematics by 2014. Proficiency benchmarks have been set along the way, requiring schools to reach a certain level with

subgroup proficiency. If not met, schools or districts may be classified as "program improvement" and face sanctions. Thus, districts are under considerable pressure to engage teachers effectively in the improvement process. These high-stakes goals impact every student; the goal cannot be attained with one leader, the principal, at the point. It is necessary to include the expertise of others at the school site, specifically teachers, to help lead the school to ensure the academic achievement of every student. It is the expertise of the teachers and their ability to lead colleagues in discussions and actions that will increase the likelihood of student and school success.

Purpose Statement and Research Questions

The purpose of this qualitative study was to investigate the ways the Math Council facilitated the distribution of leadership to teachers at a district level. In particular I explored how each of the key participants (superintendent and union president who negotiated the creation of the council and principals and teachers on the council) defined teacher leadership.

The study was guided by three primary research questions:

- 1. What has been the nature of the relationship between the district superintendent and the union president, and in what ways have they worked together to implement a model to distribute leadership?
 - 2. How did participants on the Math Council perceive teacher leadership?
- 3. How has the Math Literacy Council influenced the enactment of teacher leadership in the district?

Review of Methodology

The Math Council has been in existence since 2004, with the sole purpose to increase math achievement. Throughout its existence the focus of the work remained the same; yet each year, the structure of the councils was modified by the superintendent and the union president to enhance its effectiveness. Teacher council members were selected by the union via an application and an interview process and agreed upon by the district. Teacher representative math experts were selected from elementary, middle, and high school levels. In the third year, secondary math department chairs were explicitly invited to serve on the council. Each year, four principal representatives from all levels were nominated by the assistant superintendents of elementary and secondary schools to serve on the council.

During the three year process, some teachers left after the first year, and others continued on to year two. After year two, three stayed on through year three. To secure a representative sample, invitations to participate in the study were sent to teachers at all school levels that served either only through year one or only in year two. The three teachers who served on the council for all three years received an invitation to the study as did all the other teachers serving during year three. Interviews were set up with twelve teachers: one from year one, four who served for two years, four from year three, and three that served all three years on the council. The district superintendent, teacher union president, and the four principals who participated in the councils from years one and two were invited and agreed to participate.

One-and-a-half hour interviews were conducted at the convenience of each participant. Each of the interviews was transcribed and analyzed using codes to

illuminate themes about teacher leadership and distributed leadership. A qualitativeanalysis program, NVivo, was used to help with organizing key data and crossreferencing common themes within the interviews.

As a result of conducting this study, some key findings about distributing leadership to teachers at the district level elucidate the ongoing work that will be required as the district moves toward creating capacity through teacher leaders. Below is a synopsis of the findings that will be discussed in more detail throughout the chapter, linking them to current literature and illuminating areas that may not yet appear in the literature to this date.

Summary of Findings

Unfolding the key indicators that would address the research questions required a look at the historical culture of the district as well as the thinking that helped to structure the current effort for distributing leadership to teachers. Also, addressing the research questions required a deeper investigation into the perceptions and actions of teacher leadership from the relative positions (i.e., superintendent, principal, or teacher) of participants in the study. Key discoveries include, but are not limited to:

A trusting work relationship existed between the superintendent and the teacher union president. The relationship allowed the district leaders to engage in discussions during negotiations to advance distributing leadership to teachers as a district reform strategy. Because of this long-standing relationship, partnerships such as the Math Literacy Council and others that develop teacher leadership in the district were started, and many continue to be in place. In addition to the trust, it is important to note that in a hierarchical leadership structure, the superintendent and the union

president need to be placed in order to distribute leadership to teachers at a district level.

- Perceptions of the behaviors, roles, and responsibilities that define teacher leadership
 varied among the district leaders, principals, and teachers. In addition, the definitions
 and perceptions differed within each of the groups.
- When the roles, responsibilities, and identification of a task for teacher and principal leaders was not clear, it contributed to the lack of "notable" program development to address academic achievement by the Math Council.
- A curriculum content focus seemed to be one way to distribute leadership to teachers that drew on important teacher expertise.
- In creating the conditions to distribute leadership to teachers on a systems level,
 district or school, there were nine identified components that surfaced from the
 interviews of all three groups. However, three that stood out in all groups were time
 to learn, building trust by honoring teacher voice, and collaboration.

Summary of Math Council Work

Three courses, Math 7, Introduction to High School Algebra, and Introduction to College Algebra were recommended to the superintendent based on assessment data analysis and the best thinking and discourse of the council members; the courses were accepted. The powerful work described included district, council, and schools working together to support the staff development, acquisition of materials, and district-wide articulation for teachers to successful implementation.

The support provided is a new model that the district continues to use in current adoptions. The curricular support provided to teachers district-wide is through release

time to develop criteria for textbook selection, a common pilot process and feedback mechanism and, after the adoption year, there is continued support by releasing teachers throughout the school year. The release time is used to integrate curriculum maps into the classroom with the new resources, coordinate district level articulation of common assessments, and the sharing of best instructional practices and resources.

The maps developed by the council members provide for a clearer expectation of the standards and the level of learning of the standards that each grade level needs to accomplish. For example, the teaching and use of the Pythagorean Theorem is at novice level in Pre-Algebra; the foundation from Pre-Algebra is built upon in different levels of mastery in successive math courses. While this may sound simple, the algebraic concept articulation, even in its earliest stages, hopes to clearly identify to teachers the expectation of student mastery at the end of the school year.

The Math Council recommended the hiring and placement of a Teacher on Special Assignment to lead the math work. District leadership embraced this recommendation and placed a council member in this role. A third outcome of the Math Council work was a document that described a Math Instructional Leader model for staff development. The model has financial implications on the system so the discussion of its implementation has been slowed down.

Findings Related to the Literature

Building on Historical Models to Distribute Leadership

The unique relationship developed and nurtured by the superintendent and the union president was grounded on three premises: a common vision to distribute leadership to teachers, a trusting relationship, and past practices and artifacts that

provided evidence that distributing leadership to teachers was beneficial. The cultural norm of distributing leadership was particularly strong at the district level and reflected a somewhat unique partnership between superintendents and union presidents (Kahlenberg, 2006; Kerchner & Koppich, 1993; Togneri & Anderson, 2003). The examples provided in Chapter 4, especially the peer review program, represent significant evidence of support for meaningful teacher leadership.

Of all the joint efforts, the one that has served as a beacon and anchor through the years is the Beachside Peer Assistance Program (BPAP). BPAP was one of the first negotiated joint efforts intended to impact student achievement through the evaluation process (Koppich & Kerchner, 1990). This district-level effort has developed into a strong example of teachers leading and coaching new teachers to classroom excellence. The effort has some critical elements that have led to its success: a high respect and regard for the teachers selected to serve as teaching consultants, full release from teaching for the consultants, open communication between site principal and consultant regarding the professional progress of the new teacher, a designated office for all consultants to collaborate and support one another in their work, and a governing board made up of district and union personnel who make joint recommendations to move to tenure or release a teacher. School reform efforts have been strengthened when teachers have had a voice in the decision making (Beachum & Dentith, 2004; Smylie & Brownlee-Conyers, 1992; Suranna & Moss, 2000; Urbanski & Erskine, 2000), thus teacher consultants have been instrumental in creating teacher capacity at all of the school sites in the district. However, the greatest leverage in the evaluation process through the consultants is the relationship that the consultant has with the principal.

Smylie and Brownlee-Conyers have reinforced the importance of the relationship between teacher and principal and principal and district in the shared leadership process.

The other district-level committees expounded upon in Chapter 4 are examples that provide verification of the district's efforts to move forward with other key initiatives that cultivate the union and management working collaboratively. Kahlenberg (2006) and Kerchner and Koppich (1993) discuss this effort as professional unionism. This change in union work pays attention to three areas, one of which is district-level councils and committees for district reform. It is in this that the role of the teacher is broadened, working collaboratively to address and resolve educational issues. In this case study, district-wide math achievement became the focus of this partnership effort.

Trust. While the strategies to distribute leadership that each of the leaders, the superintendent and the union president had in mind differed, they were both able to talk about their common goal to continue to build teacher leadership capacity in the district. What is even more startling is that they both could talk openly about their own interests and perspectives. The work of Togneri and Anderson (2003) with the Kent County and Minneapolis school districts illuminates how a healthy relationship between labor and management helped to solve challenging issues through open communication.

The trusting relationship between the superintendent and the union president allowed the two to address a critical budget crisis. Budget conditions in the district required the superintendent to reduce staffing in the area of Educational Services and there was concern from both leaders about how the district was going to move forward with the work in curriculum and instruction reform. Both leaders were ready to engage in discussions that would take the best from past teacher leadership practices to mold a

structure that would support increasing math achievement, using the expertise of teachers.

The union president was not confident in the current structures that supported the schools, site administrators, and Educational Services with curriculum and instruction.

The superintendent was committed to getting teacher voice at the table at a district level, focusing on common district-wide resources, practices, and interventions that impact curriculum and instruction; and, hopefully, student achievement. The union's interest was embedded in "changing site [school] leadership" by distributing it to teachers; this was no secret in his discussions with the superintendent. The union wanted curriculum and instruction leaders at each school to make the decisions in these areas. These different perspectives of where the focus of control should be placed, however, did not derail the move to establish district-level curricular councils. All in all, both wanted teacher voice and agreed, through negotiations, to develop a structure that would meet some of both of their strategies to distribute leadership to teachers.

As described in Chapter 2, it is through the tenets of professional unionism—trust, a common vision, and the historical success of BPAP and other jointly led groups—that the superintendent and the union president forged the Math Literacy Council, which has been on a three-year leadership journey.

Key Participant Perceptions of Teacher Leadership

Existing in the literature is a myriad of definitions of teacher leadership practice in schools. It is not surprising that when the superintendent, union leadership, teachers, and principals were asked about their concept of teacher leadership, a wide variety of concepts and definitions emerged. The district superintendent views teacher leadership as

helping the district make decisions in the areas of curriculum, instruction, and assessment, particularly in areas of their expertise. Togneri and Anderson's (2003) work echoes the superintendent's vision for teacher leadership.

The union president described teacher leadership as administrators and teachers working side-by-side making decisions together about the school and school leadership. He felt that teachers were best equipped to lead the work at the school level. The district's current model uses a department chair structure at the secondary level. Both superintendent and union espoused a flattening of the leadership structure to allow expertise to flow through the system, specifically in areas of curriculum. The superintendent, however, (as shown in Chapter 4) wanted to utilize teacher expertise at the district level and seemed less committed to teacher leadership at the school level.

From the Beachside teacher and principal leader definitions of teacher leadership, I identified eight themes: content expert, systems thinker, mentor, representative of teacher voice, decision maker, initiator, collaborator, and continuous learner. Each of these themes reflects important ideas in terms of how leadership is shared and distributed in this case study district.

Teacher Leadership

The study revealed several key elements that help to define teacher leadership.

These include content expertise, systems thinker, mentor, representative of teacher voice, decision maker, collaborator, initiator, and continuous learner, which are discussed below in relation to other studies of teacher leadership.

Content expertise. The idea that teachers have content expertise that needs to be shared and tapped is a point of agreement with the union and superintendent's perception

of teacher leadership. The literature on teacher leadership confirms that content expertise is a fundamental foundation for shared leadership. Togneri and Anderson's study (2003) identifies the redefinition of leadership roles as important to district reform efforts. This study also confirms findings of Togneri and Anderson that union leaders defined a teacher leader as one that would provide professional expertise, content, and instructional guidance for colleagues in core critical areas, such as math and reading.

Systems thinker. This concept was most prevalent in the principals' definition. They defined and expected teachers to be able to take a systems perspective in their work. However, within the system, each principal had their own beliefs of the behaviors and expectations of a teacher leader, as indicated in Table 4.2. All principals recognized that teacher leaders required teachers to think and lead beyond the four walls of their classroom.

Mentor. Teachers and principals in this study both identified mentoring as an aspect of teacher leadership. Through their content expertise, these teacher leaders are then able to lead others in the improvement of educational practice (Katzenmeyer & Moller, 2001). This idea of mentor at the school site seemed less prevalent in the superintendent and union leader's definition. The superintendent's definition focused on using teacher expertise to develop a plan for district-wide improvement.

Representative of teacher voice. This dimension of the definition of teacher leadership was predominant in the union president's definition. Almost all the participants interviewed also concurred that teacher leadership encompassed representing colleagues. As shown in Chapter 4, it was most strongly shared by one teacher who also saw herself as a union representative. In addition, Table 4.6 shows that eight teachers

noted their role as representing their colleagues. The literature on teacher leadership supports this view. Teachers are critical to the education of children and their views need to be represented (Frost & Durrant, 2003; Lambert, 2003; Mullen et al., 2002; Whitaker, 1997).

Decision maker. The challenge of shared leadership is who makes the decision. As they are currently structured, school systems are hierarchically organized bureaucracies with board of education and superintendent as the top decision makers for the district, and principals as the lead decision makers for the individual school. In contrast, distributive leadership models and definitions of teacher leadership emphasize collaboration and collective responsibility for decisions (Frost & Durrant, 2002; Lambert, 2003; Richardson, 2003; Smylie, 1995).

The superintendent-union charge to the Math Council expected the council members to collaborate and collectively reach a decision on a plan to improve math achievement. Principals, in their definitions, view teachers as curricular and instructional decision makers at the classroom levels, as well as with colleagues at grade and school levels. These decisions, as noted by the principals, often center on curriculum, assessment, and interventions. Beachum and Dentith (2004), Smylie and Brownlee-Conyers (1992), and Suranna and Moss (2000) contend that the integration of teachers in decision making at the school and district levels is a key foundational practice for reform efforts.

Except for one teacher leader, decision making did not surface in the definitions of teacher leadership given by teacher members of the Math Council. This seems to confirm the findings in most of the literature on teacher leadership. The decision-making

role is not explicitly addressed, except as a collective responsibility. Some of the frustrations of the superintendent about the productivity of the council may, in part, stem from the lack of clarity regarding decisions to be made by the council. Other researchers have found that lack of specificity regarding the decision-making function can undermine shared leadership (Martin & Chrispeels, 2004; Brazer, 2004). In this case district, the Math Council's most concrete product (decision), creating two new math courses to enhance student readiness for Algebra, was accepted. Their less-concrete professional development plan was not embraced by the superintendent after year one and was continued for further development in years two and three. By the end of year three, a more concrete long-term staff development plan was finalized. However, it is uncertain how the superintendent will respond.

Initiator. A few of the council participants identified self-motivation as a characteristic of being a teacher leader. An initiator is defined as a teacher who recognizes that leadership is needed in a situation, whether at the school or district level, and is willing to step up and take on additional responsibility. This aspect of being a teacher leader is highlighted as a barrier in the work of Smylie and Denny (1990), and Katzenmeyer and Moller (2001). In their studies, they pointed out that there may be bitterness by colleagues toward the teacher leader trying to bring together opposing points of view. This is traditionally viewed as the "administrator" role and the teacher may be vulnerable to the criticism of peers as they "act" like an administrator.

Collaborator. The data show that there are different areas within which teachers and administrators can collaborate. The superintendent would like the system to engage in collaboration through sharing best practices. There appears to be a culture of sharing,

but truly collaborating includes supporting one another in the implementation of the best practices. This includes trusting one another to support the success of classroom teaching for all students. Once a clearly identified endpoint has been determined, principals look to collaboration as defined by the leaders. It's more about the "how process" as opposed to the "what." While the superintendent identified the "what" as best practices, he has identified some "how" strategies through sharing, supporting, and implementing of the best practices. What is not clear are the structures through which the collaboration can occur. The need to collaborate is clearly supported in the literature (Frost & Durrant, 2002; Lambert, 2003; Mullen et al., 2002; Urbanski & Nickolaou, 1997). While the union president does not use the word collaboration, per se, the examples and descriptions he provided clearly indicate a message that collaboration is critical in developing teacher leadership.

Continuous learner. The need to be a continuous learner was specifically articulated by three of the principals as well as two of the teachers. As a participant-observer, it was evident that continuous learning was part of the structure of the meetings of the Math Council. There was an expectancy that council members were researching and learning outside of the council meetings and within the council meetings. However, the external learning was not as widespread. So while not specifically articulated by a large group of teacher participants as a dimension of the definition of teacher leadership, it was identified by the principals and teacher participants as a "condition" to distribute leadership to teachers at the district level. The superintendent and union president, too, did not specifically articulate "continuous learner" as part of their definition of teacher leadership. Similar to the teachers, it can be suggested that perhaps both superintendent

and the union president assumed that learning would be part of the process, as they viewed it as part of their own professional practice. This, however, became problematic, as will be described in the next section. Very limited time to learn was built in to the process and expectations for council members. Yet research has documented that time needed to learn a new task is critical for team success (Urbanski & Nickolaou, 1997; Shiu, Chrispeels, & Doerr, 2004; Yep & Chrispeels, 2006).

Consequences of Differing Perceptions of Distributing Leadership to Teachers

Although the data showed commonalities in the definitions of what it meant to be a teacher leader, some of the differences posed challenges. There were unspoken and unexplained expectancies of how one should perform as a leader. As shown in Chapter 4, not all teachers engaged equally in the work of the council, both during and outside of weekly meetings. This tension was apparent in some meetings through general comments made by council members, as well as private conversations surfaced by council members with facilitators. A lack of discussion by council members of what it means to be a teacher leader on this Math Council left participants unclear about expected leadership actions they were to take on the council or at their school. The confusion about the leadership role Math Council members were to play at the school is most problematic given the union president's vision of teacher leaders at the school level.

As illustrated in chapter 4, math leaders at the secondary level seemed to be able to play a more active leadership role than at the elementary level. The departmentalized structure, at the secondary schools provided secondary Math Council leaders an organized structure to share their learning and to lead colleagues in changes. This same structure did not exist at the elementary level, thereby limiting the elementary council

member scope of leadership in their schools. In addition, the work and ultimate accomplishments of the council were the development of a middle and high school mathematics course to prepare students to succeed in Algebra.

Another challenge is that the concept of distributed leadership practice was not fully developed in the thinking and actions of the councils. While there were mental models of teacher leadership among the group, distributed leadership invited larger-scale thinking about leadership. Whether distributed leadership through a district council causes different action and thinking than teacher leadership poses is unknown. In this district, the unfolding of an understanding of distributed leadership is still in its early development in this district's work.

Barriers to Distributing Leadership to Teachers

Two potential barriers previously identified in the literature, time (Barth, 2001; Blegen & Kennedy, 2000; Lambert, 2003) and compensation (Kelley, 1997; Odden, 2000; Rosenholtz & Smylie, 1984; Urbanski & Erskine, 2000), were addressed and built into the Math Literacy Council work. Nevertheless, time continued to be a barrier, in spite of the compensation for teacher time. In addition to addressing these two barriers, three unforeseen barriers materialized during the three years of work. Clarity of task and differing perceptions of roles and responsibilities emerged as factors that may have affected the leadership practice among the council members, as well as the changing membership during the three years. Even with intentional attention to time and compensation barriers that the leaders identified, neither foresaw the other barriers that would surface.

Clarity of Task

The initial tasks were laid out by the superintendent and the union president. The council was to make recommendations on two charges: (a) to improve student readiness for algebra success and participation in advanced mathematics and (b) to support the district's culture change initiative by working collaboratively. The data suggest that the council, in the first year, struggled with how to carry out these tasks. There was no unified vision for this work. The interview responses charted in Table 4.4 capture some of the ambiguity of the task throughout the three years of council work.

Given the charge from the superintendent as described above, the teachers perceived their leadership work to fall into these categories: district-wide alignment of math curriculum (41%), make action-oriented recommendations to district (23%), review of research (18%), investigate new materials (6%), develop a professional development plan (6%), and put together a plan for algebra success (6%). While all of these are directly related to the charge, it illuminates the complexity of distributing a task to an expert group. Each one of these individuals thought about the system and what was needed to attempt to meet the needs of the charge. The charge to "make recommendations to the district," as expressed by the many responses, suggests that the charge was ambiguous as it led to a variety of options to respond to the task.

Additionally, all principals noted that their task was to provide guidance and clarity to the charge. The challenge of clearly identifying the task might have served as an impediment to the leadership practice of this group of experts.

One of the potential causes of the lack of clarity could be attributed to the changing nature of the councils during its three-year tenure. Not only did the participants

change, but the number of participants tending to the charge also changed. Smylie and Brownlee-Conyers (1992) would view these shifts in membership as unhelpful to district reform. In their study, they found that it is important for leaders to develop a relationship that strengthens the new working relationships with teachers. This effort would have helped to trust one another, breaking down any *perceived* barriers that contoured the work. Yep and Chrispeels (2004) also found that there is a need to develop a strong working relationship between teachers and administrators so that teachers can take on new leadership roles.

The lack of clarity emerged when interviewees were asked about conditions that would be necessary to distribute leadership. Participants not only indicated clarity as critical to distribute leadership through the council but also noted it was essential at the beginning of collegial work. Although the initial charge maintained its focus, the work within that charge kept evolving with new directives from the superintendent and union as well as the addition of new members' expertise and loss of others. As a result, the council's work and processes through two more member iterations and the gap of clarity of expectations continued to frustrate members. In addition, the expectation for a product was not clear. The lack of clarity regarding the product the council was to produce and the expectation of the superintendent and the union president to solve the district's math achievement gap seemed to increase frustrations during the years of the council's work.

Spillane's (2006)work on distributed leadership supports, through his examples, the findings in this study about the need for clarity of expectations of the leaders, whether they are teachers or administrators. Elmore's (2000) concept of distributed leadership also supports the initial design of the councils as having leaders with expertise come

together for collective action for the organization. What Elmore and Spillane clearly identify, but was not clear in this case study district, is a clear vision and agreed upon tasks.

Roles and Responsibilities

District leaders, principals, and teachers participated in the councils with different visual concepts and potential actions regarding their leadership as district math leaders. Again, while encompassing the same general themes, how the work manifested itself in leadership roles and responsibilities differed.

It appears from the data in Tables 4.5 and 4.6 that the participants had different ideas of their leadership roles and responsibilities on the Math Council. Togneri and Anderson's work (2003) exposed critical elements for academic improvement, one of them specifically illuminating clearly redefined leadership roles. Principals participated in the Math Council with different expectations of their roles as participants. Each of the four principals saw their roles to fundamentally move the district's initiative to improve math achievement through making recommendations, to provide clarity and identifying the nonnegotiables in the work, to clarify the charge and help the conversations move forward, and to serve as a role model. Serving as a role model included valuing opinions, asking questions, and providing the bigger picture of the work. Principals were key members of the group not only in expertise but in the leadership that they modeled and brought to the council. Thompson (2004) identifies the principal's modeling as an important entity to school reform.

Teacher council participants voiced their role in two categories: representation of teacher voice and developing artifacts to be used within the district. These are two

interesting perceptions of their roles. As a researcher and participant-observer in this study, I observed that there wasn't any district-wide knowledge of the work of the Math Council. If the teachers truly are representing teacher voice, then one would assume that teachers in the system have been consulted, with their best thinking, and practice the foundation for discussions within the council. Clearly, this was not communicated as part of their leadership role, but some of the teacher representatives automatically saw this as part of their role and brought back the voices of their colleagues to council meetings.

There are two other possible explanations for lack of broad-based teacher input to the Math Council. One may be the absence of a clear structure, methods, or time for soliciting input from colleagues at the district schools. The other is that the selected representative may have assumed that their presence on the council represented teacher voices. It seems clear that the idea of what it means to represent other teachers was not a topic discussed by the Math Council as it began its work.

Key products that may result from distributed leadership practice are artifacts.

These represent both the tools to do the task and the work that may emerge from the leadership practice. In this case district, teachers, when asked what was the purpose of the Math Council, identified the staff development plan as one of the artifacts. Others, who had been serving on the sequence subgroup, identified curriculum alignment as one of the council's responsibilities and potential artifacts. Interestingly, members did not identify developing new courses as part of their responsibilities, yet two new math courses became critical artifacts of the Math Council's work. As previously discussed, the overall charge to the council was to figure out how to improve math achievement in the district. Creating specific artifacts was not detailed.

Consistency of Membership

Given the lack of clarity of tasks and responsibilities and the shifting ideas of the superintendent and the union president of what the work of the Math Council should be, another barrier that emerged was the changing membership of the council during each of its years of existence. The data indicate that the first year the council had a robust membership with 29 representatives of teachers, principals, assistant principals, and facilitators from schools across the district and from different school levels. As stated earlier, the group divided itself in to two working subgroups: professional development and scope and sequence. Although the groups met weekly, by the end of the year only the scope and sequence group had a concrete product to present to the superintendent and the union president: a ninth-grade math readiness course. Nevertheless, the superintendent felt that the cost of supporting this many teachers in relation to their productivity was unwarranted. He and the union president then renegotiated the task and membership of the council and reduced the council to 13 members; 10 of which served on the previous council. By the end of the second year, observations and documents indicate the Math Council had again focused mostly on curricular changes and course development at the secondary level. Because of the secondary focus of committee work, the superintendent opened his thinking to asking department chairs to serve as council members. The union president concurred as he had already identified an ongoing focus to create a new role for the department chairs. The evolution in thinking about the system provided the opportunity to have the department chair discussion. However, after year three it was clear that this was not the right structure. Interestingly, district and union leaders

facilitating this work have verbalized that the department chairs, because of their managerial roles in our schools, were not all well-equipped to lead the curricular and instructional charge needed to increase math achievement.

Although each year observational data indicated that the members worked hard and generally well together, the changing membership meant that each year the council needed to engage in some form of re-formation. Given the intensity of the work, some turnover would be expected; however, the lack of clarity and changing nature of the task contributed to the council's shifting membership.

As mentioned in Chapter 4, one of the membership challenges voiced by council members, which was not addressed with each iteration of the council, was the lack of representation of elementary teachers on the council. This limited representation may have prevented the opportunity to move Algebraic readiness into elementary schools. Data shared in the previous chapter showed that the superintendent identified voices as critical to his definition of teacher leadership, as did the union president. In their minds, the expertise of the few was put in place to represent and gather the needed information to speak for the masses during council meetings. These findings suggest the need for districts to consider challenges of representation when establishing district-level committees.

Time

Time is often cited as a barrier in teacher work, so it is not surprising that it surfaced in this case study district. The superintendent and the union president tried to address the time issue through giving teachers compensation for their work. Nevertheless, time remained a concern. The council's work was to be conducted after the school day,

with compensation commensurate with a set number of working days. After the school day *time* continues to impede teachers from participating or for teachers to provide the kind of thoughtful curricular leadership needed at the end of a long workday. Time continues to be a challenge within the "traditional" structure that the state identifies as "seat time" for students. In alignment with Spillane's model of leadership tasks occurring over time, the Math Council's work initially was to occur weekly over a period of one year. Time for the task was extended two additional years. By the end of year three, questions remained whether after-school time is the most productive time for teachers to engage in the type of deep work demanded by the superintendent. This study illustrates how leadership practice occurs over time, and yet understanding how concepts of time and use of time in regard to leadership needs further study.

Another dimension of time critical to this study was the need for the council members to become a working group. Researchers Day and Harris (2002) and Camburn et al. (2003) noted that there is potential for incoherence in work when different parties come together to do common work. Gronn's (2000) work identified the importance of structural relations as being critical to work with one another toward completion of a task. Relationships, however, take time to develop (Shiu, Chrispeels, & Doerr, 2004; Smylie & Brownlee-Conyers, 1992; Yep & Chrispeels, 2004) and with the annual change council members, it is doubtful that the needed time and attention to build relationships was afforded with the changing membership and structure.

A final way in which time seemed to be a barrier was the time needed for learning. The superintendent and union leadership, of course, selected council members who were regarded as experts in mathematics. Nevertheless, when undertaking a new

task, participants still have to enhance their own knowledge. In the first year, council members took it upon themselves to research math issues. This research may have delayed the development of final products and added to the frustration of the superintendent and the union president, who perceived a lack of accomplishment of tangible work. The findings from this study suggest that time for learning needs to be factored in to any efforts to distribute leadership, especially at the district level when the final product may have considerable consequences for the district as a whole.

Supports to Distributing Leadership to Teachers

Focus on Curriculum

The data appears to point to the need for a focus on curriculum to distribute leadership to teachers. All the principals and nine of the 12 math leaders noted that a focus on curriculum is a venue to distribute leadership. It allowed teachers to lead through their expertise. The council provided the time and collaboration to develop a comprehensive view of the sequencing of math and the algebraic thinking that is developed beginning in kindergarten. The focus on math provided an automatic hook for teachers; there is vested interest in increasing math achievement for students. The curricular focus also provided a common topic to discuss. It is the easiest and most comfortable way to engage teachers with their greatest expertise. In summary, teachers at all levels noted that to be a leader, a teacher needs to be engaged in all aspects of curriculum development and implementation.

In 2003, Burch and Spillane observed and interviewed 30 administrators (principal, assistant principal, and curriculum coordinators) in a school district to study distributed leadership practices. The elementary school study revealed that in

mathematics, only 13% of the participants believed the school had the expertise to lead reforms and 63% responded with the comment about the need to look externally for the reform. This is a bit disconcerting. The Math Council was forging forward with internal work to reform math by distributing the leadership to teacher math experts. Burch and Spillane's data exposed an elementary system that believed the reform needed to come from the outside. Their study raised an interesting challenge. This study showed that elementary teachers were not as engaged at leading the reform at their school level compared to the secondary council members. This was due in part to the charge given the committee and the departmentalized structure noted earlier. Yet, the elementary level is where the basic foundations for all math concepts are rooted for future success. Further study is needed to explore if the structure for elementary reform may need to be rethought and reconstructed so as to engage the reform efforts from teacher experts and administrators separately at that level.

The remaining 25% of the teachers who indicated that curriculum was not a means to distribute leadership were themselves, teacher leaders at the district level at one point in their career. They felt that leadership in curriculum was too narrow and needed to encompass the broader view. Although they liked the focus on curriculum, it was not the only venue for them to continue to develop as leaders in the district and in their schools.

Surprisingly, there were other benefits that were uncovered during the interviews with teachers. The focus allowed participating teachers to learn from the leadership actions of the facilitators as they navigated through the curricular discussions. It allowed for philosophical discussions about the sequencing of mathematics, how math should be taught, and the differences and importance of foundational and conceptual teaching and

learning of mathematics. Some members expressed how a curricular focus facilitated personal confidence and growth. Four of the 12 teachers stretched the definition of personal growth to the curriculum focus. They cited professional growth as a purposeful venue that allows for the cross-pollination of ideas, causes a different way of thinking about content, and needs to interact with adults to develop their thinking, especially since their workday world confines them with students all day. When thinking about distributing leadership, Spillane did not highlight the desire for individuals in the organization to learn. Spillane's model looks to the leadership practice that is a summation of the interactions of the leaders and followers in a situation. As mentioned earlier, however, Lambert (2003) has focused on learning as critical to distributing leadership to increase leadership capacity.

Through a curriculum focus, finding a way to cross pollinate ideas, building a systems approach, engaging in respectful discussions, honoring philosophical views and practices, and owning them appears to be challenging. The challenge is linked to time, as mentioned in the previous section. The thinking that goes on cannot be done with a meeting held once a month or so. It needs some systemic structure and focus in order to become embedded in the culture. The initial Math Council in this case study seemed to be affording through its weekly meetings time for teachers to learn.

Compensation

While potentially a barrier, compensation and an adjusted salary schedule was negotiated for Math Council members for their time and expertise they brought to the district work to improve math achievement. This negotiated compensation for work beyond the contract is apparent in the works of Kelley (1997), Rosenholtz and Smylie

(1984), and Urbanski (1998). Principals were not compensated with a salary adjustment but were provided time and support to go to a conference. Further study may be needed to better understand how compensation can support the work of district level distributed leadership practice.

Distributing Leadership to Math Council Participants

Spillane's Distributive Leadership Model

One of the purposes of this study was to understand in what ways Spillane's (2006) concept of distributive leadership helps to explicate distributed leadership in this case study. Spillane's model stems from studies at the school level. As discussed in Chapter 2, his work draws on the concept of leadership as a function of organizations and his goal is to understand leadership as practice. In his model, as shown in Figure 2.1, leadership practice is defined by followers and leader embedded in a situation and engaged over time with a task using tools and artifacts. For Spillane, follower, leader, and situation are critical tangible components to distribute leadership. Within his three leadership practice types, there was a clear situation whereby tasks were led by "leader" and "follower" members in the system through routine and use of tools.

Within his general model, Spillane has noted three different types of leadership practice: collaborative distribution, collective distribution, and coordinated distribution. In each one of these distributive types, at least two people work together on a particular task. Each type, however, suggests different ways of interacting and communicating their work. Spillane and his colleagues' study of distributed primarily focused on leadership practice at the school level. The focus of this study was leadership practice at the district

level; therefore, it is appropriate to discuss the relevance of these types for understanding leadership practice at a district level.

Collaborative distribution. The leadership practice described in collaborative distribution by Spillane involves two or more individuals coleading through a leadership process at the same time and place. This type of distributed leadership is strongly evident in the Math Council's work at two levels. The first level of collaborative distribution occurred between the superintendent and the union president. As evidenced throughout Chapter 4, the common vision, a trusting relationship, and their ongoing dialogue allowed for district wide distribution of leadership to teachers through the Math Council. In front of the council or in negotiations, both were able to exercise and articulate their collaborative leadership with those immersed in the work.

The second example was the teamwork of the two district curriculum and instruction directors (elementary and secondary) and two union representatives. The four were tasked with facilitating the work of the council. During the many hours of weekly planning that occurred between the four, there was a dynamic co-facilitation and co-leading process. The four benefited from the expertise that each one brought to the team as they planned each council meeting. As described in Chapter 4, the union representatives and district administration collaboratively led the council in initiating and closing each meeting. However, during the meeting the "leader-follower" relationship was fluid and dynamic, with other council members taking leading roles and these four moving into follower positions. This fluidity, based on expertise and council needs, suggests a strong collaborative example of distributed leadership. The union president,

from observing this council in action, regarded the process as matching his vision of teacher leadership.

Collective distribution. Spillane's collective distribution focuses on leadership practice "that is stretched over the work of two or more leaders who enact a leadership routine by working separately but interdependently" (2006). Each person performs alone, yet the collective work together defines the leadership practice. Clearly, communication between the collective leaders or leader/follower teams is a critical element so they have a clearer vision of their co-leadership and the complementary tasks.

In the first year of the Math Council, the data revealed that two leadership research subgroups immediately formed: Scope and Sequence and Staff Development. Members divided themselves between these two functions and these separate task groups met regularly as an entity at most meetings throughout the year. Periodically each group reported to the other their findings and their work. By the end of the first year, the Scope and Sequence group had created a ninth-grade Introduction to High School Algebra course for students entering high school without the requisite skills to succeed in Algebra. The staff development group developed the outlines of a professional development plan to enhance teacher math skills. There is little evidence, however, that the work of the staff development subgroup impacted the work of the scope and sequence group.

In year two, the smaller council group of 13, and two facilitators, continued to function in two leadership subgroups: staff development and concept mapping of algebraic standards in grades 4-9. Interestingly, at the end of year two, the mapping group developed a Math 7 course for middle school seventh graders who do not have the requisite skills to succeed in pre-algebra. Once again, the work of the staff development

group did not impact the work of the sequencing and mapping group. However, throughout the year, minutes reveal that there was reporting out to one another. In other words, the two subgroups engaged in parallel but not interdependent work (Andrews & Crowther, 2002).

In year three, the Math Council membership was increased and new membership, representing secondary math department chairs, were added. The council followed in the pattern of the previous years, with members dividing into three subcommittees. One of the frustrations shared anecdotally, not through the interview process, by one teacher who has served all three years in the council was that she was not aware of what the other groups were doing and was discouraged by the lack of communication among these task groups. It appears the structure was in place to potentially distribute leadership through collective practice, but the communication and articulation required to bring this to fruition was missing. Although there was sharing and reporting about their independent work, each subgroup functioned independently in silos and learning from one another seemed minimal. The work of one group did not impact the leadership work of the other. This may be in part attributed to the lack of a clear vision and coordination of the collective work that was being executed by the subgroups. Spillane speaks to the interdependency of co-leaders in his model, which seemed to be absent in the leadership practice within the council in this case district. These findings suggest collective leadership made sense to the Math Council members, but the division of tasks needed more collaboration and coordination to have a significant impact on math achievement in the district. Unpacking the way collective leadership was enacted provides important insights into how the council may need to be structured in the future.

Coordinated distribution. The third type of distributed leadership is through coordinated distribution, which involves two or more people who have needed expertise of the task but who do only a part of the task. The metaphor Spillane uses is that of a relay team. Positions are ordered and sequential and each one is essential to task accomplishment. The clarity of tasks is carefully thought out and leader roles are targeted to build upon the work of the previous leader. The coordinated distribution seems to be the weakest and perhaps even less relevant form for understanding distributed leadership in this case district. There was no evidence of coordinated distribution of leadership between the two subgroups, within the subgroups, or from the facilitators with the subgroups. One could argue that the superintendent and union president, in their agreement to establish the Math Council set a task in motion exercising an important policy function appropriate for their leadership level. They in turn passed on the task to four leaders (two administrators and two union representatives) to guide the work. These four handed the task to the Math Council members who were considered co-leaders charged with fulfilling the task. This case seems to represent more a case of delegated leadership rather than an example of coordinated leadership.

In summary, two of Spillane's types of distributed leadership had relevance for this study in distributing leadership at the district level. In establishing opportunities for teacher leadership at the district level, attending to the ways the leadership practice might require collaborative, collective, or coordinated dimensions could enhance the effectiveness of the work of any district committee. Furthermore, at the district level each type of distributed leadership may need to be considered because of the scope and complexity of the leadership practice.

Rethinking a Model of Distributed Leadership

Distributed leadership practice described by Spillane (2006) addresses a practice at the school site level. Applying Spillane's distributed leadership model to explore the data collected in this study provides new insights into how leadership practice operates at a district level. The findings of this study suggest a revision of Spillane's model of distributed leadership practice to reflect some of the component identified in this study. Three key elements were identified as essential to the distributed leadership practice in this case district: collaboration, trust and continuous learning by participants. These are illustrated in Figure 5.2.

Spillane diagrammed the need for leaders, followers, a situation, and time to describe distributed leadership practice. Spillane (2006), Elmore (2000), Timperley (2005), and Copland (2003), emphasized that distributed leadership practice is a product of the interactions that occur between the leaders and the followers in the situation. A gray zone is the distinction between a follower and a leader (Gronn, 2000; Spillane, 2005; Timperley, 2005; Zinn, 1997). Burch and Spillane (2003) noted the need for multiple school leaders to improve subject matter reform.

Harrison's 2005 study on distributing leadership in an elementary school highlighted a structure of multiple leaders focused on instruction. Yet what still appears to emerge is the hierarchical structure of leadership, whereby leadership for a teacher is dependent on a teacher's position and, in some cases, the tenure of the teacher. Although Spillane (2005) and others argue for the need to flatten the structure through which leadership occurs, Harrison's study continues to illuminate the principal as the key figure to distribute and develop leadership at the site. At the district level, as this study shows,

distributed leadership to teachers was in the hands of the superintendent. Although the superintendent and the union president agreed on the establishment and processes of the Math Council, it was the superintendent's frustrations with the productivity of the council that led each year to changes in its membership and attempts to refine its tasks. However, once each council was established, the leader-follower dynamic was fluid. This fluidity and other findings from this study suggest a possible reconceptualization of Spillane's distributed leadership practice model as shown in Figure 5.1.

Leader/Follower

In this case study, both the union president and superintendent, the four facilitators and the Math Council itself did not display distinct leader/follower roles (see Figure 5.1). They operated as co leaders. The concept of the distributed model redefines leadership beyond the hierarchical model of leadership. The leadership is about the dynamic work of people around a problem (Elmore, 2000; Sergiovanni, 1993; Spillane 2001). Togneri and Anderson's study (2003) identified the redefinition of leadership roles as important to district reform efforts. Relevant to this case, Togneri and Anderson found that union leaders defined a teacher leader as one who would provide professional expertise, content and instructional, and guidance for colleagues in core critical areas, such as math and reading. This study's findings confirm this perspective. The union leader in this district noted a teacher leader as taking on a "facilitative role" with colleagues, no matter whom the teacher is working with. The work can be with other colleagues or administrators. There is nothing hierarchical with his definition. Teachers and administrators serving on the Math Council assumed no distinct leader/follower roles, but shared equally in leading and doing the work.

Situation

Although the leader-follower relationship seems to be different in this case, the concept of situation has relevance for understanding leadership practice. Part of the situation in this case was the meeting routines and the division of the Math Council in subgroups. The two groups shared in common the tool of math achievement data, internal and external (e.g., how this district was performing in relation to other districts) to the system. However, the two groups varied in how they used the tools to impact their leadership practice. For example, the subgroup on sequence focused on the secondary math course offerings and degree of alignment and availability to meet student needs as the tools to guide its work. In contrast, the subgroup on staff development used examples of best practices from the district and paid little attention to the achievement data.

Investigating the data even deeper shows that distributing leadership at the district level has some other parameters that need to be clearly articulated. The barriers and supports that were brought up in chapter 4 find their place in Spillane's "situation," as shown in Figure 5.1. Clearly, having a focus on math curriculum whereby teachers can work through their expertise and experience proved to be an appropriate component for the situation. In addition, math achievement data, both inside and outside the district, was an important artifact that supported the distribution of leadership to teachers and principals and helped to focus their work. However, the barriers that caused the work to pause, as perceived by the district leadership and council members, need to also be clearly articulated. These include clarity of task, roles and responsibilities, purpose of the work, and expectations of outcomes.

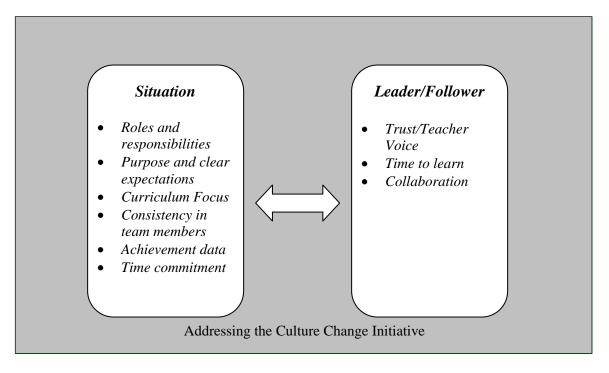


Figure 5.1: Needed System Supports to Distribute Leadership through a District-level Math Council

Three Additional Components for Distributed Leadership Practice

A dimension that is less visible in the distributed leadership literature is the environment through which successful leadership distribution can occur. Table 4.3 identifies a number of key behaviors that are critical for teachers to possess in order to lead. Foundational to these behaviors is the ability of the teacher to build and sustain relationships with colleagues. Through the relationships, a teacher leader can collaborate, and serve as a visionary, decision maker, listener, and content expert. In addition, Table 4.9 highlights a number of the cultural conditions, noting which group identified each element considered essential to distributed leadership. Of the 10 components, three were considered of paramount importance by superintendent, union president, principals, and teachers: collaboration, time to learn, and trust in teacher voice.

It could be argued that Spillane's (2006) model includes collaboration and trust in order to carry out leadership practice. However, it seems possible that collective and coordinated leadership practice could be conducted with a minimal amount of collaboration and trust. In contrast, a collaborative distribution of leadership seems to imply high levels of trust. Such a level seemed to be displayed by the superintendent and the union president in this case. The trust that is described here is linked to the desire to have a culture whereby teacher voice is honored and that there is trust among all administrators and teachers. The frequent interaction of the four sub leaders (two district administrative representatives and two designated union leaders) also seemed to have resulted in considerable trust and extensive collaboration. Evidence is less clear that the needed trust was built at the council level, as evidenced by the lack of collaboration between the two subgroups.

Teachers and principals serving on the council felt to some degree their participation was perfunctory and their work not respected. This seemed to be more prevalent about the sub-task group working on staff development compared to the scope and sequence group whose work was accepted and implemented by the district. Thus, in Figure 5.1, I have added collaboration and trust as two dimensions that need to be considered as essential in the leadership practice of leaders and followers in the definition of a model for leadership practice.

Time for organizational learning. One of the charges identified by the superintendent and union leader for the councils is to create a cultural change in how district leaders participate in collaborative work through the councils. Part of this work, as identified by the superintendent, is about "building in time that it takes to be a leader;"

the union president chimed in with idea of getting "smart people" together to discuss the skills and literature to deepen understanding on becoming leaders. Snell and Swanson (2000) corroborate the statements of both district leaders, focusing on the need for teacher leaders to have leadership knowledge and skills. Taking up new leadership roles, such as shared leadership in a distributive leadership system requires interpersonal and team-building skills for success in organizational leadership (Barth, 2001; Lambert, 2003).

Interviewees identified organizational learning as pivotal to their work. In one respect, the reorganization of the council each year and the reconfiguration of the membership could be considered as evidence that organizational learning was occurring. At least the superintendent and the union leader agreed that refinements were needed as they examined the work and considered the needs of the teachers to bring all students to high level of math learning. The subcommittee groups of the Math Council also evidenced learning as they deepened their work. In particular, the staff development subgroup as it worked together over the three years to develop a plan. They came to recognize that deepening content (conceptual and foundational) knowledge, tending to and implementing the best mathematical pedagogical practices, and systematically using interventions in every classroom were three critical areas that were needed to improve math achievement. The data emphasizes organizational learning on two fronts: leadership and teacher content expertise. One of the areas not directly addressed through Spillane's (2006) distributed leadership model is the time needed to learn in both areas. The outcome of this finding suggests that the model of distributed leadership practice requires continuous learning on the part of participants. Other researchers including DarlingHammond (1990) have documented that organizations, which support reform efforts, engage in continuous learning. This, too, has been added to 5.1 as a needed element for distributed leadership practice.

Argyris and Schon (1996) have studied organizations that learn and described them as taking risks with new initiatives and believing in the human desire to learn for the greater good. In this case, Math Council members evidenced the desire for learning about the organization and math content and pedagogy as a means of accomplishing their goal—increased math achievement of students. The time needed for learning and the appreciation of the learning curve required, however, may not have been fully recognized by the superintendent.

Collaboration. Although collaboration is one type of distributed leadership practice identified by Spillane, this study suggests that at the district level greater collaboration was needed not only among council members but also between the superintendent—union president partners with the Math Council so that needed dialogue about the council's task would have occurred as the work unfolded. In other words, to bring about a major systemic change (i.e., improved district—wide math achievement), attention needs to be given to who needs to be involved in collaborative distributed leadership practice. In the case of the Math Literacy Council it seems that the superintendent and union president delegated leadership work to the council but to fully benefit the district, these two key hierarchical leaders may have needed to be more active players in the distributed leadership practice.

Trust. This study illustrates the power of trust in a system of distributive leadership practice. Without the long history of trust between the superintendent and the

union president, it is unlikely a Math Council would have been established and tasked with such an important end goal. Because of the trust existing between these two organizational leaders, they may have underestimated the time it takes to build trust in a new group. This suggests the need to identify trust as a key component of a model of distributive leadership practice.

Enhancing Spillane's Distributed Leadership Model

In conclusion, Spillane's (2006) model of distributed leadership can be augmented by the findings from this district-level study. The situations from Figure 5.1 clearly articulate the situation as found in this district's model. The change from a distinct leader and follower has been compressed to leader/follower and follower/leader roles, as described in the previous section. Superimposing these findings on Spillane's diagram are proposed enhancements to distribute leadership, and define leadership practice, from a district level.

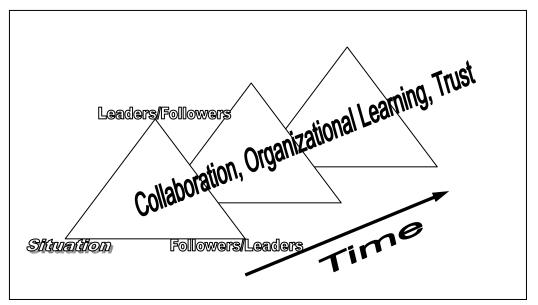


Figure 5.2: Refinement of Spillane's Model of Distributed Leadership—A District Level Perspective

Implications of the Study for Practice

Several implications for practice can be drawn from this study. One implication is for superintendents and union presidents to build an interest-based problem-solving negotiations process to address both educational issues as well as labor issues. It is evident from the historical data that Beachside School District has engaged in many district reform initiatives in collaboration with the union. The leadership for both district and teacher's union is nurtured and cultivated in an environment that views this leadership practice as the norm, how business is done. The ability of district leaders to engage in open and honest thinking and action about educational issues and move through a negotiations process that works to problem solve is a unique and potent process to engage a system in building leadership capacity through distributed leadership. This labor-management partnership can potentially enable districts to engage in a systems approach to student achievement. This case study suggests that such union/district collaboration and trust may be essential for distributed leadership at the district level.

A second implication is that the role of trust cannot be overemphasized; it is critical to the success of the partnership at all levels. Starting with trust from management and union leadership, whether it is with certificated or classified employees, allows for interest-based bargaining to occur. Without trust it is unlikely that the system and its constituents can work together productively on educational issues. Addressing even bread-and-butter issues can be challenging in a low-trust environment. As others have shown, trust takes time to build and maintain and can be easily undermined (Bryk & Schneider, 2003). Attending to building trust can be foundational to the success of moving a system to addressing student achievement and building strong, systemic

relationships that are not person centered, but culture centered. Beachside had a culture of union and management working together, and when top leaders have left the synergy of the partnership has continued. Additional case studies of successful examples of district-level distributed leadership are needed to better understand the significance of union/management trust in the creation and sustainability of a distributive leadership practice.

A third implication for educational practice can be drawn from using Spillane's (2006) model of distributed leadership and the conclusions from this study. Practitioners interested in implementing distributed leadership need to give thoughtful consideration to the situation (tools and artifacts needed to accomplish the task) and the amount of time to cultivate the work. This study suggests that successful distributed leadership practice requires identified routines, clearly articulated tasks, and powerful resources and tools be established and built into each situation. If engaging in distributed leadership at the district level, these three mechanisms, in tandem, will define high-level leadership practices of the participants engaged in a particular situation.

A fourth implication is that for district-level distributed leadership, it may be important to blur the positions of leader and follower while doing collaborative work. The collaborative work needs to be built upon the assumption that participants can learn from one another. Often, district-level distributed leadership involves a group of equals without clear demarcation of leader/follower. A potential outcome of this type of leadership flow is a focused attention to the situation. The stronger the flow, the less hierarchical "creep" in the group and the stronger the collaboration of the team.

A final implication of this research on distributed leadership practice at the district level is that time for learning and the idea of leadership requiring learning needs to be built into structures that are attempting to engage teachers or other participants in major leadership work. Coupled with trust, time for learning and collaboration will not only honor the employees serving students but the students and families. Building in a culture that automatically defines work through trust, learning, and collaboration is the pinnacle to creating a system that distributes leadership to many, defining leadership practice at all levels in an organization.

Recommendations for Further Research

For a distributive leadership practice model to flourish, it will be important to continue to understand the components of effective collaboration among teams. The area of particular interest is a collaborative process that uses artifacts and research to drive curricular leadership development. In addition, Spillane's (2006) distributive model delineates the follower and leader as pivotal to defining leadership practice. It would be helpful to understand how the dynamics of a follower and leader can be influential and positively impact the definition of leadership practice, especially among members of a district-wide leadership council who, in many respects, all regard themselves as leaders.

Another important area that requires further research is the flexible and efficient use of time to initiate and sustain powerful adult learning on a system level while still serving in the classroom. When is the best time to have teachers participate in such a major initiative? Should meetings be held after school, on weekends, or in the summer to accomplish such a task as redesigned the math curriculum? Are there different outcomes depending on when teachers and principals do the work?

A third area for study is the impact of trust in a distributed leadership system. Both of these require studies at the macro level, district, as they can manifest themselves differently at the school site or grade/content level teams. Finally, it would be important to explore if engaging teachers at the district level in distributed leadership practice to implement curricular changes actually yields higher student achievement returns compared to central office administrators developing revised courses and conducting the needed professional development. Further deepening our understanding of the impact of collaboration, time for continuous learning, and the impact of trust on a district's efforts to distribute leadership would further education's efforts to flatten leadership structures and help illuminate the ways distributed leadership practice contributes to student achievement.

In the interviews, teachers identified teacher leaders using the criterion of good teaching. This criterion suggests the need to further study what are the implication of using "good teacher" to determine who moves into a leadership roles, especially at the district level. If good teaching is a precursor to distributing leadership to teachers, how do we create a larger capacity for good teaching? How might such a criterion eliminate teachers who may not be the "best" but who can more easily understand systemic issues or who possess other leadership skills needed by the team? What is the leadership role of the principal, serving with a team of teachers at the district level, in this effort?

Appendix A

Information Letter

Distributed Leadership Through Literacy Councils

1		
Dear		_

April 2007

I am writing you to seek your permission to participate in my research study that I am conducting for my doctoral studies. I am conducting a study that investigates if the Literacy Council has had any effects on distributing leadership. As part of this study, I will be interviewing 23 teachers and four administrators from our school district that have served on the Literacy Councils, like yourself. In addition, I will be interviewing district-level leadership.

I would appreciate your assistance with this research project about your experiences and perceptions of distributed leadership, due to your participation in the Literacy Councils. This research will help me understand the process and role of distributing leadership through teachers at the district and school-site levels.

Your participation in this study involves two parts:

- 1. A short preinterview, written survey, which should take no more than 15 minutes. The survey will give you a chance to tell me background information about yourself and what experience and support you have had with teacher leadership. This information will be assigned a code and you will remain anonymous.
- 2. An interview (~90 minutes). The interview questions will focus on your knowledge, experience, perception and insights on distributed and teacher leadership through your participation in the Literacy Councils. I will contact you to set up the interview at a convenient time and place, if you choose to participate.

The interview will be taped for the purpose of transcription and validity. Your participation is completely voluntary. All interviews will be scheduled at your convenience and will not interfere with administrative or teaching responsibilities. Your identity and your school will remain confidential. I will assign you a neutral code of letters and numbers. If you do not wish to participate, simply let me know at any time before or during the study.

Attached to this letter is a consent form which outlines the purpose and procedures of this study. Signing the form indicates that you understand the conditions of the study and are willing to participate. Please sign the consent form and return it to me at in the attached, addressed and stamped envelope, with your pre-interview survey. If you have any questions regarding the study, please contact me at 858-472-9009. I am looking forward to talking with you about your experiences. I appreciate your time and contribution to the field of education and research.

Thank you, again, for your help.

Sincerely, Mel Robertson Doctoral Student, Educational Leadership UCSD, SDSU, and CSUSM

Appendix B

Participant Consent Form

Project Title Distributed Leadership Through Literacy Councils

Purpose The purpose of this research study is to investigate how

participation in Literacy Councils has distributed leadership at the district and school site level. Teacher perceptions and influences on their leadership behavior will be explored. The study will provide insight in the diverse ways that teacher leadership is manifested, supported, and developed.

teacher readership is mannested, supported, and developed.

This study will not benefit you personally, but will provide useful information about the perceptions and potential practices to develop and support teacher leadership at a

local and district level.

Benefits

Participation Selection You have received a letter inviting you to participate in this

research study and have been selected by your years of participation on the council and grade level (elementary, middle, and high school). Your selection is also based on order of response to the invitation to participate. When possible, selection will be controlled to represent male and

female participation.

Procedures The research study is expected to take place from April

2007 to December 2007. If you participate, you will be observed during Literacy Council meetings in spring and fall 2007, and/or you will be interviewed if you have participated in Literacy Councils for the past three years. The interview will be audio taped. Audiotapes will be used to ensure that information is documented accurately, but no

names will be recorded.

During the interviews, you are free to ask the researcher to turn off the tape recorder and end your participation. The recordings will be transcribed and used for analysis. Only the researcher will have access to the data. At the end of the study, the tapes will be kept in a secured file cabinet at the researcher's home; the tapes will be destroyed in a timely

manner.

Confidentiality Your responses will be kept confidential through the use of

pseudonyms for participants, schools, and district and

anyone that you mention. The transcripts from the interviews will be kept on a password protected laptop file, and hardcopies in a locked file at the researcher's home.

Freedom to Withdraw and Ask Questions

Participation in this study is completely voluntary and you have the option to stop the interview at any time. The tape recorder will be turned off and the recording will be erased in your presence. You will also be given any notes that are written during the interview. You may ask questions at any time and withdraw from the study, at any point, without any consequences.

Statement of Participation Since this is an investigational research study, there may be unknown risks that are currently unforeseeable. You will be informed of any significant new findings. You may feel uncomfortable answering some of the interview questions or having the Literacy Council meetings audio taped. Your participation is voluntary and you may discontinue your participation at any time.

Graduate Researcher

UCSD, CSUSM, and SDSU, Graduate Schools of Education: Mel Robertson

has explained this study to you and answered your questions. If you have additional questions or need to report research related problems, you may contact Mel Robertson at 858-472-9009 or melrobertson@san.rr.com. My advisor, Janet

Chrispeels, can be contacted at 858-822-4253 or jchrispeels@ucsd.edu. You may also call the Human ire arch

Research Protections Program at 858-455-5050 to inquiabout your rights as a research subject or to report researchated problems.		
esentative		

Appendix C

Interview Questions

Distributed Leadership Through a Math Council

Interview questions for district superintendent and union president:

- 1. Can you tell me about your concept of teacher leadership? What informed your thinking?
- 2. Can you tell me how you and (district or union) worked together to shape the first literacy council?
- 3. How did your concept of teacher leadership influence the design of the council?
- 4. Can you give me an example of a time that energized and excited you in the Math Council? A time where teachers took leadership and enacted your vision of teacher leadership?
- 5. What tasks did you want the leadership council to accomplish in year one?
- 6. What tasks do you believe were accomplished year one?
- 7. In what ways did you see teacher leadership capacity develop in year one? Year two? Year three?
- 8. What do you see as your role in supporting the literacy councils?
- 9. What tools and resources do you believe the council needed to accomplish the task?
 - a. How did you envision the leadership of the facilitators of the councils? What were their roles?
- 10. How did you envision council members playing a leadership role in their schools? What tasks did you want them to do? What resources and tools did you want them to use in their work?
- 11. Based on year one, what changes and ideas led to the design, work, and membership in year two? Based on year two, what changes and ideas led to the design, work, and membership in year three?
- 12. You may be considering changes and ideas to design year-four councils. If you could have three wishes, what would you wish to be in place for year four?
- 13. In what ways have the literacy councils contributed to distributing leadership through teachers?
- 14. Are other thoughts on your mind as you think backward and forward about distributed leadership through teachers in this district?
- 15. What three system conditions are necessary to distribute leadership?

Interview questions for *teachers* that have served on the Math Council:

- 1. I am interested in your experiences on the Literacy Council. Can you tell me a peak experience you've had this year on the Literacy Council where you took leadership as a teacher? What made it special? (What conditions existed that allowed this peak experience to happen?)
- 2. Can you tell me about your concept of teacher leadership? What informed your thinking?
- 3. Tell me a little about your role on the Literacy Council? What do you perceive as the primary purpose of the Literacy Council? What did you see as the roles of the facilitators?
- 4. How did you work with others on the council?
- 5. How did your concept of teacher leadership influence your work with others on the council?
- 6. How do you think your Literacy Council participation contributed to your development as a teacher leader?
- 7. (As it applies.) You have been on the Literacy Councils for three (or two or one) year/s now. Can you tell me a little about how your teacher role has evolved or changed on the council? In what ways did the task of the council change?
- 8. What tasks did you want the literacy council to accomplish in year one?
- 9. What tasks do you believe were accomplished year one?
- 10. What critical tools and resources do you believe the council needed to accomplish the task?
- 11. As a result of your role on the council, how have you played a leadership role in your school? What tasks did you do? What resources and tools did you use in accomplishing these tasks?
- 12. (Year two.) Based on your year one experience, what changes and ideas led to the tasks in year two? (Three-year participants.) Based on years one and two, what changes and ideas led the tasks in year three?
- 13. In what ways have you shared the work of the Literacy Councils with your school site? In what ways have the work of the Literacy Councils affected teaching and learning at your school?
- 14. In what ways have you, as a Literacy Council teacher, played a leadership role in your school?
 - a. What kind of leadership role/s did you play as a direct result of serving on the literacy council? Please be specific in describing your behaviors and responsibilities.
- 15. In what ways do you feel the curriculum focus on the Literacy Councils has supported or constrained leadership in this district?
- 16. In what ways have the literacy councils contributed to distributing leadership through teachers?
- 17. What three conditions, do you believe, must be present to distribute leadership to teachers?

Interview questions for *principals* that served on the Literacy Council:

- 1. Can you give me an example of a time that energized and excited you, in the Math Council? A time where teachers took leadership and enacted your vision of teacher leadership? What would need to be present on the councils for this to occur as routine?
- 2. Can you tell me about your concept of teacher leadership? What informed your thinking?
- 3. Tell me a little about your role on the Literacy Council?
- 4. How did you work with others on the council?
- 5. What do you perceive as the primary task the council was to accomplish in year one?
- 6. What tasks do you believe were accomplished year one?
- 7. In what ways did you see teacher leadership capacity in year one? Year two? Year three?
- 8. What did you see as your role in supporting the literacy councils?
- 9. What were the critical tools and resources do you believe the council needed and used to accomplish the task?
- 10. How did you think council members play leadership role in their schools? What tasks do they engage in? What resources and tools do they use in their work?
- 11. You have been on the Literacy Councils for one/two (or two or one) year/s. Can you tell me a little about how teacher roles have evolved or changed as influenced by serving on the councils?
- 12. Are other thoughts on your mind as you think backward and forward about distributed leadership through teachers in this district?
- 13. In what ways have teachers shared the work of the Literacy Councils with your school site? In what ways have the work of the Literacy Councils affected teaching and learning at your school?
- 14. In what ways do you feel the curriculum focus on the Literacy Councils has supported or constrained teacher leadership in the councils?
- 15. In what ways have the literacy councils contributed to distributing leadership through teachers?
- 16. What three conditions, do you believe, must be present to distribute leadership to teachers?

Appendix D

Copyright Permission: Union Professionals: Labor Relations and Educational Reform

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---- Original Message ----
From: "Copyright.com" <notices@copyright.com>
To: <melrobertson@san.rr.com>
Sent: Monday, February 11, 2008 8:10 PM
Subject: Copyright.com Special Order Update (1725701)
> Dear Melavel Robertson,
> On 02/04/08, you placed an order to purchase the rights to use
> copyrighted material. Since the rightsholder for this material does
> not pre-authorize CCC to sell these rights, we have contacted the
> rightsholder to determine whether the right you requested is
> available and to determine the price for the right. We have updated
> information on the status of your order:
> Order Summary:
> Original Order Date: 02/04/08
> Confirmation Number: 1725701
> Updates on Items You Ordered:
> UNION OF PROFESSIONALS : LABOR RELATIONS AND EDUCATIONAL REFORM,
> 19174797
> Current Status: Granted
> Fee: $3.00
> We will automatically include the fee for your purchase (see above)
> on the next invoice we send for your account. If you have decided to
> cancel this order, please review your order on-line. You can always
> cancel your order prior to being invoiced.
> If you would like to view the details of your order, or to make
> changes to your order, please click the following link:
https://www.copyright.com/ccc/dispatcher?type=order&target=histdetid&id
=1725701
> You can learn more about Copyright Clearance Center's Special Order
> process by clicking on the following link:
 http://www.copyright.com/ccc/do/viewPage?pageCode=h28-n
******************
> If you need assistance with copyright.com, please visit our online
help (www.copyright.com/help) where you will find answers to common
> questions.
> For further assistance call 978-646-2600 (Mon-Fri, 8:00 am to 6:00 pm
> Eastern Time) to speak with a Customer Relations Representative. Or
> e-mail your questions and comments to: info@copyright.com.
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Appendix E

Copyright Permission: Distributed Leadership

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---- Original Message ----
From: <BJohns@wiley.com>
To: "Melavel Robertson" <melrobertson@san.rr.com>
Sent: Thursday, February 21, 2008 7:42 AM
Subject: Re: Dissertation Request - Urgent
> Ms. Robertson:
> Please be advise permission is granted to reuse Figure 1.1, page 3
> from Spillane/Distributed Leadership/0787965383 in your forthcoming
> Thesis which will be published by University of California - San
> Diego.
> Credit must appear on every copy using the material and must include
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