Does Distributed Leadership Influence the Decision Making of Teachers in the Classroom:

Examining Content and Pedagogy

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Abstract

Distributed leadership is currently a frequently researched area of study. However, few studies examine the influence of distributed leadership on teachers' decisions in the classroom. The true essence of distributed leadership is to empower teachers to become involved in the decision making process within the school. Yet, research does not examine how distributed leadership influences the most important decisions teachers make, which are instructional decisions specifically relating to content and pedagogy. The purpose of this study is to begin to fill the gap in research by examining the influence of building level distributed leadership on teachers' sense of autonomy at the classroom level relating to content and pedagogy. This is accomplished by focusing on the question, "Does distributed leadership influence the decision making of teachers?"

The data used for this study came from two districts in Missouri. Certified staff members from elementary, middle, and high schools were surveyed. The survey incorporated a measure of distributed leadership at the building level, which focused on questions relating to various responsibilities often distributed to staff members including collaborative decisions, school governance and academic development. The survey also included the amount of influence teachers have, their colleagues have, and their administrators have over both curricular content and pedagogically related classroom decisions. This made it possible to determine if there is a correlation between distributed leadership and teachers' classroom decisions.

Findings suggest that distributed leadership is positively correlated with teachers' instructional decisions. Specifically, distributed leadership is positively related to both content and pedagogical decisions. It was also found that distributed leadership and pedagogical decisions have a stronger relationship than distributed leadership and content decisions.

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Dedication

This project is dedicated to the three most important people in my life, my husband Ryan Shields, my mom, Dr. Sandy Clutter and my future child, who I will have the honor of meeting in February. All have been an amazing support and comfort throughout this process. I love you all dearly.

Ryan provided me with a shoulder to lean on, reminded me that I would get through it, tutored me with technology and statistics, and helped me take my mind off everything when needed. Ryan, I value everyday with you, feel honored to be your wife, and look forward to spending the rest of my life with you.

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Finally, I dedicate this project to my future child. I can't wait to meet you in February.

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Chapter 1

Introduction

While a number of studies have focused on distributed leadership, few have looked at the influence of distributed leadership on teachers' decisions. In reality, the majority of research on distributed leadership primarily focuses on the definition of distributed leadership (Harris, 2003; Harris, 2004; Spillane, 2003; Arrowmith, 2004; Spillane, Halverson & Diamond, 2001), the rationale for distributing leadership (Spillane, 2006; Spillane 2003; Harris, 2003; Harris, 2004), the manner in which leadership responsibilities are spread across the members of the community (Spillane & Diamond, 2007; Spillane, 2006; Spillane, Halverson & Diamond 2001; Gronn, 2000; Harris, 2003), and the effect of specific forms of distributed leadership on the school organization (Camburn, 2003; Goldstein, 2003; Harris, 2003; Hobby & Arrowsmith, 2004; Mayrowetz, 2008). The true essence of distributed leadership is to empower teachers to get involved and provide them with more influence in the decision-making process within the school. For distributed leadership to be effective, it should impact the core of what teachers' do on a daily basis, which is make instructional decisions focusing on content and pedagogy. Yet, research does not delve into how distributed leadership influences teachers' decisions. Therefore, the intent of this study is to fill this gap in research by analyzing the influence of building level distributed leadership on teachers' sense of autonomy at the classroom level relating to content and pedagogy. To study this, the following question will be analyzed: "Does distributed leadership influence the decision-making of teachers in the classroom?"

While the idea of distributed leadership is not a new concept, some researchers claim that it is critical for the success of the organization because it allows individuals to pool their expertise to create leadership of many rather than the few while empowering teachers to get

involved in the decision-making process of the school (Spillane, 2007; Spillane & Diamond, 2006; Harris, 2003). There are a multitude of responsibilities and pressures placed on the leader of the educational organization some including becoming an expert in effective learning strategies, developing a positive vision and culture, building trust, becoming an instructional leader and more. In fact, the responsibilities and areas that educational leaders are expected to become an expert in is an exhaustive list. To respond to all the areas of expertise, some leaders have chosen to implement distributed leadership to spread the tasks to members of the staff, since it is nearly impossible for the leader to be an expert in all of these areas (Harris, 2004; Gronn, 2000). Even though there is extensive research stating that distributed leadership is critical to the success of the organization, it takes for granted the idea that it is an effective leadership practice by basing findings on anecdotal accounts as well as having mixed results (Mayrowetz, 2008; Marks & Louis, 1997).

Distributed leadership is a leadership style that has been frequently examined within the educational setting. The research primarily focuses on defining distributed leadership, explaining why it is practiced, describing the distributed leadership perspective, and illustrating the manner in which leadership responsibilities are spread across the members of the community (Arrowmith, 2004; Camburn, 2003; Gronn, 2000; Goldstein, 2003; Harris, 2003; Harris, 2004; Hobby & Arrowsmith, 2004; Mayrowetz, 2008; Spillane, 2003; Spillane, 2006; Spillane, Halverson & Diamond, 2001, Spillane & Diamond, 2007). Other studies have examined a specific type of distributed leadership such as comprehensive school reform models and peer assistance review (Camburn, Rowan, Taylor, 2003). Additional studies evaluate the most efficient way of distributing leadership as well as specific roles that are distributed to teachers (Spillane & Diamond, 2007; Spillane, 2006; Spillane, Halverson & Diamond 2001; Gronn, 2000;

Harris, 2003). Several studies have delved into positive and negative effects of distributed leadership on the school but these results are mixed (Camburn, 2003; Goldstein, 2003; Harris, 2003; Hobby & Arrowsmith, 2004; Mayrowetz, 2008). In other words, some research supports that distributed leadership has a positive effect on the community as a whole, while others negate this argument. Therefore, a number of studies have been conducted examining distributed leadership, although the influence of distributed leadership on teachers' decisions has not yet been a focus.

While research does not speak directly to the influence of distributed leadership on teachers' decisions, there is a great deal of research surrounding the decision-making of teachers. Specifically, researchers focus on the debate of autonomy and control, teachers' involvement in school-wide decisions as well as classroom decisions and factors influencing teachers' instructional decisions (Diamond, 2007; Ingersoll, 2003; Ingersoll 1996; Harris, 2003; Arrowhead, 2004; Shavelson, R.J., Stern, P., 1981). Some research suggests that distributed leadership will provide more autonomy to teachers, while other research proposes that there will be more control for teachers resulting from distributed leadership (Harris, 2003; Arrowhead, 2004). Further, research focusing on teachers' decisions in the school and classroom setting found that teachers have control over administrative, social and instructional decisions (Ingersoll, 2003). Yet, they have the most control over instructional decisions made in the classroom relating specifically to content and pedagogy. Finally, a number of factors influence teachers' decision-making including their personal characteristics, collegial influences, and administrative control (Shalverson & Stern, 1981). However, there is a lack of research regarding how distributed leadership influences teachers' decisions.

The purpose of this study is to examine the influence of building level distributed leadership on teachers' sense of autonomy at the classroom level relating to content and pedagogy. Not only is it critical to look at distributed leadership and teachers' decisions, but it is also a crucial to examine how the former influences the latter. The primary purpose of distributed leadership is to encourage teachers to become empowered in the decision-making process within the school, which should bring about increased student achievement and school improvement. Thus, the primary outcome of distributed leadership should be to provide the most influence to teachers by impacting them at the core of what they do daily, which is instructing and educating children. While there are a vast amount of instructional decisions that teachers make, the most crucial are those that impact students daily. This involves content and pedagogical decisions. Therefore, the focus of this study is to examine the influence of distributed leadership at the building level on teachers' sense of autonomy over content and pedagogical decisions. In other words, while teachers are given more involvement through distributed leadership, do they really have more influence in the content and pedagogical decisions they make daily?

The central research question within this study is, "Does distributed leadership influence the decision-making of teachers in the classroom?" An additional question is does distributed leadership influence content or pedagogical decisions differently? These questions were collected through a questionnaire given to two different school districts including twelve elementary schools, three middle schools, and four high schools (Appendix A).

Chapter 2

Literature Review

The intent of this study is to analyze the influence of building level distributed leadership on teachers' perceptions of their autonomy over instructional decisions relating specifically to content and pedagogy. To do this, it is necessary to take a deeper look at current research surrounding distributed leadership and teachers' decisions. Research on distributed leadership focuses on the definition (Harris, 2003; Harris, 2004; Spillane, 2003; Arrowmith, 2004; Spillane, Halverson & Diamond, 2001), the rationale (Spillane, 2006; Spillane 2003; Harris, 2003), the distribution of leadership functions (Spillane & Diamond, 2007; Spillane, 2006; Spillane, Halverson & Diamond 2001; Gronn, 2000; Harris, 2003), and the impact of distributed leadership on the school (Camburn, 2003; Goldstein, 2003; Harris, 2003; Hobby & Arrowsmith, 2004; Mayrowetz, 2008). Not only is it crucial to focus on distributed leadership research, but it is also critical to delve into research on teachers' decisions. Current research surrounding the decision-making of teachers focuses on the debate of autonomy and control, decisions teachers have control over in the school and classroom setting, as well as factors influencing teachers' instructional decisions relating to content and pedagogy (Diamond, 2007; Ingersoll, 2003; Ingersoll 1996; Harris, 2003; Arrowhead, 2004; Shavelson, R.J., Stern, P., 1981). This is the first step in answering the question, "Does distributed leadership influence the decision-making of teachers in the classroom?"

2.1 Distributed Leadership

Although a number of studies focus on distributed leadership, there is a lack of research concerning the influence of distributed leadership on teachers' instructional decisions.

Distributed leadership research centers on defining the leadership style, providing a rationale,

describing how leadership responsibilities are distributed, offering examples of distributed leadership, and investigating the effect it has on the school organization (culture, principal, staff, student achievement) (Arrowsmith, 2004; Camburn, 2003; Gronn, 2000; Harris, 2003; Harris, 2004; Spillane, 2003; Spillane, 2006; Spillane, Halverson & Diamond, 2001). While the research is extensive, the majority takes for granted that the idea of distributed leadership is an effective practice by using anecdotal accounts and not basing results on evidence. Further, the results are mixed. Some researchers claim that distributed leadership is effective (Camburn, 2003; Goldstein, 2003; Hobby & Arrowsmith, 2004); while others argue that it has no impact or even a negative influence on the educational organization (Mayrowetz, 2008; Marks & Louis, 1997). It is critical to consider this research when evaluating if distributed leadership has an influence on teachers' educational decisions.

Defining Distributed Leadership

A dominant form of literature within this topic provides a definition of the leadership style. While distributed leadership is not a new concept, it is at the forefront of many educators' minds because leaders often distribute functions to various members within the school community. This occurs so much that different individuals have different definitions of distributed leadership. Common themes from current literature show that distributed leadership involves and is defined by shared responsibilities, collective leadership, pooled expertise, development of different 'power' relationships, and tasks that are 'stretched-over' leadership, organizational structures, and positions (Harris, 2003; Harris, 2004; Spillane, 2003; Arrowsmith, 2004; Spillane, Halverson & Diamond, 2001).

Distributed leadership has been described as "a form of collective leadership in which teachers develop expertise by working together" (Harris, 2003; Harris, 2004). In this definition,

each member of the community shares the leadership responsibilities in a collective manner depending on their area of expertise. This implies an alteration of 'power' relationships within the school in which the division of leader and follower begins to blur due to the pooled expertise of various individuals. This creates a reciprocal relationship between the "leader" and "follower." At times the leader takes on the primary leadership role and at other times the main leadership is passed onto the follower. Hence, the leadership functions are stretched-over different positions and individuals within the school.

An example of this relationship exists within the site based management team of the school where the members represent different grade levels and have varying areas of knowledge, experiences, and expertise. This team makes school-wide decisions, such as writing and revising the school improvement plan, allocating professional development funds, and developing school wide instructional policies and procedures. Along with this, it involves distributing leadership to individuals that possess expertise in a specific area rather than only utilizing the building administrator.

Another example involves a teacher with high expertise in a specialized area such as technology providing professional development to staff members rather than only relying on the principal to take on this role. When considering distributed leadership in this manner, it can be viewed as leadership of many rather than the few. In essence, many come together to pool their expertise and provide leadership to the members of the school rather than only the principal having the responsibility of leadership.

While some research describes distributed leadership as a process of stretching leadership functions over multiple staff members, others portray it as a process that is owned by the group of individuals within the organization rather than only by the principal, administrator or

superintendent (Arrowsmith, 2004). In this model, leadership boundaries are open to anyone with the knowledge or skill needed to lead and not specifically distributed to a specific teacher leader. In other words, the leader can be anyone within the organization. In turn, the expertise of leadership expands due to the variety of skills or knowledge from different possible leaders within the organization. In sum, distributed leadership has been defined as a process owned by the group with open boundaries and a variety of expertise.

This definition of distributed leadership is exhibited through the "Teacher as Trainer" model. This model involves different teachers or staff members gaining expertise in a specific area such as the reader's workshop model, a philosophical program for teaching reading, then training the staff through professional development activities. Various staff members may attend specialized training focusing on the implementation of reader's workshop. These staff members would then organize and facilitate professional development opportunities to train the rest of the staff. They may also develop "model classrooms" where teachers in the building or around the district can observe the reader's workshop model in practice. Along with the Teacher as Trainer model, another example involves staff members who are knowledgeable in reader's workshop leading teacher training on the model. It could also involve staff members simply sharing ideas of successful classroom practices with each other. The essence of this description of distributed leadership involves individuals other than the "formal leaders" in the building taking on leadership roles due to their specialized training in a specific area.

Other researchers describe distributed leadership as being a "practice that is stretchedover the school's social and situational contexts" (Spillane, Halverson, and Diamond, 2001). This can mean that leadership functions are stretched over positions, organizations, and even two or more leaders. Furthermore, distributed leadership should not be a delegation of leadership functions or tasks, but instead the "social distribution of leadership where functions are stretched over the work of a number of individuals where the leadership task is accomplished through the interaction of multiple leaders" (Harris, 2004 & Spillane, 2003).

As distributed leadership became more widespread, the definition began to vary depending on the researcher or practitioner. Since there are a number of definitions for distributed leadership, it is essential to prescribe a working definition for this study. Therefore, from this point forth, distributed leadership will be defined as the process in which multiple members of the staff contribute to leadership functions in the school. Specific leadership tasks may include: site based management team, professional development, curriculum teams, school improvement planning, etc. In turn, a sense of a shared responsibility within the school should be developed, creating the leadership of many rather than the few.

Rationalization for Distributed Leadership

Along with defining distributed leadership, another leading piece of literature focuses on why it is practiced or rationalizing the need. The main ideas are that distributed leadership is needed to assist with school improvement efforts, make the job of the principal more manageable, improve teacher empowerment and increase student achievement (Spillane, 2006; Spillane 2003; Harris, 2003; Harris, 2004). However, the majority of this research takes for granted that distributed leadership will truly improve the educational organization and there are mixed reviews of whether or not it creates positive change from the school perspective.

For many years, educators and school officials have shared leadership responsibilities with various members of the school staff by working together to develop the mission, vision, educational goals, curriculum, effective teaching methods, professional development and more. Yet, distributed leadership is currently at the forefront of many educators' and leaders' minds

due to national and state mandates calling for increased accountability, the need to improve student achievement and the need to improve the school as a whole. To meet these needs, leaders have attempted to implement reforms and initiatives to improve teacher instruction, efficacy, and motivation, create a shared vision, build trust within the building, increase collaborative relationships, and develop a positive culture. For an isolated leader, this is a daunting task because it is unlikely for one individual to become an expert in all of the areas needed to incur long lasting change of great magnitude. Some of the knowledge a leader must possess includes content, pedagogy, curricular, as well as student and adult learning (Spillane, 2006; Spillane, 2003; Harris, 2003). In a knowledge-intensive organization like teaching and learning, there is no way for the leader to perform all of the complex tasks without widely distributing the responsibility for leadership among various roles within the organization (Harris, 2004). Thus, the leader distributes leadership responsibilities to members of the organization. When distributed leadership occurs, the skills and talents of all members of the school staff are combined so that the expertise of the school community can be pooled in specific areas. In addition, this creates a shared sense of leadership where the administrator is not the sole individual taking on the leadership responsibilities. In turn, teachers have an increased stake in the school organization because they are given an active role in making decisions. It has been argued that this improves the culture of the building, which is tied to an increase of student achievement (Harris, 2004). Hence, current literature claims that distributed leadership is practiced to assist in school improvement, make the job of the principal more manageable, and encourage teachers to become involved in the decision making process of the school.

Distribution of Leadership Responsibilities

In addition to a great deal of distributed leadership literature focusing on the definition and rationale, other research describes various ways leadership functions are often distributed as well as different forms of distributed leadership (Spillane & Diamond, 2007; Spillane, 2006; Spillane, Halverson & Diamond, 2001; Gronn, 2000; Harris, 2003). This focuses on the distributed leadership perspective, which encompasses the leader plus aspect and the practice aspect. It is a critical piece within the literature because leading researchers focus on this perspective to explain how educational organizations practice and study distributed leadership through the distribution of responsibilities, including Spillane, Diamond, Halverson, Jita, Sherer, Coldren, and Harris. This perspective does not simply look at the heroic leader. Instead it focuses on all individuals in the community to analyze how they lead in some situations, follow in other instances, and how their interactions assist in task completion. In other words, this perspective looks at leadership as a whole within the school setting. It does not just focus on the principal. The distributed leadership perspective provides an explanation of how functions are distributed to members of the community, while also describing different types of distributed leadership.

One side of the distributed leadership perspective is the leader-plus aspect, which means what the title depicts...the leader plus other leaders within the organization (Spillane, 2006; Spillane, & Diamond, 2007). This aspect takes into consideration the fact that the principal does not lead alone. Various members that could participate in leadership functions include the assistant principal, curriculum specialists, special education coordinators, reading teachers, classroom teachers, parents, etc (Spillane, 2006; Spillane, & Diamond, 2007). All members of the community act as leaders at one time or another, depending on the situation. In other words,

the leader plus aspect involves the educational leader and other members of the school organization taking on leadership responsibilities.

Spillane's, Harris' and Hallinger's research from 2003, 2006 and 2009 all focus on the leader plus aspect, which includes different examples of distributed leadership including formal and informal leaders. Informal leadership typically refers to classroom related responsibilities such as planning, setting goals, communicating goals, regulating activities, creating a positive work environment, supervising, motivating, team leadership and evaluating performance. On the other hand, formal leadership includes school-wide responsibilities that are often distributed to subject coordinators, department heads, instructional coaches, etc. Some of the responsibilities of formal leaders could include shaping the curriculum, developing the schedule, hiring staff, placing teachers or students in classes, providing professional development opportunities to the staff, evaluating staff, creating the school improvement plan and more. At times, a teacher can take on dual leadership tasks where he/she is responsible for informal and formal leadership functions. Other instances may involve the teacher moving away from the classroom to take on full time formal teacher leadership roles. Current literature describes informal and formal leadership as two examples of distributing leadership to members of the school community. However, there is a lack of evidence based data regarding the usage of informal and formal leadership and how their daily educational decisions are influenced.

Along with formal and informal leaders, other forms of distributed leadership that fall under the leader plus category include division of labor, co-performance, and parallel performance, which were examined in the Distributed Leadership Study (Spillane, 2006; Harris, 2003; Gronn, 2000). Division of labor involves splitting leadership responsibilities between people. Typically, the principal and assistant principal divide leadership functions between one

another or other staff members. The study found examples of divided labor within teacher evaluation, student discipline, student attendance and matters of instruction (Spillane, 2006). Co-Performance is another manner of distributing responsibilities. This involves the leader and another member of the organization performing a leadership routine in a collaborated manner. Examples of co-performance occurred within teacher growth, curriculum development, curricular material selection, and school improvement planning. An additional form from the Distributed Leadership Study is parallel performance, which involves leaders working on the same task at the same time, but without coordination or collaboration. This often causes work to be duplicated, which is not always negative. An example of this form is two leaders attempting to gain buy-in of the mission of the school. This task requires more than one individual and could have a positive result as long as both leaders believe in the same educational mission. Other examples may include discipline, overseeing transportation, communicating with members of the school community and more. Therefore, division of labor, co-performance, and parallel performance are three examples of distributed leadership that involve the leader plus another individual. While the Distributed Leadership Study determined how the educational organizations distributed leadership responsibilities with members of the school, it did not depict whether or not it influenced teachers' educational decisions. It only showed how functions were distributed across the community.

Not only does the distributed leadership perspective encompass the leader plus aspect, it also involves the practice aspect. This involves the leader, followers and an analysis of the situation in which they are involved. Instead of focusing only on the leader plus model, the practice aspect considers all the leaders, all the followers and the situation involved in the practice of leadership (Spillane & Diamond, 2007; Spillane, 2006; Spillane, Halverson, &

Diamond, 2001; Gronn, 2000). For example, when implementing, developing buy-in and sustaining a new educational initiative, this task involves a number of individuals, not just the principal and a teacher leader. It involves the principal with a group of leaders in the school and district setting providing information to the staff, the staff implementing the initiative, and sustaining system-wide change with evaluation of the initiative. To create systematic change, the entire community is involved by changing their practice on a daily basis. Change does not occur by one action from the principal. It occurs by the entire staff or community interacting and working together. Individuals may lead at times and follow at others. There is not just one set leader. Thus, the practice aspect of the distributed perspective looks at all interactions within the school community including those of the principal, formal or informal leaders, followers and their interactions.

Current research describes three ways of distributing leadership within an organization that fall under the practice aspect including collaborated distribution, collective distribution and coordinated distribution (Spillane, 2003; Spillane, 2006; Spillane, & Diamond, 2007).

Collaborated distribution involves a group of individuals working together to complete a leadership function. This results in a reciprocal interdependent relationship because the work of one leader becomes the foundation for another leader and so on. Another manner in which leadership is distributed is collective distribution. This involves two or more leaders working independently but towards the same goal. It results in an interdependent relationship wherein independent actions occur, but towards a common goal. Furthermore, the actions of one leader affect the actions of another and then go on to affect other members of the community. Neither could reach the goal without the work of the other. Finally, coordinated distribution entails different leadership practices that must be conducted in sequential order to reach a common goal.

Research describes collaborated, collective, and coordinated distribution as three ways of spreading leadership roles across the community. However, it reports on these methods by describing how and when they occur through anecdotal accounts and not basing the results on evidence. It also does not examine the effectiveness of distributed leadership on the school perspective.

Impact on the School

The intent of this study is to examine the decision-making of teachers resulting from distributed leadership. There is a lack of research in this area. However, the number of studies focusing on the effect of distributed leadership on the school organization has increased in recent years. Most of these studies examine how distributed leadership influences the educational organization as a whole (school improvement efforts, the job of the principal, certified staff, and student performance) (Camburn, 2003; Goldstein, 2003; Hobby, Arrowsmith, 2004; Mayrowetz, 2008). While studies are beginning to take a closer look at the impact of distributed leadership on school outcomes, the majority is based on anecdotal accounts and assumes that distributed leadership is working. This is apart from the recent work of Heck and Hallinger in the article, "Assessing the contribution of distributed leadership to school improvement and growth in math achievement," which was published by the AERA in 2009. The focus of their study was to examine how distributed leadership influences school improvement as well as students' math achievement. They found that changes in distributed leadership results in positive changes in the academic capacity of the school and student achievement in math. This had a direct relation to school improvement and indirect relation to math achievement. For the most part, emerging research supports that distributed leadership has a positive effect on the school (Camburn, 2003; Goldstein, 2003; Hobby, Arrowsmith, 2004). However, researchers have also found that

& Louis, 1997). Thus, results are mixed and based on anecdotal accounts rather than hard evidence when evaluating the effectiveness of distributed leadership.

Researchers claim that distributed leadership assists in school improvement efforts and the educational organization as a whole (Camburn, 2003; Goldstein, 2003; Hobby, Arrowsmith, 2004; Mayrowetz, 2008). These studies have shown that distributed leadership can have a positive effect on the climate, morale, workload, creativity, quality, and values of those within the organization. These positive effects should occur because more individuals are taking part in the decision-making process within the school, which increases the climate and morale. It also decreases the workload of the principal or assistant principal because he/she can gain assistance from a number of individuals with varied expertise. Since diverse individuals are able to assist in leadership tasks, then the creativity and quality of work could improve. All of these factors could strengthen the values and culture within the building. Further, some studies specifically claim that distributed leadership exists within improving schools by improving the culture, student achievement, teacher morale, efficacy, efficiency and pedagogy (Harris, 2003; Mayrowetz, 2008). Therefore, some current research claims that distributed leadership brings about school improvement, yet it fails to analyze if teachers' decisions will benefit.

One of the leading arguments for distributed leadership is that it improves the job of the principal by making the responsibilities more manageable (Harris, & Spillane, 2008). This is because the principal no longer has to work in isolation and tackle the numerous and daunting tasks alone. Instead, the principal is able to distribute leadership functions to various members of the community. In turn, the principal's job becomes more "doable" (Harris, & Spillane, 2008). For example, teachers may be utilized to facilitate committee meetings, staff meetings,

develop school improvement plans, collaboration, and even supervise the transportation of students. This provides on the job assistance for the principal. An additional gain for the principal distributing leadership to teachers is acquiring a team of experts to assist in the decision-making process at the school. They no longer have to be the sole individual responsible for the leadership responsibilities within the school. Even though the majority of research supporting distributed leadership suggests that distributed leadership is a necessity to make the principal's job more manageable, it fails to analyze how this influences teachers' educational decisions.

Along with claiming that distributed leadership improves the school organization as a whole and makes the job of the principal more manageable, relevant research also suggests it positively affects teachers (Harris, 2003; Spillane, Halverson, & Diamond, 2001; Barth, 2001). Even though current literature does not specifically speak to the influence of distributed leadership on teachers' instructional decisions in the classroom, it does suggest that it has a positive effect on teachers by increasing their empowerment. Some findings propose that distributed leadership could result in an increase of collaboration, empowerment given to teachers, decision-making, morale, commitment to the school, higher quality professional development, effective teaching practices being implemented, teacher confidence, motivation, greater likelihood of achieving school goals as well as student outcomes (Harris, 2003; Spillane, Halverson, & Diamond, 2001; Barth, 2001). These gains occur by teachers taking on leadership responsibilities and becoming empowered by making school-wide decisions, which increases their connectivity, commitment, and morale within the school. Roland Barth supports this by stating, "Most would agree that who the teacher is and what the teacher does within the classroom has a greater influence upon students' accomplishments than any other school factor.

This is directly related to what the teacher does outside of the classroom. However, the research does not evaluate whether or not teacher leadership truly influences educational decisions made by teachers, which is the intent of the current study.

Studies have shown that students also benefit when distributed leadership exists within the school because they are able to witness enhanced democracy within the school (Barth, 2001). Barth's argument is that when students observe teachers participating in all aspects of decision making within the school, they see the value in taking part in the democratic system. Further, it has been found that in high-performing schools with few discipline problems and high student achievement, teacher leadership and decision making (establishing discipline policies, selecting textbooks, designing curriculum, selecting colleagues, etc) are significantly more democratic (Barth, 2001). Yet, the question remains as to whether or not building level distributed leadership truly influences teachers' sense of autonomy at the classroom level.

Not all research supports the claim that distributed leadership will have a positive effect on the school organization. Some research reports that distributed leadership will actually have negative effects including making the principals' job more difficult, having ineffective teachers lead, not leading to school improvement, taking away from teacher empowerment and causing lower student achievement (Mayrowetz, 2008; Marks & Louis, 1997). Therefore, research regarding the effects of distributed leadership on the school organization is mixed.

One argument from Mayrowetz is that distributed leadership does not make the job of the leader more manageable; instead, more work is required of the leader. One reason for this is that teachers given leadership responsibilities may not all be effective leaders (Mayrowetz, 2008).

Just because they are knowledgeable or possess expertise in an area, does not mean they can effectively lead the organization. In fact, Mayrowetz states, "Distributing leadership is a risky

business and may result in the distribution of incompetence" (2008). If ineffective leaders are given leadership responsibilities, then it causes more work for the principal because he/she may need to solve problems that occurred or take over the task for the ineffective leader.

Along with the possibility of having weak leaders, as responsibilities are distributed to teachers, their focus on instruction is also lessened. When this occurs, less attention is given to classroom instruction because their focus is on different leadership tasks, which could lead to decreased student achievement. All of this could also cause a decreased culture because frustration, workload, and inefficiency might be increased. Therefore, researchers' findings are mixed regarding whether or not distributed leadership truly has a positive effect on the school.

Additionally, distributed leadership has not yet been proven to lead to school improvement (Mayrowetz, 2008; Marks & Louis, 1997). In fact, some research has found that higher amounts of distributed leadership in schools, defined as both teachers and principals engaging in leadership work, have actually been associated with lower levels of student engagement (Mayrowetz, 2008). This could be due to distributed leadership taking away from teacher empowerment, having a negative effect in improving student achievement by weakening classroom practices (Marks & Louis, 1997). There are mixed feelings and outcomes regarding the efficacy of teacher leadership and empowerment as a method of improving instructional practices. In fact, research shows that the participatory decision-making of teachers reduces individual autonomy, consumes teachers' work time for instructional related responsibilities, depletes teachers' energy and detracts from instruction as well as focuses on non-instructional issues, which does not positively influence classroom practices relating to content and pedagogy (Marks & Louis, 1997). Hence, some current research evaluates the negative effects of

distributed leadership including the lack of competent teacher leaders and the lack of evidence supporting whether or not distributed leadership truly has a positive influence on the school.

Recent research focusing on the effects of distributed leadership is mixed. Some argue that it increases school improvement, makes the job of the principal more manageable, assists in teacher empowerment and leads to student achievement (Camburn, 2003; Goldstein, 2003; Hobby, Arrowsmith, 2004; Mayrowetz, 2008). On the other hand, current research also depicts the opposite by stating that distributed leadership does not lead to school improvement, causes more work for the principal, takes away teachers' empowerment and autonomy, creates incompetent leaders, and weakens classroom practices, which leads to a lack of academic achievement (Mayrowetz, 2008; Marks & Louis, 1997). Further, the research fails to sufficiently depict whether or not distributed leadership at the building level is related to teachers' sense of autonomy at the classroom level relating to content and pedagogy.

While researchers have provided a definition, rationale, examined the distribution of responsibilities, as well as evaluated positive and negative effects of distributed leadership, they do not address how distributed leadership influences teachers' educational decisions. This presents a major gap in the research because the essence of distributed leadership is to empower teachers to become more involved in educational decisions within the school; thus, improving classroom practice and student achievement. Therefore, emerging research should examine how it impacts teachers, who should be influenced the most because they are at the heart of distributed leadership. If this is truly the case, then distributed leadership should focus on improving classroom practices by providing more influence to teachers when making decisions in the classroom. Yet, research does not look at how distributed leadership impacts the core of teachers' work, which is making instructional decisions in the classroom relating to content and

pedagogy. This is the intent of the current study...to fill that gap by asking, "Does distributed leadership influence the decision-making of teachers in the classroom?"

2.2 Decision-making of Teachers

For years community members, school board, administrators, principals, teachers, parents and students have been in disagreement about the most meaningful content that should be taught in school. While some argue for the basic skills, others consider life skills, higher-order thinking skills, problem solving, vocation education, democracy, citizenship and/or socialization to be the most important. Even though some cannot agree on the most worthwhile subject to teach, all can agree that the primary mission and purpose of the school is to educate children. To achieve this mission, it takes the work of all members in the school including the principal, teacher, classified staff member, parent, and student. Yet, teachers directly impact the achievement of students on a daily basis by providing instruction. The core of teachers' work, instruction, takes place through the decision-making of teachers. Their decision-making revolves around what to teach (content decisions) and how to teach it (pedagogical decisions). Therefore, distributed leadership needs to be tested to see how it influences the core of teachers' work, which is providing instruction to students. This is the heart of the current study, which is to evaluate how distributed leadership at the building level relates to the instructional decision-making of teachers.

To fully analyze whether or not distributed leadership influences teachers' sense of autonomy when making decisions, it is critical to consider current research surrounding teachers' decisions. Current research on the educational decision-making of teachers delves into the debate of how much autonomy and control is necessary to result in the most efficient learning organization (Arrowhead, T., 2004; Harris, 2003; Ingersoll, 2003). Other research examines the types of educational decisions made by teachers including those at the district, school, and

classroom levels as well as what or who influences teachers' decisions (Archbald & Porter, 1994; Diamond, 2007; Ingersoll, 1996; Ingersoll, 2003;; Shavelson, R.J., Stern, P., 1981).

Autonomy and Control

Distributed leadership has been found to increase the empowerment of teachers (Harris, 2003). This is based on the argument that distributed leadership increases the autonomy of teachers because they are given more control in the decision-making process within the school setting. When more autonomy and control is given to teachers through distributed leadership, the school becomes more loosely coupled and more decentralized. Another side of the argument is that distributed leadership actually increases the control within the educational setting because the leader is forced to delegate responsibilities, hold the members accountable, and follow through on the progress of the responsibility (Arrowhead, T., 2004). Regardless of the debate, when considering teacher decisions and empowerment, the argument arises as to how much autonomy and control teachers should be given when making educational decisions. There are two sides to this debate: centralization and decentralization.

One side of the debate argues that schools are too loosely structured, which results in lax standards, poor student achievement, decreased workplace productivity and an inefficient organization (Ingersoll, 2003). Due to the loosely structured system of education, some argue for the need to develop a tighter educational system through increased centralization by guiding schools "back to the basics," promoting educational excellence, emphasizing a standardized core curriculum, and upgrading requirements for students, and raising the accountability of teachers (Ingersoll, 2003). Hence, proponents argue that teachers should not have autonomy or control in making educational decisions within the school.

The second side of the debate argues for the need to decentralize schools by giving teachers more autonomy and control when making educational decisions. This argument is based on the fact that teachers are the individuals who directly impact student achievement on a daily basis. Therefore, they should be given increased autonomy to make educational decisions at the district, school and classroom level, which will result in increased professionalism, motivation, collaboration, and efficacy of teachers (Ingersoll, 2003). In turn, student achievement will increase as well as the productivity of the organization (Ingersoll, 2003). Proponents of decentralization argue for the need to institute school-based management, site-based management, and shared decision-making (Ingersoll, 2003). All which are forms of distributed leadership. Furthermore, they argue that teachers should have more autonomy in making educational decisions within the school setting. Yet, research does not sufficiently address whether or not distributed leadership truly influences the teachers' instructional decision-making in the classroom.

School-wide Decisions of Teachers

Along with the debate over autonomy and control, research also focuses on the types of decisions that teachers make within the school setting (Ingersoll, 2003). In the school-wide setting, these decisions can be categorized into three different types of decisions including administrative, social and instructional. While the majority of control teachers have falls into instructional decisions, research supports that teachers have some control over social decisions and little to no control over administrative decisions (Ingersoll, 2003).

Administrative decisions include the managerial issues within the school setting. Some of these issues include allocating nonteaching duties, allocating school space, selecting employees, determining the school schedule and class size, assigning teachers, and budgetary

decisions (Ingersoll, 2003). Ingersoll found that teachers had little input regarding decisions about the schedule, class size, allocation of school space, and budgetary decisions. Therefore, teachers have little to no control over administrative decisions made within the school. This relates to the intended study because distributed leadership should provide an increased amount of teacher autonomy when making decisions within the school. The current study will delve further into this topic. Additionally, it raises the question of how much influence distributed leadership really has on teachers when making educational decisions.

Another type of educational decision in which teachers have some autonomy includes social decisions. This consists of evaluating, expelling, adding or dropping, tracking students, determining the focus for faculty inservice training, as well as setting discipline policies including classroom attendance, classroom discipline and rules for teacher behaviors (Ingersoll, 2003). While it has been found that teachers have little control over evaluation, inservice training, and school-wide behavioral rules for students, teachers did report to having more independence over the behavioral norms for themselves, and student discipline in their own classrooms (Ingersoll, 2003). Further, teachers tend to feel they have more control over social decisions than administrative decisions.

Along with administrative and social decisions, instructional decisions are another category of decisions in which teachers may have autonomy. In fact, teachers have the most autonomy when making instructional decisions when compared to administrative and social decisions within the school (Ingersoll, 2003; Archbald & Porter, 1994). Instructional decisions include developing the school curriculum, creating educational innovations, choosing course texts, establishing grading standards, establishing objectives for each course, assigning homework, selecting content, and selecting pedagogical strategies (Ingersoll, 2003). Teachers

reported having the most control over the selection of content and pedagogical strategies taught (Ingersoll, 2003). Under content teachers reported having a great deal of control over establishing grading standards, choosing objectives, assigning homework and selecting course texts (Ingersoll, 2003). In sum, teachers feel they have the most control over instructional decisions occurring in the classroom.

While teachers have the most influence over instructional decisions, other research examines the impact of teachers having power or control over different types of decisions in the school (Ingersoll, 1996). A study conducted by Ingersoll found that the amount of power teachers have does make a positive difference in how well the school functions, but this depends on the type of school activity that teachers have control or autonomy over (1996). In fact, when teachers have the most control over instructional and social decisions, then the conflict in the school will improve. In turn, the school climate and culture will also improve. At times though, teachers are given control over less important activities, issues or decisions. When this occurs, they do not actually have real power within the school. Consequently, this actually creates more centralization within the school. As a result, teachers are simply led to believe that they have control over school related issues and decisions when in reality they do not really have control over anything of substance.

This brings up the question of whether or not individuals in the school setting truly have influence over decisions in the school. Even though they may be involved in leadership, it does not necessarily mean they have influence over the decisions that are made within the school. Further, just because teachers have a chance to get involved does not necessarily mean they will due to the costs (increased time demands, loss of autonomy, risk of collegial disfavor and subversion of the collective bargaining process) outweighing the benefits (feelings of self-

efficacy, shared ownership, advancement of workplace democracy) (Duke, Showers, Imber, 1980). It has been stated by Duke, Showers, and Imber, "shared decision making does not mean shared influence (1980). Thus, not only should teachers be provided with opportunities to become involved in the decision making process, but their involvement should carry influence. In other words, they should not just have opportunities to get involved to create the illusion of having influence. This would be a waste of everyone's time. Instead, they should be involved in the decision making process while having influence. The current study analyzes if the level of involvement within the school measured through building level distributed leadership will relate to the sense of autonomy teachers have at the classroom level.

The most important decisions in the school involve what happens in the classroom because this is the heart of the educational mission. When teachers have more control over instructional decisions within the school, student conflict or misbehavior decreases (Ingersoll, 1996). This relationship is strengthened when teachers' control over instructional decisions is coupled with their control over social decisions, which includes setting disciplinary policies affecting the school and classroom practices as well as tracking and sorting students (Ingersoll, 1996). It is critical for teachers to have control over instructional issues within the school. Teachers who have little control in the school are less able to get things done and they have less credibility (Ingersoll, 1996). In sum, the school benefits when teachers have more control over social and instructional decisions. The present study has a similar focus which is to analyze if distributed leadership is related to teachers' classroom decisions.

Classroom Decisions of Teachers

In addition to research focusing on the types of decisions teachers make in the school setting (Ingersoll, 1996; Archbald & Porter, 1994), research also emphasizes the decision-

making of teachers in the classroom setting, which is where they have the majority of power and control (Shavelson, R.J., Stern, P., 1981; Diamond, 2007). When analyzing classroom decision-making of teachers, researchers have delved into the amount of control teachers have over content and pedagogical decisions and factors influencing teachers' instructional decisions (Diamond, 2007). Not only are there a multitude of decisions that teachers make on a daily basis, but there are also a number of factors that influence teachers' decisions. However, when looking at the core of teachers' work, their primary decision-making revolves around what to teach (content) and how to teach it (pedagogy).

Historically, research looks at factors influencing teachers' instructional decisions in the classroom (Shavelson, R.J., Stern, P., 1981; Diamond, 2007). The overriding principle is that teachers' decision-making is influenced by multiple players including personal influences, collegial influences, and administrative (Diamond, 2007). Personal influences involve teachers' own characteristics, their cognitive processes; consequences for instructional decisions and personal reflection and or evaluation. Collegial influences include teachers' colleagues, coworkers, grade level team collaboration, and vertical collaboration (teachers consulting with colleagues in grades above and/or below their own). Finally, administrative influences stem from school or district policies, administration, curriculum materials, grade level standards, textbooks and more. Therefore, teachers traditionally do not make instructional decisions in isolation. Instead, their decisions are influenced by themselves, their colleagues and administrative influences.

One primary factor that influences teachers' instructional decisions evolves from their personal influences: characteristics, cognitive processes, consequences for making a certain decision, and self-reflection or evaluation (Shavelson, R.J., Stern, P., 1981). Teachers' personal

characteristics involve their own beliefs about teaching and the subject matter stemming from their past experiences, schema, environment and more. Further, their personal beliefs and values about instruction relating to content and pedagogy influence what and how they teach. For example, if teachers' believe guided reading to be the best way to teach reading, then their pedagogical decisions will more than likely involve grouping students by ability level to focus on a common skill. Additionally, when making content decisions, teachers will spend the most time on subject matter they deem to be the most valuable. If a teacher thinks reading is the most worthwhile subject, then she will spend more time building students' reading skills than on other subjects. This also refers to what teachers do not think are important subjects. If a teacher does not think a certain subject or topic is important, then she will not focus a lot of her instructional time on it. Therefore, teachers' content (subjects, topics or objectives) and pedagogical strategies (activities, grouping techniques, methods, etc) reflect their personal beliefs and values.

Teachers' cognitive process is another factor that influences instructional decisions, which is the manner of selecting information and making inferences (Shavelson, R.J., Stern, P., 1981). When teachers make instructional decisions, they have to select information, and then infer how well students will master the concept. To select information, they use their view of student attributions and heuristics. Student attributions refer to teachers' judgments on students' ability, motivation, participation and behavior. Heuristics are implicit rules that the individual is unaware of having (Shavelson, R.J., Stern, P., 1981). These processes play a role in how teachers select information to be taught and the sequence of introducing it during instruction.

Consequences for teachers' decisions and personal reflections are two other factors categorized as teachers' personal characteristics that influence instructional decisions. Teachers' consequences involve what could happen from making a specific decision. For example, as

teachers begin placing students by ability, they may judge a student's behavior and/or ability. Placing the student in the wrong group could cause them to not succeed fully. It could also pull away from the learning of others. Therefore, teachers' decisions have consequences and the possibility of what could occur influences teachers' decisions. Additionally, as teachers make and carry out instructional decisions, they reflect and evaluate what occurred, which influences future decisions. When making instructional decisions, teachers are influenced by possible consequences and self-reflection.

In addition to a teacher's personal characteristics, collegial relationships also play a critical role in teachers' instructional decision-making. When considering what will be taught, when and how, teachers do not generally make this decision in isolation. Instead, they utilize support from their grade level teams, expectations, and vertical teaming. The decisions of teachers are often influenced by the actions of other individuals in the educational system (Shavelson, R.J., Stern, P., 1981). Hence, their colleagues influence their decisions. Teachers are encouraged to work closely with their grade level teams so that a sense of consistency and cohesiveness exists. This partially stems from the influence and expectations of parents who want to ensure that their child has the same type of education as their neighbors' children. Therefore, teachers are encouraged to make decisions regarding what and when content is taught as a team. However, teachers tend to have more autonomy in deciding how the content will be taught because this typically depends on the ability levels of students in each class. Teachers are also encouraged to seek assistance from the grade level team above and below their respective grade, referred to as vertical teaming. The purpose of this is to gain knowledge and direction in what their students learned in the previous year and what their students need to master for the upcoming year. In sum, teachers' instructional decisions are influenced by their colleagues.

Not only are teachers' instructional decisions influenced by personal characteristics and collegial relationships, but administrative influences also play a major role. Administrative influences incorporate board, district or school policies, administration, and curriculum materials (grade level standards, guides, textbooks, scope and sequences). As a teacher makes instructional decisions, she needs to consider all of these administrative influences because the district and/or school environment sets boundaries on content and pedagogical decisions (Shavelson, R.J., Stern, P., 1981). "The most critical decisions affecting what students learn is the choice of content for instruction" (Shavelson, R.J., Stern, P., 1981). Yet, the content to be taught is often predetermined by curriculum guides, materials, and scopes and sequences, which are written at the district level. Therefore, one of the most important aspects of the core of what teachers do is generally controlled completely by administrative influences.

Considering the vast amount of influences and decisions that teachers make on a daily basis is a daunting task. However, when focusing strictly on instructional decisions, there are two primary decisions that teachers make daily including the 'what' and 'how' of teaching. In other words, teachers make content and pedagogical decisions. Content decisions refer to the topic areas, specific objectives and broad subject matter. Pedagogical decisions involve the teaching methods, strategies, and assignments to teach the content. The teacher is not the sole individual that influences content and pedagogical decisions. These decisions are influenced by the teacher, colleagues, supervisors, as well as student ability levels. Research has been conducted on what influences teachers' decisions (Shavelson, R.J., Stern, P., 1981; Diamond, 2007), but it has not delved into the influence of distributed leadership on the decisions of teachers. This is a must because the most important instructional decisions that teachers make involve content and pedagogical decisions, which directly impact student learning.

Some research examines the influence of various factors on teachers' instructional decisions relating to content and pedagogy (Diamond, 2007). Teachers utilize a number of factors when making both instructional decisions. Yet, researchers have found that content related decisions are mostly influenced by other teachers, textbooks, their own past experiences and standards (Diamond, 2007). Additionally, when making pedagogical decisions, teachers utilize other teachers, their own past experiences, textbooks for ideas, or reflect on students' learning styles and ability levels. Studies specifically looking at the influence of high stakes testing on content and pedagogical decisions have found content to be influenced more so than pedagogy (Diamond, 2007). A primary factor influencing teachers decisions relating to both content and pedagogical decisions are their colleagues, which can be initiated through distributed leadership of informal roles. This occurs because teachers will turn to their colleagues for advice and consultation and these interactions tend to influence educational decisions. Yet, the influence of distributed leadership has not been studied. However, this is the heart of the study at hand.

Researchers have also examined the amount of control teachers have regarding content and pedagogical decisions (Archbold & Porter, 1994). Some researchers have found that the amount of control teachers have over decisions regarding content varies by the degree of centralization within the school (Archbold & Porter, 1994). As the control becomes increasingly centralized within the school organization, then the control teachers have regarding content decisions tends to decrease. Additionally, when looking at pedagogical decisions, teachers tend to feel that they have a great deal of control regardless of the amount of centralization or even control within the school organization. Some research shows that teachers tend to feel they have more control over pedagogical decisions than content related decisions (Archbold & Porter,

1994). Yet, the examination of building level distributed leadership in relation to the instructional decisions of teachers is an area needing further evaluation.

Current research surrounding teacher decisions focuses on the debate of how much autonomy and control teachers should have over decisions (Arrowhead, T., 2004; Harris, 2003; Ingersoll, 2003), the control teachers have over school and classroom decisions (Ingersoll, 2003), the various factors influencing teachers' decisions (Archbald & Porter, 1994; Diamond, 2007; Shavelson, R.J., Stern, P., 1981) and specific information regarding content and pedagogical decisions (Diamond, 2007). While research shows that teachers have a varied amount of autonomy and control when making educational decisions, the majority of decisions teachers have control over are instructional decisions relating to the content in which they teach and pedagogical strategies they choose to implement (Ingersoll, 2003). Even though studies show that teachers have a great deal of control over content and pedagogically related decisions, they are still influenced by a number of factors with their colleagues being the primary influence (Diamond, 2007). There has been a long lasting debate on the amount of control teachers should have over educational decisions. Some argue the need to centralize the community by tightening the structure of education. On the other hand, others argue that schools should be decentralized by giving more autonomy and control to teachers since they are at the heart of the educational mission, which is to educate children. The concept of distributed leadership is supported by the latter argument. The research on the need to give autonomy and control to teachers, the various decisions teachers have control over and the various factors influencing teachers' decisions is extensive, but does not specifically look at the decision-making of teaches resulting from distributed leadership.

The purpose of the present study is to analyze teachers' sense of autonomy in classroom level decision-making resulting from building level distributed leadership. Research surrounding distributed leadership primarily focuses on what it is, why it is practiced, how to distribute leadership functions and how it impacts the school, but this research is mostly based on anecdotal accounts and basically assumes that it has a positive effect on the school. The true essence of distributed leadership is to empower teachers to make decisions. Further, for distributed leadership to be an effective practice, it should influence the core of what teachers' do daily, which is make content and pedagogical decisions. This is the heart of the current study, which asks "Does distributed leadership influence the decision-making of teachers in the classroom?" In other words, building level distributed leadership will be examined to determine if it is related to teachers' sense of autonomy at the classroom level.

Chapter 3

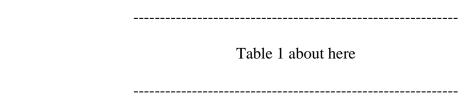
Data and Methodology

3.1 Research Questions

The focus of this study is to analyze the relationship of building level distributed leadership to teachers' sense of autonomy at the classroom level. The main research question is, "Does distributed leadership influence the decision-making of teachers in the classroom specifically relating to content and pedagogy?" In other words, this study examines distributed leadership at the building level to examine possible relationships to teachers' perceptions of their autonomy at the classroom level. A supporting question within the study is, "Does distributed leadership influence content or pedagogical decisions differently?" To put it differently, if there is a relationship between building level distributed leadership and teachers' sense of autonomy in classroom decisions, will this relationship be stronger with content or pedagogical decisions?

3.2 Empirical Context

Data for the study will come from certified staff members among two suburban school districts in Missouri. Certified staff members include individuals who hold a four year degree in education, have a current Missouri teaching certificate and are employed in the school district. Table 1 displays the schools represented in the study from each district. This includes participating elementary, middle and high schools from districts 1 and 2.



School district 1 involves certified staff members from six elementary schools, two middles schools, and two high schools. The elementary schools consist of kindergarten through sixth

grade. The middle schools instruct students in seventh and eighth grade; while, the high schools hold ninth through twelfth grades. School district 2 will include six elementary schools, one middle school, and two high schools. The elementary schools involve five that are kindergarten through fourth grade as well as another school that is fifth and sixth grades. The middle school instructs seventh and eighth grades. There are two high schools in this district, one that is a ninth grade center and another that holds tenth through twelfth grades. This includes a total of twelve elementary schools, three middles schools and four high schools.

Table 2 displays the basic descriptive statistics for the sample and demographics within the study. This table helps show the composition of respondents within the study.

Table 2 about here

As displayed in Table 2, most of the sample is made up of white female respondents working in an elementary school setting. The teaching experience appears to be evenly distributed. The majority have been at their current school and in their current position for five or more years. The respondents teach a variety of topics including Language Arts, Math, Social Studies, etc. The majority has a Bachelor's degree or a Master's degree as their highest degree acquired.

3.3 Data Collection Process

The data collection process involved multiple steps. First, the questionnaire was developed with the collaboration of Dr. Argun Saatcioglu and Jaimi Clutter-Shields. Secondly, the study was formally approved by participating districts. Thirdly, the questionnaire was electronically distributed to certified staff members from the participating districts and reminder emails were sent regarding the end date for the completion of the questionnaire.

The questionnaire incorporates four sections described in detail in the following section. The measure for distributed leadership was adapted from the work of Heck and Hallinger's recent article, *Assessing the contribution of distributed leadership to school improvement growth in math achievement*, which was published in 2009 by the AERA. In the developmental stages of the questionnaire, the quantitative study by Heck and Hallinger were analyzed, paying close attention to the measure of distributed leadership. Professor Heck was contacted to gain more information. Using this correspondence and the collaboration of Dr. Saatcioglu, the measure of distributed leadership from Heck and Hallinger's study was used to measure the amount of distributed leadership within the study. The remaining sections of the questionnaire were derived from the work of Spillane, Diamond, and Ingersoll, but the remaining questions were written independently from their work. The measure for this study will be described in detail in section 3.4.

Once the questionnaire was developed, the next step involved gaining approval from the participating districts. This involved a formal meeting with members of the administrative staff including the superintendent and assistant superintendent. Once the study was proposed, it was presented to the administrative team at both districts by the superintendent and assistant superintendent. The study was then endorsed by both participating districts.

The final steps involved distributing the electronic questionnaire using Survey Monkey.

The questionnaire was distributed to certified staff members at the participating schools and districts. Certified staff members are defined as individuals who hold a four year degree in education, have a current Missouri teaching certificate and are employed in the school district.

This includes teachers, counselors, librarians, coordinators, and administrators. The total number of certified staff members participating in the survey includes 438 from the elementary schools,

224 from the middle schools, and 372 from the high schools. The total certified staff members are 1034. The questionnaire was open from April 1, 2010 through May 28, 2010. A reminder email was sent to participants in May.

The overall response rates incorporate those from both districts as well as disaggregated rates by district. Table 3 displays the response rates from district 1 and district 2. This includes response rates from elementary, middle and high schools as well as combined response rates.

Table 3 about here

The total response rate for the study is 25%. District 1's rate is 17% and district 2's is 38%. The total response rate for elementary is 42%, 28% for District 1 and 57% for District 2. A total of 10% were received for all middle schools with 9% from District 1 and 13% from District 2. Finally, the total high school rate was 13% including 11% from District 1 and 17% from District 2.

Speculations can be made regarding the response rates. Generally, individuals who respond to surveys may tend to have certain biases such as high frustration levels, negative feelings toward the school community, poor relationships with colleagues, administration and more. The response rates from this study show that a great deal more elementary teachers participated in the survey when compared to middle and high school staff members. This could be due to the nature of elementary teachers. For example, research describes elementary teachers as being more nurturers than individuals in the middle or high school setting (Louis, Marks, Kruse, 1996; Wilson, Herriot, Firestone, 1991). The speculation can also be made that elementary teachers are more tuned into their environment and more likely to follow through

with requests. Therefore, elementary teachers may be more prone to participate in surveys. District 2 had higher response rates in all levels than district 1. This could be attributed to the amount of active participation from the administration. In other words, the building and administrators in district 2 took an active role in promoting the study to their staff. In turn, they encouraged their staff members to participate. While some administrators in district 1 encouraged their staff to participate, some did not follow-up with their staff regarding the completion of the survey.

3.4 Measures

The data collection measure involves a survey distributed through an electronic format (Appendix A). The survey is comprised of four main categories including: demographics, measure of distributed leadership, influence of distributed leadership on content decisions, and influence of distributed leadership on pedagogical decisions. The survey focuses on perceptual data. It does not verify or explore the actual amount of distributed leadership at the building level. Instead, the survey asks questions relating to teachers' perception regarding the amount of distributed leadership at the specific school in which they are employed. Therefore, the data derived from this survey includes perceptual data regarding the amount of distributed leadership at the respondents' building level.

Demographics

In the first section focusing on demographics, respondents were asked to answer multiple choice and open-ended questions that focus on gender, ethnicity, grade level, subjects taught, duties, experience, professionalism, and certification (adapted from James Spillane).

Distributed Leadership

To determine if building level distributed leadership is associated with educational decisions, there has to be a method of determining the amount of distributed leadership perceived to be at each school. The survey does this by asking questions relating to three aspects of distributed leadership that respondents perceive take place at their specific school including: collaborative decisions (focusing on educational improvement); school governance (empowers staff and students, encourages commitment, participation and shared accountability); and academic development (participation in efforts that evaluate the school). The distributed leadership scale inquires about the amount of building level distributed leadership that respondents perceive take place. It does not inquire about whether or not specific individuals participate in more distributed leadership. This measure of distributed leadership was adapted from the works of Heck and Hallinger (2009) as well as Ingersoll (2003). The EFA results suggest a high level of both discriminant and convergent validity for the scale items. The loading ranged from 0.576 to 0.885, with no cross-loadings on other latent measures in the study. Cronbach's Alpha was 0.891.

Content and Pedagogical Decisions

Both the content and pedagogical sections focus on the following: the influence teachers feel they personally have on classroom decisions, how much teachers' decisions are effected by their colleagues, and how much teachers' decisions are effected by their superiors. Respondents were asked to answer the questions using a five point Likert scale ranging from "not at all," "some," to "quite a lot." The survey was adapted from the work of Heck, Hallinger, and Ingersoll through the collaborative efforts of Dr. Argun Saatcioglu and Jaimi Clutter-Shields. The EFA results for the content and pedagogy scales suggest a high level of both discriminant

and convergent validity. The loading ranged from 0.493 to 0.766, with no cross-loadings on other latent measures in the study. Cronbach's Alphas for content and pedagogy measures were 0.887 and 0.825 respectively.

It is critical to get an understanding of how educational decisions are made and what influences these decisions. Since distributed leadership is gaining popularity in the educational and research setting, it is essential to determine whether or not it is related to educational decisions. This directly impacts classroom practice and student learning on a daily basis.

Therefore, respondents supplied perceptual data regarding the amount of distributed leadership in each school as well as the influences of instructional decisions relating to content and pedagogy. The data for the current study was derived from an electronic survey and includes four sections: demographics, measure of distributed leadership, influence of distributed leadership on content decisions, and influence of distributed leadership is truly associated with educational decisions relating to content and pedagogy.

3.5 Analysis Strategies

Multiple steps were used to analyze the data for this study. The first step was factor analyzing the items within the questionnaire. The second step involved running basic descriptive statistics for key demographics within the study as well as the key measures within the study (distributed leadership, content decisions and pedagogical decisions). Next, bivariate correlations were conducted to determine if any associations existed between distributed leadership and content decisions and distributed leadership and pedagogical decisions. Finally, multivariate regression analysis was conducted to test the central questions of the study: "Does distributed leadership influence the decision-making of teachers specifically relating to content

and pedagogy" and "Does distributed leadership influence content and pedagogical decisions differently?"

Chapter 4

Data Analysis

4.1 Measurement Characteristics

The initial step in analyzing the influence of distributed leadership on classroom decisions was to conduct a factor analysis on the items within the questionnaire. This provided a more limited number of essential factors rather than focusing on each questionnaire item individually. The results of the factor analysis showed that there were three main factors including distributed leadership, content decisions, and pedagogical decisions.

Mean and standard deviations for the key measurements within the study are displayed in Table 4. Table 4 is divided into three sections: distributed leadership, content decisions, and pedagogical decisions. All incorporate the mean scores and standard deviations. Respondents rated their answers on a five point scale where the score of 1 equaled "not at all" and the score of 5 equaled "a lot."

Table 4 about here

The overall mean score of distributed leadership is 3.86, which means respondents felt that their school moderately applies distributed leadership. Further, this score is in the middle of the five point scale. The overall mean score of content decisions in teaching is 3.43; whereas, the overall mean score of pedagogical decisions in teaching is 3.59. While the mean score of pedagogical decisions is slightly greater than the mean score of content decisions, both scores are basically the same. Based on the mean score, it appears that respondents feel similarly regarding the direction of control in both content and pedagogical decisions.

It is important to note that this is simply a combined mean score; thus, providing an average of responses from participants. Yet, it does not explain why. The mean scores cannot depict possible relationships or predict how the results will change if there is more or less distributed leadership within the school setting. Therefore, additional statistical analysis needed to be conducted such as correlations and regressions. Therefore, bivariate correlations are provided in Table 5 and multivariate correlations are shown in Table 6.

4.2 Bivariate Test of Key Measures

Construct correlations were conducted on the key measures of the study including distributed leadership, content related classroom decisions and pedagogically related classroom decisions. Table 5 displays the construct correlations. Construct correlations were conducted to determine whether correlations existed between the different items.

Table 5 about here

At a bivariate level, distributed leadership has a positive association with content (.330) and pedagogy (.418). Pedagogical decisions have a slightly higher association than content decisions. This may be due to content decisions being externally driven by state standards and district curriculum; whereas, pedagogical decisions tend to be determined on the local level. Furthermore, teachers are often told what to teach (content); not how to teach (pedagogy).

These correlations show a preliminary examination on the size and strength of the relationship between distributed leadership and classroom decisions: content and pedagogy. However, they are bivariate estimates. To obtain a more predictable relationship, it is necessary to conduct a multivariate analysis.

4.3 Multivariate Test of the Central Hypothesis

Table 6 shows the results of multivariate regression models that test the relationship between distributed leadership and content classroom decisions as well as pedagogical classroom decisions. The first panel displays the predictable relationship between distributed leadership and content decisions. The second panel displays the predictable relationship between distributed leadership and pedagogical decisions. Table 6 displays these relationships with and without controls. The controls include gender, race, school level, language arts teacher, science teacher, special education teacher, other subject teacher, total years of experience, years of experience in the current school and years of experience in the current position and highest degree attained. Through the examination of this table, three findings will become apparent. First, distributed leadership is associated with both content and pedagogical decisions. Second, the association remains robust when controls are added in for both content and pedagogical decisions than content decisions. Third, the relationship is slightly stronger with pedagogical decisions than content decisions.

Table 6 about here

In the first panel, model 1 demonstrates the relationship of distributed leadership and content decisions without the use of controls. The table shows a coefficient of .300, which is a significant relationship (.300, p<.010). Additionally, ten percent of the variation can be explained (R²=.105).

The data remains robust as the controls are incorporated into the analysis, which is displayed in model 2 of panel 1. The coefficient with the controls added in was found to show a

significant relationship (.273, p<.010). Further, the controls in model 2 account for fifteen percent of the variation, even though special education teacher has a positive significant effect. Therefore, with the controls incorporated into the equation, the R-squared improves by five percent.

The first panel of Table 6 shows that there is a positive relationship between distributed leadership and content decisions. This relationship remains positive when controls are added into the analysis. The interpretation could be made that as building level distributed leadership increases, respondents perceive that their control over content decisions also increases. In other words, teachers' sense of autonomy over content related decisions might increase as the level of building level distributed leadership increases.

The second panel of Table 6 depicts the relationship between distributed leadership and pedagogical decisions. Model 1 in panel 2 shows the relationship without adding in controls, which is a significant association (.328, p<.010). This accounts for seventeen percent of the variation. The variation increases to twenty percent with the incorporation of controls. This time, special education teacher does not have a significant effect, instead years of experience in the current position has a highly significant effect (.204, p<.010) and years of experience in the current position has a medium significant effect (-.162, p<.050), which is negative. Therefore, with the controls added in to the analysis, there is a three percent increase to the R-Squared.

The second panel of Table 6 shows that there is a positive association between distributed leadership and pedagogical decisions. When controls are added in, this relationship remains strong. Therefore, distributed leadership is positively associated with pedagogical decisions. This relationship actually slightly increases when controls are added in. Instead of pedagogical

decision only increasing by thirty-two percent, it can be predicted that pedagogical decisions increase by thirty-three percent.

Table 6 demonstrates three findings. The first is that distributed leadership is positively associated with both content and pedagogical decisions. This means that respondents perceive a greater sense of control over both content and pedagogical decisions as their perceived level of distributed leadership at the building level increases. A second finding is that there is a stronger correlation between distributed leadership and pedagogical decisions than distributed leadership and content decisions. This can be explained in several ways. First, respondents feel that they have more autonomy when it comes to pedagogical decisions than content decisions as their perception of building level distributed leadership increases. This may be due to content decisions generally being predetermined externally at the state level. In Missouri, there is a statewide curriculum for elementary and secondary teachers. Elementary curriculum is categorized by grade level. This curriculum is referred to as grade level expectations (GLE). For secondary schools, the curriculum is referred to as course level expectations or (CLE). While CLE's are not developed for specific grade levels, they are created for individual courses. A great deal of districts will then use the state curriculum to develop district-wide curriculum specific to them. While a few teachers will have this task distributed to them, the majority will be given the curriculum without having the autonomy to alter what is taught. Another explanation for content decisions having a lower association than pedagogical decisions is that the majority of respondents are teachers. Therefore, they may feel that they do not have control over content decisions regardless of the fact that several teachers may have participated in this distributed leadership task. On the other hand, teachers are usually not told specific pedagogical strategies to implement in class (how to teach the content). Instead, they are given the autonomy to make this decision based on the needs within their own classes including the ability of the students, interests of the students, collaboration between fellow teaching colleagues, and personal preference. While they may be given curriculum materials and resources (math series, reading programs, district curriculum initiatives, professional development on pedagogical strategies, etc.), teachers are allowed to use these as supplements to their own resources. Thus, they are given the autonomy to implement pedagogical strategies that will best ensure student learning in their specific classrooms. A third finding in Table 6 is that the relationship between distributed leadership at the building level and teachers' perceptions of classroom autonomy remains positive with controls added into the analysis. Therefore, distributed leadership is positively associated with both content and pedagogical decisions.

4.4 Summary

The research design and methodology within this chapter were implemented to determine if there is a relationship between distributed leadership and classroom decisions relating to content and pedagogy. A further query was to evaluate if content or pedagogy would have a stronger relationship with distributed leadership. Multivariate regression analysis was conducted to determine this relationship. It was found that there is in fact a positive association between distributed leadership and both content and pedagogically related classroom decisions. Further, pedagogical decisions have a stronger correlation with distributed leadership than content decisions.

Chapter 5

Discussion

The intent of this study is to examine if building level distributed leadership is related to teachers' sense of autonomy at the classroom level. Distributed leadership is critical to the success of an educational organization due to the vast number of responsibilities and required expertise of the leader. The response to this is for administration to spread leadership functions across the school community to pool the expertise of the staff. Further, the essence of distributed leadership is to empower teachers to participate in the decision-making process within the school. This means that distributed leadership should influence teachers' decisions more so than any other outcome. More specifically, it should influence the instructional decisions that teachers make daily. While a number of studies have been conducted on distributed leadership, few examine whether distributed leadership influences the educational decisions of teachers. This problem presents a gap in the research, which the current study begins to close by asking the following question: Does distributed leadership influence the decision-making of teachers in the classroom?

The data for the study was derived from two school districts in Missouri. Certified staff members employed at elementary, middle and high schools were surveyed. The questionnaire involved a demographics section, measure of distributed leadership, and a measure to determine the control of decision-making in the classroom focusing on content and pedagogy. Findings suggest that building level distributed leadership is positively related to teachers' sense of classroom decisions concerning content and pedagogy. A second finding is that pedagogical decisions have a stronger association with distributed leadership than content decisions.

It is important to note that findings from this study are based on correlated relationships. Cause and effect relationships cannot be determined. However, the main conclusions from this study are based on the correlated relationships between building level distributed leadership and teachers' sense of autonomy at the classroom level concerning content and pedagogy.

5.1 General Discussion

The essence of this study was to determine if building level distributed leadership related to teachers' sense of autonomy at the classroom level concerning content and pedagogy. Numerous research focuses on the need to implement distributed leadership because of its positive effects on the school as a whole, such as improving the school community (climate, culture, communication, shared decision-making, etc), the job of the principal, the work of teachers and most importantly student achievement (Camburn, 2003; Goldstein, 2003; Haris, 2003; Hobby, Arrowsmith, 2004; Mayrowetz, 2008). While this research states explicitly that distributed leadership is a must in the educational setting, it fails to examine its impact on the heart of the educational mission. In other words, it does not examine whether or not it truly impacts the decisions teachers make in the classroom setting, which directly influences student learning. There is even research arguing that distributed leadership has a negative effect on the school community due to ineffective teacher leaders, increasing the workload of the principal, taking away from the work of teachers and negatively impacting student achievement (Mayrowetz, 2008; Marks & Louis, 1997). However, current research fails to ask an essential question within the literature of distributed leadership and teachers' decision-making, "Does it really matter?"

The current study asks if distributed leadership truly matters by examining the question, "Does distributed leadership influence the decision-making of teachers in the classroom?" The

findings show that distributed leadership does have a positive association with both content and pedagogically related decisions. This suggests that yes indeed distributed leadership does matter. In other words, teachers' perceptions of the amount of building level distributed leadership gives teachers more of a perceived sense of control when making decisions. This includes both content and pedagogical decisions. As the amount of distributed leadership teachers perceive to take place at the building level increases, then the amount of control teachers perceive to have over their own classroom decisions also increases. This means that teachers perceive to have more autonomy to decide not only what they teach (content), but also how they will teach it (pedagogy).

It is important to note that this conclusion is based on a positive correlation between building level distributed leadership and teachers' sense of classroom decisions. Causation cannot be determined, instead only a correlated relationship can be found. Yet, possible inferences can be made to explain the positive correlation between distributed leadership and teachers' decisions at the classroom level relating to content and pedagogy.

The autonomy teachers have over content related decisions may come in the form of assisting with curriculum documents for the district and/or school. Teachers are often involved in this process where they are able to give input regarding the topic areas, specific objectives and broad subject matter presented in the classroom. Further, they may also be involved in the process of determining the essential skills (the most important objectives and/or skills to be taught in each grade level), specific grade level expectations and even the sequence of topics. Having this input through distributed leadership gives teachers more decision-making power.

Similar to content decisions, the autonomy teachers perceive to have over pedagogical decisions as distributed leadership increases at the building level may come from multiple

avenues. One possible explanation is that the autonomy over pedagogy may come from simply having the freedom to use their professional judgment to decide the specific teaching methods, strategies and assignments employed in their own classroom. Teachers also may have more of a role in determining the newest initiatives and/or teaching models that will be implemented in classrooms throughout the district. They may also have an increased role in providing the professional development for those specific initiatives and teaching models. As teachers participate in these distributed leadership activities, they are also being given more control over their pedagogical decisions.

Findings from this study show that there is a stronger relationship between distributed leadership and pedagogical decisions than distributed leadership and content decisions. This means that as teachers' believe the level of distributed leadership increases, they perceive to have more control when making pedagogical decisions than content decisions. If this is truly the case, then as teachers are given more autonomy within the school setting through distributed leadership, they are also given the freedom to decide the pedagogy that will be employed in their own classroom.

While the results of this study are based on positive correlations, inferences can be made to explain possible reasons why distributed leadership has a stronger correlation with pedagogy than content. The first is that research shows that teachers feel they have more control over pedagogical decisions than content decisions (Archbold & Porter, 1994). Therefore, as distributed leadership increases, it is natural that teachers feel that they have more control over pedagogical decisions than content decisions. Another explanation is that teachers do in fact have more control over pedagogical decisions because these decisions tend to be decided internally, rather than content decisions, which are usually driven by external forces. District-

wide content involves curriculum materials such as curriculum guides, grade level expectations, curriculum textbooks, etc. These materials are developed from the state curriculum guide, which informs districts and teachers of the content they must teach. Thus, content decisions are predetermined before the district and teachers even see it. Yet, teachers are able to decide how they teach that content based on their personal preferences, input of colleagues and needs of their students. This means teachers are usually told what to teach, but not how to teach it.

5.2 Implications for Practice

This study found that distributed leadership does in fact matter. In other words, distributed leadership has a positive association with both content and pedagogical decisions. This relationship is stronger with pedagogical decisions than content decision. When considering how this information fits into the educational setting, it is simple. In schools where there is a greater sense of distributed leadership perceived by teachers, then teachers tend to enjoy more control in the classroom relating to content and pedagogical decisions. Therefore, if the teaching staff feels that there is greater distributed leadership, then they may also feel that they have more autonomy in the classroom especially with pedagogical decisions. An additional implication concerns the best school placement for teachers. If teachers want more distributed leadership, then it would be worthwhile for them to attempt to work at a school where there is greater distributed leadership. This also applies with the opposite scenario. For instance, if teachers would prefer to have fewer opportunities to provide input and share leadership responsibilities, then they may want to seek employment at a school where there is less distributed leadership.

At this point, it should be noted that this study does not determine cause and effect relationships because it demonstrates correlations between distributed leadership and teachers'

sense of autonomy at the classroom level. Therefore, associational relationships can only be used when making implications for practice. However, if future research shows that distributed leadership does in fact influence teachers' instructional decisions concerning content and pedagogy, then possible implications can be made that carry more of a causal tone. Some of those inferred implications could provide suggestions to district and building leaders regarding the effect of building level distributed leadership on classroom decisions as well as possible conclusions for increasing or decreasing the level of distributed leadership within the school setting.

For example, if districts want to provide more opportunities for teachers to have autonomy over their own classroom decisions relating to content and pedagogy, then they should increase the level of distributed leadership within the school setting. This would make it possible for teacher to take an active role in the decision-making process within their own school and classroom setting. However, it is essential to note that this involvement should not occur without true influence. In other words, districts should not just give tasks to teachers to say that they are distributing leadership. Instead, they should provide involvement in conjunction with influence. This means teachers should have responsibilities distributed to them that truly matters and where they have true input.

There is another side to this implication. If districts do not want teachers to have input over their classroom decisions, then they should decrease the amount of distributed leadership within the school level. Since a key finding of this study found that distributed leadership is positively associated with teachers' decision-making in the classroom, then the opposite can be inferred. As distributed leadership decreases, then teachers have less control over decisions in their classroom.

An example of this implication for practice is with districts who are attempting to implement a new pedagogical initiative into classrooms. They may want to implement this pedagogical change from the top-down meaning the administrative staff introduces the idea to staff members, provide professional development opportunities and ensure the change is occurring in the classroom setting. If districts are attempting to incorporate this type of pedagogical change, then providing increased distributed leadership may not be the best option. This is because as teachers have more distributed leadership, they have more control over content and pedagogical decisions. Therefore, if a new initiative is being implemented from a top-down method, then teachers may have more autonomy to actually choose to or choose not to employ those changes in their own classrooms. In fact, providing more distributed leadership may inhibit content and pedagogical change within the district. Districts wishing to incorporate a new content or pedagogical initiative may want to develop a more centralized environment.

5.3 Future Research

One topic for future research is derived from the implications for practice and asks, "Does providing more decision-making in the classroom from distributed leadership assist or inhibit content or pedagogical change?" It was found that building level distributed leadership is in fact positively correlated with teachers' sense of autonomy when making decisions.

Therefore, the next plausible question is how will this influence change? Will giving more autonomy to teachers make it more difficult for them to implement new initiatives from the district?

The findings from this study are associational in nature. The results cannot determine if distributed leadership truly causes teachers to have more control over classroom decisions or if individuals who enjoy distributed leadership respond more favorably to questions focusing on

classroom decision-making. A topic for future research would be to examine if the increase of distribute leadership truly increases decision-making or will individuals responding positively because they enjoy distributed leadership.

An additional future research question is "Does the increase of teachers' decision-making from distributed leadership influence student achievement?" It cannot be argued that the heart of the educational mission is to educate children. This is the most important purpose of schools. Therefore, it is critical to investigate how increased decision-making of teachers in their classroom influences student achievement.

5.4 Limitations

A limitation with this study is that there are low response rates. The total response rate for the study is twenty-five percent where the majority of respondents are white, females, working at the elementary level and specifically teaching kindergarten through second grades. This low response rate makes it difficult to generalize the results to the overall population. Instead, the results must be focused on the population who responded to the study.

An additional limitation is the nature of the survey. It was set up to gather data regarding the independent and dependent variables. When this happens, a bias may occur. For example, respondents who felt positively regarding the amount of distributed leadership within their specific buildings may have responded positively to the sections focusing on content decisions and pedagogical decisions. The study may have been stronger if the level of distributed leadership was determined through an alternative route such as determining the amount of distributed leadership without asking the respondents. This possibly could have been determined by researching a school prior to the incorporation of distributed leadership and then viewing the changes after implementation.

5.6 Summary

Distributed leadership is a frequently researched topic. Researchers focus on the definition, the rationale, the distribution of responsibilities, and the impact on the school community. Decision-making of teachers is another topic that has a great deal of research including the debate of autonomy and control, the types of educational decisions made by teachers (district, school and classroom level), as well as who or what influences teachers' decisions. Examining the influence of distributed leadership on teachers' decision-making in the classroom is essential because it is an area that few studies have examined. Further, the true essence of distributed leadership is to get teachers involved in the decision-making process of the school. Not just providing involvement for teachers, but also allowing them to have true influence. The current study found that building level distributed leadership has a positive relationship with teachers' decision-making in the classroom. As teachers believe there to be more distributed leadership in the school, then they also perceive more control over classroom decisions concerning content and pedagogy. An additional finding was that a stronger relationship exists between distributed leadership and pedagogical decisions than distributed leadership and content decisions. The main implication for districts from this study is that in schools where there is a greater sense of distributed leadership, then teachers tend to enjoy more control in the classroom especially with pedagogical decisions. In conclusion, distributed leadership is not just a buzz word or the newest fad in education. Distributed leadership truly matters and makes a difference in the decision-making of teachers in the classroom.

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Table 1Participating elementary, middle and high schools from District 1 and District 2

School Level	Elementary	Middle	High School	Total
District 1	6	2	2	10
District 2	6	1	2	9
Total	12	3	4	19

59

 Table 2

 Basic Descriptive Statistics for Demographics

Demographic Names	Mean Percent
Gender	
Male	11.0
Female	89.1
Race	
White/Caucasian	99.1
Hispanic	1.2
School Level	
Elementary	77.0
Secondary	29.4
Grade Taught	25
K-2	66.0
3-4	41.0
5-6	24.6
7-8	12.7
9-10	18.5
11-12	18.0
Feaching Experience	16.0
0-5	22.1
6-10	26.9
11-19	30.0
20+	20.7
	20.7
Tenure at Current School 0-5	51.7
6-10	27.1
11-19	15.3
20+	5.7
Tenure at Current Position	
0-5	56.6
6-10	24.7
11-19	14.1
20+	4.4
Subject Taught	40.7
Language Arts	49.7
Math	43.8
Social Studies	42.9
Science	39.8
Elective	5.4
Special Education	16.2
Other	24.8
Highest Degree Acquired	
Bachelor's	47.5
Master's	51.9
Specialist	13.1
Doctoral	3.9

Table 3 *Response Rates*

	Overall	Elementary Schools	Middle Schools	High Schools
District 1	17%	28%	9%	11%
District 2	38%	57%	13%	17%
Combined	25%	42%	10%	13%

Table 4Basic Descriptive Statistics for Distributed Leadership, Content Decisions and Pedagogical Decisions

Distributed Leadership	Mean	Standard Deviation
Teachers have input over curricular development	3.92	.974
Staff has input over school goals	4.24	.858
Teachers have input over school innovations	4.04	.878
Parents have input over educational decisions	3.52	.988
Teachers can express concerns to administration	3.73	1.162
Teachers have input over school decisions	3.73	1.028
Adequate resources are available for educational programs	3.97	.922
Stakeholders are able to review the school's vision and purpose	3.82	1.006
Stakeholders are able to evaluate needs for academic development	3.74	.979
Overall Mean Score	3.86	
Content Decisions in Teaching	Mean	Standard Deviation
Teachers have influence over content in their own class	3.6	1.127
Teachers have influence over the sequence of topics in their own class	3.64	1.165
Teachers have influence over content taught based on student ability	4.19	.908
Colleagues have influence over content	3.33	1.077
Colleagues have influence over the sequence of topics	3.29	1.121
Colleagues have influence over the content based on student ability	3.08	1.148
Administrators have influence over content	3.4	1.082
Administrators have influence over the sequence of topics	3.25	1.158
Administrators have influence over the content based on student ability	3.12	1.172
Overall Mean Score	3.43	

Pedagogical Decisions in Teaching	Mean	Standard Deviation
Teachers have influence over specific methods used in their class	4.41	.778
Teachers have influences over specific strategies used in class	4.45	.752
Teachers have influence over assignments given to their students	4.52	.679
Colleagues have influence over methods used in class	3.17	1.053
Colleagues have influence over specific strategies used in class	3.12	1.044
Colleagues have influence over methods used in class	3.11	1.056
Administrators have influence over specific methods used in class	3.28	1.078
Administrators have influence over specific strategies used in class	3.25	1.05
Administrators have influence over assignments given to students	3.00	1.048
Overall Mean Score	3.59	

Table 5

Construct Correlations for DL, Content Decisions, Pedagogical Decisions

	(1)	(2)	(3)
(1) Distributed Leadership	1.00	.330**	.418**
(2) Content Decisions		1.00	.594**
(3) Pedagogical Decisions			1.00

^{**}p<.010

 Table 6
 Results predicting the effects of distributed leadership on content classroom decisions and pedagogical classroom decisions

	Content			Pedagogy				
	Model 1		Model	2	Model 1		Mo	odel 2
Distributed Leadership	Coeff. 0.300 ***	Std. Err. (0.059)	Coeff. 0.273 ***	Std. Err. (.060)	Coeff. 0.328 ***	Std. Err. (.049)	Coeff. 0.339 ***	Std. Err. (.050)
Controls								
Gender			0.116	(.165)			0.122	(.136)
Race			0.264	(.376)			0.504	(.317)
School Level			-0.005	(.122)			0.002	(.102)
Language Arts Teacher			0.065	(166)			0.000	(.141)
Math Teacher			-0.073	(.167)			0.077	(.145)
Social Studies Teacher			-0.053	(.177)			0.007	(.153)
Science Teacher			-0.043	(.159)			-0.006	(.135)
Special Education Teacher			0.353 *	(.184)			0.175	(.159)
Other Subject Teacher			0.108	(.180)			0.045	(.153)
Total Years of Experience			0.090	(.057)			-0.059	(.049)
Years of Experience in Current School			0.101	(.074)			0.204 ***	(.062)
Years of Experience in Current Position			-0.057	(.077)			-0.162 **	(.064)
Highest Degree			-0.053	(.083)			-0.031	(.067)
Constant	2.276 ***	(.231)	1.859 ***	(.482)	2.325 ***	(.191)	1.813 ***	(.405)
Adjusted R ²	0.105		0.15		0.171		0.200	
F	25.904 ***		3.683 ***		45.368 ***		4.854 ***	

F 25.904

*** p<.010; **p,.050; *p,.100

Appendix

1. Wh	at is your ge	nder?								
	O Male	O Fem	ale							
2. Wh	2. What is your racial/ethnic background? (Optional)									
	☐ African Ame	rican	☐ Native American	□ Latino	☐ Puerto Rican					
	☐ Asian		☐ Alaska Native	☐ White/Caucasian	☐ Hispanic					
	Other (please s	specify)								
3. Which subject(s) do you teach this school year? (Select all that apply)										
	□Language Ar	ts	☐ Science	☐ Social Stud	ies					
	□Math		□ Elective	☐ Special Edu	ucation					
	Other (please specify)									
	t your curren er, etc).	nt non-	teaching duties (i.e	., committee invol	vement, mentor					
5. Wh	nich grade(s)	are yo	u teaching this sch	ool year? (Select a	all that apply)					
	□ K-2	□ 3-4	□ 5-6	□ 7-8 □ 9-1	0 🗆 11-12					
6. Ho	w many year	s of tea	aching experience	do you have?						
	□ 0-5	□ 6-10	11-19	□ 20+						
7. Ho	w many year	s have	you been employe	d at your current s	school?					
	□ 0-5	□ 6-10	11-19	□ 20+						
8. Ho	w many year	s have	you held your curr	ent position?						
	□ 0-5	□ 6-10	11-19	□ 20+						
9. Wh	ich degrees	have y	ou acquired? (Sele	ct all that apply)						
	☐ Bachelor's Degree ☐ Master's Degree ☐ Specialist Degree ☐ Doctoral Degree									

10. Which ce	rtification(s) do you h	ave? (Selec	t all that a	pply)		
☐ Regul	ar or standar	d state certifica	ation \Box	☐ National board certification			
□ Proba	itionary certifi	cation		l Administrati	ve certificatio	n	
☐ Other	(please spec	ify)					
11. Which gra	ade level e	ndorsemer	nt(s) do you	have? (Se	lect all tha	it apply)	
□ Eleme	entary	☐ Middle S	chool E	l High School			
☐ Other	(please spec	ify)					
12. Which su	bject endo Language Arts	rsement(s) Math	do you hav Social Studies	re? (Select	: all that a p	oply) Elective	Other
Elementary	0	0	0	0	0	0	0
Middle	0	0	0	0	0	0	0
High School	0	0	0	0	0	0	0
☐ Other (please	specify)						
13. In this sec	•	•		rship dyna	mics at yo	our school.	
To what exte	nt does sc	hool leade Not at All (1	-	Som	e (3)	(4)	A Lot (5)
ensure teachers major role in cu Development		0	0	()	0	0
enable staff to v together to achi Goals		0	0	(0	0
facilitate staff pa in processes to innovation in the	promote	0	0	(0	0
provide opportu parents to partic important decisi their child's edu through a variet	inities for cipate in ions about cation	0	0	(0	0
ensure teachers express input a	s can freely	0	0	(0	0

to the administrators

provide opportunities for	\circ	\circ	0	\circ	\circ
teachers to make and plan school decisions					
ensure adequate resources are available to the school to develop its educational Programs	0	0	Ο	0	0
provide regular opportunities for all stakeholders to review the school's vision and purpose	0	0	0	0	0
provide opportunities for stakeholders to evaluate needs for academic development	0	0	Ο	0	0

14. In this section, we inquire about issues concerning decisions affecting the content of what you teach in class. By "content," we broadly mean the topic areas, the specific objectives, and broad subject matters covered in class. We are interested in the influence that you personally have on content, as well as the influence that your colleagues and your supervisors have over content.

To what extent do you feel...

	Not at All (1)	(2)	Some (3)	(4)	A Lot (5)
you personally have influence over the content of what you teach	0	0	0	0	0
you personally have influence over the sequence of topic areas you teach in class	0	0	0	0	0
you personally have influence over decisions made in situations when the level of what you teach needs to be adjusted to variations in student ability in your class	0	0	0	0	0
your colleagues (i.e., peers at the same level) have influence over the content of what you teach	0	0	0	0	0
your colleagues have influence over the sequence of topic areas you teach in class	0	0	0	0	0

your colleagues have influence over decisions made in situations when the level of what you teach needs to be adjusted to variations in student ability in your class	0	0	0	0	0
your administrative supervisors have influence over the content of what you teach in class	0	0	0	0	0
your administrative supervisors have influence over the sequence of topic areas you teach in class	0	0	0	0	0
your administrative supervisors have influence over decisions made in situations when the level of what you teach needs to be adjusted to variations in student ability in your class	0	0	0	0	0

15. In this section, we inquire about issues concerning decisions affecting the pedagogy of teaching. By "pedagogy," we broadly mean the teaching methods and strategies as well as the assignments given to students. We are interested in the influence that you personally have on pedagogy, as well as the influence that your colleagues and your supervisors have over pedagogy. To what extent do you feel...

	Not at All (1)	(2)	Some (3)	(4)	A Lot (5)
you personally have influence over the specific method(s) you use for your teaching in class	Ο	0	0	0	0
you personally have influence over the specific strategies you employ in your teaching in class	Ο	0	0	0	0
you personally have influence over the nature of assignments you give to your students in class	Ο	0	0	0	0
your colleagues (i.e., peers at the same level) have influence over the specific methods you use for your teaching in class	0	0	0	0	0

your colleagues have influence over the specific strategies you employ in your teaching	0	Ο	0	0	0
your colleagues have influence over the nature of assignments you give to your students in class	0	0	0	0	0
your administrative supervisors have influence over the specific methods you use for your teaching in Class	0	0	0	0	0
your administrative supervisors have influence over the specific strategies you employ in your teaching	0	0	0	0	0
your administrative supervisors have influence over the nature of assignments you give to your students in class	0	0	0	0	0

Correlations for all survey items																																									
soriciations for all survey rechis	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1) Distributed Leadership	1	.330**	.418**	-0.02	0.026	-0.007	0.014	0.017	0.101	-	0.009	-0.008	0.102	0.072	0.049	0.026	-0.078	0.053	0.009	-0.059	0.016	0.057	0.031	-0.067	0.015	0.04	.198**	0.07	0.074	0.081	0.001	-0.039	0.089	0.101	.147*	.125*	.134*	0.052	-0.011	-0.027	.140*
2) Content Decisions	-	1	.594**	0.06	0.059	0.048	173**		_			0.086	118*	-0.034	0.02	-0.008	-0.009	0.061	155*	-0.022	.125*	0.048	-0.014	-0.02	0.064	0.04	.231**	.187**	.132*	0.049	-0.107	.117*	-0.09	120*	-0.039	-0.063	129*	0.104	.123*	0.049	0.003
3) Pedagogical Decisions		•	1	0.003	0.08	.122*	-0.016		-		0.059	-0.019	0.026	0.046	0.018	0.045	-0.067	-0.01	-0.064	0.098	0.003	-0.061	-0.032	0.071	0.011	-0.047	0.016	.120*	-0.023	-0.014	0.013	-0.027	0.077	0.092	.132*	.139*	0.087	-0.105	0.104	0.027	.132*
4) School Level			•	1	.409**	-0.022	410*				0.045	.253**	-0.018	.109*	019*	144*	274**	0.078	174**	170**	509**	368**	296**	.359**	.672**	.633**	-0.018	0.073	0.023	.119*	605**	.351**	345**	404**	386**	409**	427**	.310**	-0.02	-0.055	.376**
5) Gender				1	1	0.022	251**	-			-0.052	.170**	131*	-0.084	-0.049	164**	.142*	-0.065	040*	121*	262**	234**	-0.094	0.064	.327**	.288**	-0.105	0.034	0.077	.134*	327**	0.057	217**	150*	-0.047	-0.096	140*	.159**	138*	-0.047	177**
6) Race					1	1	0.052		0.034		-0.047	-0.037	0.073	-0.005	0.043	0.054	-0.001	0.005	0.046	0.04	0.105	-0.088	-0.027	0.039	-0.05	-0.06	0.016	0.004	-0.002	-0.014	0.06	0.037	0.073	0.06	0.047	0.061	0.057	-0.042	-0.019	0.047	0.064
7) Language Arts Teacher						1	1	.683**	.681**		-,454**	525**	126*	0.053	-0.099	0.034	249**	0.035	.155**	.169**	.146*	154**	-0.024	269**	274**	246**	-0.016	0.004	-0.019	-0.093	.295**	361**	.649**	.494**	.511**	.503**	.504**	216**	352**		.371**
8) Math Teacher							1	.003	.775**		326**	456**	0.065	0.033	-0.033	0.072	-237**	-0.032	.173**	.201**	.182**	-0.093	133*	180*	287**	270**	-0.010	-0.01	-0.013	-0.033	.270**	365**	AA1**	.454	.422**	.445**	.458**	307**	306**	-0.05	.275**
9) Social Studies Teacher								1	1	.775**	424**	486**	0.054	.120*	-0.010	0.072	194**	-0.052	.116*	.195**	.184**	-0.095	133*	186**	295**	302**	117*	-0.01	-0.027	140*	.204**	334**	0.436**	.449**	.543**	.494**	.472**	293**	336**		.2/3**
10) Science Teacher									1	-				-					-		-									140						471**	.518**	293**			-
										1	379**	_	0.068	.118*	-0.038	0.088	232**	0.014	.162**	.186**	.249**	-0.089	134*	168**	295**	257**	-0.045	-0.039	-0.081	-	.257**	389**	.452**	.460**	.431**				286**		.279**
11) Special Education Teacher											1		122**	0.03	-0.093	-0.013	0.085	-0.066	-0.055	-0.052	-0.014	.201**	.172**	0.102	0.002	0.031	0.003	-0.093	-0.037	-0.055	.129*	.170**	265**	237**	255**	218**	223**	-0.082	.629**	-0.093	-0.056
12) Other Subject Teacher												1	-0.039	131*	.214**	-0.043	.127*	0.058	-0.047	141*	-0.051	0.101	-0.05	0.039	.318**	.306**	0.095	.152*	.123*	.203**	154**	.182**	349**	358**	356**	341**	365**	.448**	-0.074	.178**	233**
13) Curriculum Team													1	.147*	186**	0.02	0.04	.222**	.186**	0.084	-0.047	0.002	0.053	0.095	-0.084	-0.104	0.061	0.054	0.012	0.046	-0.004	0.004	.123*	0.105	0.083	0.06	.141*	-0.044	-0.098	-0.08	0.053
14) Non-Curriculum Team														1	-0.091	0.095	0.026	0.045	0.028	0.066	-0.014	0.052	.114*	-0.045	129*	148*	-0.041	0.015	-0.066	179**	0.042	-0.005	-0.039	-0.011	0.003	-0.017	0.045	-0.018	0.069	0.083	0.027
15) Multiple Committees															1	-0.053	0.003	144*	117*	-0.101	0.059	0.014	-0.008	-0.046	-0.002	-0.03	-0.086	-0.095	-0.107	-0.118	0.03	0.093	-0.084	-0.054	-0.098	-0.09	-0.079	-0.018	-0.026	0.096	-0.059
16) Student Learning Team																1	0.1	-0.052	0.103	-0.02	.133*	.143*	0.031	-0.05	-0.063	-0.006	-0.002	-0.077	0.002	0.002	0.069	114*	0.074	0.072	0.079	0.068	0.085	-0.058	0.001	.114*	0.048
17) Student Organization Team																	1	.145*	121*	-0.007	177**	-0.073	126*	.154**	.250**	.255**	-0.1	-0.035	0.034	-0.097	281**	.159**	204**	262**	232**	269**	-224**	.128*	0.025	-0.067	.284**
18) Building Leadership Team																		1	.174**	.190**	.209**	0.102	-0.046	-0.083	-0.071	-0.074	.161**	.168**	.149*	0	0.049	0.076	-0.105	-0.057	-0.051	-0.047	0.001	0.063	-0.016	-0.014	-0.034
19) District Team																			1	.223**	.137*	0.055	0.045	-0.095	114*	-0.096	0.102	-0.025	-0.014	0.069	.131*	159**	.224**	.181**	.168**	.178**	.191**	132*	-0.039	-0.07	.126*
20) Other Team																				1	.186**	-0.024	0.005	-0.027	120*	-0.105	0.039	0.083	0.074	0.019	0.066	123*	0.088	.120*	0.108	.117*	.129*	-0.063	0.079	0.054	0.1
21) K, 1st or 2nd Grade Teacher																					1	.118*	114*	254**	365**	330**	0.045	-0.02	-0.001	-0.061	.355**	165**	0.089	.141*	.109*	.133*	.146*	135*	0.012	0.09	.137*
22) 3rd or 4th Grade Teacher																						1	.114*	168**	253**	227**	0.074	0.015	0.009	0.066	.253**	-0.045	117*	-0.068	-0.093	-0.074	-0.05	0.053	.133*	.117*	-0.005
23) 5th or 6th Grade Teacher																							1	-0.088	140*	143*	0.02	-0.047	-0.063	-0.017	.172**	-0.043	0.074	0.106	0.108	.122*	.120*	-0.061	.115*	-0.47	.153*
24) 7th or 8th Grade Teacher																								1	-0.002	0.019	-0.074	0.034	-0.028	-0.005	179**	.170**	-0.099	-0.092	-0.076	124*	-0.083	-0.021	.153**	-0.099	-0.071
25) 9th or 10th Grade Teacher																									1	.824**	0.003	0.089	.125*	.150*	433**	.257**	264**	379**	326**	312**	388**	.310**	-0.031	-0.002	310**
26) 11th or 12th Grade Teacher																										1	0.031	0.104	.122*	.171**	414**	.230**	233**	376**	319**	331**	339**	.327**	0.004	-0.03	289**
27) Total Years of Experience																											1	.558**	.564**	.355**	0.05	.159**	-0.036	-0.049	-0.066	-0.045	-0.062	.120*	-0.005	-0.013	0.035
28) Years of Experience Teaching in																																									
Current School																												1	.703**	.200**	-0.061	0.108	-0.023	-0.069	-0.03	-0.047	-0.066	.185**	-0.061	0.1	0.024
29) Years of Experience in Current																												_													
Position																													1	.192**	-0.072	0.088	-0.055	112*	-0.069	-0.079	112*	.205**	-0.06	0.016	-0.033
30) Highest Degree																													-	1	-0.05	0.01	-0.061	-0.057	-0.053	-0.071	-0.103	-0.032	0.056	.141*	-0.036
31) Elementary Certification																														1	1	256**	.312**	.341**	.231**	.345**	.329**	148*	.158**	0.027	.474**
32) Secondary Certification																															1	1	371**	428**	407**	422**	425**	.257**	.230**	0.027	-0.092
33) Language Arts Endorsement																																1	1	.793**	.789**	.783**	425 .825**	233**	296**		.741**
34) Math Endorsement																																	1		.856**	.765**	.902**	293**		-	.781**
																																		1	.856**				292**	-0.087	-
35) Social Studies Endorsement																																			1	.919**	.885**	267**	315**		.770**
36) History Endorsement																																				1			277**	_	_
37) Science Endorsement									-																												1			112*	
38) Elective Endorsement									-																													1		0.023	
39) Special Education Endorsement																																							1	_	
40) Other Endorsement																																								1	0.054
41) Total Endorsements																																									1-
																																									_ ′