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Examining Perceptions of Practices and the Roles of Special Education Leaders through the Distributed Leadership Lens

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Examining Perceptions of Practices and the Roles of Special Education Leaders through the Distributed Leadership Lens

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EXAMINING PERCEPTIONS OF PRACTICES AND THE ROLES OF SPECIAL EDUCATION LEADERS THROUGH THE DISTRIBUTED LEADERSHIP LENS

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DEDICATION

This dissertation is dedicated to my mother, my last father, and my two sisters. I thank my sisters, Sarah and Annie, for their unconditional love and support which helped me to finish this important work through difficult personal times. I thank my mom, Margaret, for instilling the confidence in me with her constant encouragement of words (aka "nagging") that I could achieve anything. I thank my deceased father, Tony, for never allowing me to take the easy way out, and teaching me through hard work and perseverance that great things can be accomplished. Most importantly, I appreciate the upbringing I received from both parents. Without my mother or father, I could have never overcome the reading and speech and language challenges displayed during my primary years, and access the level of education needed to complete this dissertation. I especially thank them for not enabling me during those years, but motivating me to accomplish more with their support and encouragement.

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ABSTRACT

EXAMINING PERCEPTIONS OF PRACTICES AND THE ROLES OF SPECIAL EDUCATION LEADERS THROUGH THE DISTRIBUTED LEADERSHIP LENS

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The purpose of this dissertation is to investigate the perceptions of distributed leadership held by 15 administrators of special education and 15 special education teacher leaders invited to perform a Q-sort, rank ordering 40 statements representing distributed leadership attributes. The research questions that guided this investigation included: 1) Are there any clusters of participants who ranked the leadership statements similarly and differently; 2) Are the clusters related to demographic or personal characteristics associated with the participants; 3) Were there similarities as to how the items were ranked by the participants among the clusters; 4) Are there themes depicting the clusters based on the statement rankings; and 5) To what extent is there a relationship between the cluster composition, demographic and district variables? Results revealed two factors of participants who sorted their cards similarly, the priority given to each statement representing distributed leadership traits, and the preferred attributes associated with each factor. Each factor was further examined to determine how the demographics of the participants contributed to the similar sorts. This study demonstrates the importance of

special education leaders developing an understanding of both the organization's purpose as well as the staff members' needs, personalities, strengths, and skill sets. As special education leaders move across the continuum of distributed leadership, their leadership practices transition from distributing leadership tasks from a top-down model to creating a truly collaborative environment embedded into the organization as it becomes action oriented through continuous improvements in programming and instruction with students with special needs. This research will contribute to expanding the understanding of distributed leadership practices in the field of special education. Future research should be devoted to better understanding the relationship between special education and distributed leadership, and the influence special education leadership has on an organization's culture, student programming, and student achievement in relationship to state accountability measures.

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CHAPTER 1

EXAMINING LEADERSHIP PRACTICES AND THE ROLES OF SPECIAL EDUCATION LEADERS

James Burns is commonly associated by many in the educational field as the founder of modern leadership theory (Marzano, Waters, & McNulty, 2005). While working in politics, Burns (1978) provided the following definition for leadership:

> "leaders inducing followers to act for certain goals that represent the values and the motivation- the wants and the needs, the aspirations and expectations- of both leaders and followers. And the genius of leadership lies in the manner in which leaders see and act on their own and their followers' values and motivations." (p.19)

Introduction

The primary purpose of this paper is to explore the relationship between distributed leadership and the leadership practices of special education administrators and special education teacher leaders. For the purpose of this paper, special education administrator will be defined as an individual who works in a school district to lead, supervise, and manage the provision of special education and related services for individuals with disabilities. Lashley and Boscardin (2003) state that special education administrators responsibilities include implementing the provisions of the Individuals with Disabilities Education Act (IDEA), state and local statutes as well as policies and procedures that stipulate a free appropriate public education in the least restrictive environment for all students with disabilities. Special education administrators have had a significant role in the vast improvements in the field over the last 30 years and will continue to play a vital role in the future of public education.

When defining teacher leadership, York-Barr and Duke (2004) argue that very few authors in the literature accurately define teacher leadership with clarity. For the

purpose of this paper, special education teacher leaders are teachers that possess both the skills and opportunities to collaborate often with others in an effort to problem solve in an effective and timely manner; and advocate for the needs of students with special needs (Billingsley, 2007). In addition, special educator leaders provide vision and direction for special education through collaborative efforts (York-Barr, Sommerness, Duke, & Ghere, 2005). Special educator leaders promote the use of evidence-based practices and are adept at interpreting student data needed to effectively provide an appropriate education to all students with various ability levels (CEC, 2009a). Ironically however, it is disappointing when the current research base for special education lacks in the number of data-based publications (Crockett, Becker, M.S.W., & Quinn, 2009).

While the focus of this paper is on special education leadership, it is imperative to first demonstrate that leadership does have a significant impact in the educational field. Leadership affects the extent to which teachers use proven, research-based practices to improve student performance (Noell & Witt, 1999). Additionally, academic outcomes for students with disabilities and at-risk students have been found to improve when school leaders focus on instructional issues, demonstrate strong support for special education, lead collaborative efforts, and provide ongoing professional development and/or training (Benz, Lindstrom, & Yovanoff, 2000; Brownell, Smith, McNellis, & Miller, 1997; Kearns, Kleinert, Clayton, Burdge, & Williams, 1998; Klingner, Arguelles, Hughes, & Vaughn, 2001). In recent years, specifically in the last decade, there has been a substantial amount of research produced linking leadership to student achievement and thus emphasizing the importance of leadership in the field of education. For example, Marzano et al. (2005) performed a meta-analysis examining 69 studies over 35 years of

research involving 2,802 schools, approximately 1.4 million students, and 14,000 teachers and the results indicate that "school leadership has a substantial effect on student achievement and provides guidance for experienced and aspiring administrators alike" (p.12). In fact, leadership has been found to be second only to teaching on its direct impact on student learning (Marzano et al.; Leithwood, Harris, & Hopkins, 2008). Provost (2007) reported that participants valued a principal that effectively communicates the school objectives with clear outcomes while maintaining high expectations for staff performance. Although the majority of the research available focuses on the role of the principal, the role of the special education administrator is just as important. However, the size of the impact of the special education administrator is complex and difficult to measure compared to principals who are placed in a position of sustained direct daily contact with teachers and students. The problem is there is little known about how special education leadership tasks and activities are distributed among professionals in schools (Boscardin, 2005). Furthermore, there is a void in the educational literature on the extent of involvement that district and school administrators involve special education teachers in shaping local policies and practices (Billingsley, 2007). In addition, it has been reported on the topic of teacher leadership that no studies have been found that addressed the work of special education teachers as leaders (Billingsley).

Historical Perspective: School Reform Movements Influence on Learning & Leadership

Between the years of 1910 and 1929, the business and industrial group held top status in American society (Callahan, 1962) largely due to technological advances for efficiency (Callahan). During this time there was immense pressure for schools to run

like businesses for efficiency and economy from popular journals, outside businessmen, and from educators themselves who bought into the factory system (Callahan). Furthermore, by 1917 school boards although smaller in size became increasingly more dominated by businessmen (Callahan) resulting in the increased incorporation of the factory model into the educational system. An additional factor that resulted in schools resembling factories and school superintendents as business managers was the similarity of the school superintendent's responsibilities with the running of a physical plant (Callahan). Superintendents, especially those in large cities, were responsible for supervision of staff and students, working with the school board to improve quality of education, managing the maintenance of the physical plants, and paying careful attention to expenditures involving large sums of money, (Callahan). Consequently, the position of school superintendent held more characteristics similar to a managerial job of a business or industry than that of an educator and thus the factory model was reflective in school systems throughout the United States.

The factory model was developed during the nineteenth century with the purpose of sorting and selecting students (DuFour & Eaker, 1998). This was aligned with the industry model in which a select few made decisions that affected many within the organization as the decisions were handed down. Workers were trained on their specific tasks to perform their jobs, and thus were viewed as "interchangeable parts" (Callahan, 1962; DuFour & Eaker). Education was reflective of this practice as it followed this top-down structure- teachers would carry out the mission of the principal and students were provided the "one size fits all" form of instruction (Callahan; DuFour & Eaker). The factory model during this time was somewhat effective as dropouts had ready access to

unskilled jobs in the industry and a select few would move onto college (DuFour & Eaker). However, this has become less true over time as the number of unskilled jobs have significantly decreased, resulting in the factory model becoming increasingly more inappropriate and ineffective for improving education (DuFour & Eaker).

The Impact of Education Reform Movements

The historical events and characteristics of the efforts in the late 20th century school reform/improvement in the United States have been educational in terms of improving educational leadership and school reform initiatives (although the results were disappointing). Beginning in 1957, the launching of Sputnik cause many critics to cite the United States public school system as the primary reason for falling behind Russia in the race for space (DuFour & Eaker, 1998). This event brought attention to the inappropriateness of the factory model and the need for reform in education which led to the development of *The Elementary and Secondary Act of 1965* (ESEA) (Yell, 2006b). Although the earliest known school for children with disabilities was established in 1817 in Hartford, Connecticut, it was not until the late 1960s and early 1970s that equity of educational opportunity for the disabled became a priority for federal legislation (Alexander & Alexander, 2001). The ESEA provided federal funds to states under Title I of the law for the purpose of improving the educational opportunities for disadvantaged children (Yell).

Title I schools were schools determined by a variety of formulas containing large populations of underachieving disadvantaged children. These formulas were usually based on data that contained the number of students on free or reduced lunch or the percentage of students within the school's attendance zone (Yell, 2006b). The ESEA is

responsible in many ways for the continued support throughout the years from the federal government to ensure equal educational opportunities to the economically disadvantaged students (Yell). *No Child Left Behind* (NCLB) has its roots from *ESEA* and the *Improving America's Schools Act of 1994* (IASA).

In 1983 the National Commission on Excellence in Education caught the nation's attention with its poor assessment of education in the U.S. In its report, *A Nation at Risk,* the commission made frequent remarks such as "decline," "deficiencies," "threats," "risks," "afflictions," and "plight" when describing the educational system (DuFour & Eaker, 1998). *A Nation at Risk* led to the catalyst of school improvement initiatives that came to be known as the Excellence Movement, a top-down attempt to improve education (DuFour & Eaker).

The Excellence Movement's answer to educational reform was more is better: more instructional time, more testing, longer school days, more homework, and more rigorous courses. This was the top-down approach to education adopted during the Excellence Movement is associated with a leadership practice similar to one Silva, Gimbert, and Nolan (2003) describe in the first wave of development. Decisions are made at the highest administrative level driven by major school reform initiatives and are handed down for implementation, thus lacking the collaborative learning environments that school districts presently strive to create and that are evident of high achieving schools. The Excellence Movement lacked innovative initiatives, and therefore the billions of dollars the U.S. invested in the Excellence Movement produced marginal results at best. Within the Excellence Movement period in time from 1983 to 1986, forty-six states created some kind of performance-based compensation system for

teachers such as merit pay, career ladders, or mentor teacher plans in an effort to improve on the quality of teachers (Berry & Ginsberg, 1990) and teacher leadership. Berry and Ginsberg report that hundreds of millions of dollars were spent as hundreds of thousands of teachers participated in some form of performance-based pay system. However, these performance-based compensation systems did reflect in gains in student achievement.

Standards Movement

Unfortunately, also in 1990, the United States Department of Education came to the same conclusion as 1983 by reporting low levels of student achievement. The failures of the Excellence Movement led to a new two-part strategy (DuFour & Eaker, 1998). The first part emerged from a summit lead by President George H. W. Bush where the objective was to identify six national goals of education that were later amended to eight by Congress and to attain these goals by the year 2000 (Yell, 2006b). Thus the name Goals 2000, was given to this federal initiative. This "bottom-up" attempt to improve education represented the second wave of reform, known as the Restructuring Movement (DuFour & Eaker). The Restructuring Movement looked to address the national goals by providing job-site autonomy and individual empowerment consistent with the best practice in the private sector giving local administrators greater authority to initiate change. The problem with the Restructuring Movement was that school improvement agendas failed to focus on the number one priority of classroom learning and instead focused on nonacademic issues such as student discipline (DuFour & Eaker).

Both the Excellence and Restructuring Movements are time periods that can be associated with the leadership practice of transactional leadership. Transactional leadership takes its name from the exchange of goods, etc. for services. The expectation

from followers is that they will receive perks for good service (e.g., teacher is excused from faculty meeting for giving up their prep period to provide coverage for another class). Transactional leaders attempt to motivate teachers through contingency-reward relationships (Kezar & Eckel, 2008) exemplified in the performance-based compensation systems created by the majority of state legislations during the Excellence Movement. Transactional leaders also delegate authority while communicating teacher expectations (Stewart, 2006) similar to the top-down approach of the Excellence Movement. In addition, transactional leadership was evident in the management of schools during the Restructuring Movement. Although opportunities were provided to educators to collaborate to improve teaching and learning commonly found in the practices of transformational leadership and professional learning communities, educators participated in lower levels of collaboration seen in transactional leadership practices. Vesper, McCarthy, and Lashley (1994) concluded in their research that principals continued to exert substantial authority over most decisions, failing to include teachers in the decision making processes despite the Restructuring Movement.

No Child Left Behind

Although opportunities were provided to schools to collectively improve academic success, most schools failed to use the power of collaboration to focus on high priority academic issues (Dufour & Eaker, 1998). The failures of the Excellence and Restructuring Movements led to at least two significant changes in the field of education; one, the *No Child Left Behind Act* (NCLB) (2002) introduced greater levels of accountability for students and increase qualification requirements for teachers, and; two, the educational leadership has shifted, focusing on leadership roles and practices of the

leaders in relationship to the effectiveness of the use of collaborative leadership practices (Hallinger and Heck, 2010).

It is evident that administrative practices in schools have changed over time as federal laws have strengthened and efforts have increased to ensure students with disabilities receive a free appropriate public education (FAPE) (Meyen, 1995). Although education is not a provision covered in the Constitution, the federal government has been indirectly involved through the use of categorical grants over the years (Yell, 2006b; Alexander & Alexander, 2001). Federal government allows Congress to intervene in public education through three avenues: (1) state acceptance of federal grants by the general welfare clause; (2) standards or regulations authorized within the commerce clause; and (3) constrained actions by courts enforcing federal constitutional provisions protecting individual rights and freedoms (Alexander & Alexander). For years the federal government would only intervene with states' regulation of public schools if denial of a Constitutional right was involved. However, over the last decade the federal courts have made more decisions regarding issues of the equity and adequacy of state finance models used to fund schools (Alexander & Alexander).

On January 8th, 2002, President Bush signed the *NCLB* into law as a result of ESEA (20 U.S.C. §16301 *et seq.*) in order to ensure that all public school students achieve important learning goals in safe classrooms by highly qualified teachers (Yell, 2006b). NCLB is a revision and reauthorization of both the ESEA and the Improving America's Schools Act (IASA) of 1994, and NCLB serves the purpose of continuing the government's commitment to ensure equal access to education for poor and disadvantaged students (Yell). NCLB (2002) was developed in response to the federal

government's overwhelming dissatisfaction from our country's lack of improvement in educational achievement despite increased funding over the last twenty years. Acknowledging the failures of the Excellence and Restructuring Movements as measured by this reform initiative adopted accountability as its mandate. Student achievement of standardized tests would be the dominant measure of student performance.

The major requirements of NCLB for schools include accountability for results, the use of scientifically based instruction, and the training of highly qualified teachers and paraprofessionals (Yell, 2006b). NCLB holds school districts accountable for all students' learning, including those with disabilities through student participation in statewide assessments. Similarly, the 1997 reauthorization of IDEA ensures that all students with disabilities are included in state assessment programs by building in accountability provisions (Parrish & Wolman, 2004). This is to ensure that the instruction and achievement improves for all students (Yell).

Schools districts have learned from past failures that change is dependent on effective leadership which emphasizes collaborative approaches to school improvement. Even though there are many valid arguments with some of the dilemmas NCLB places on school districts, most educators would agree that accountability for student achievement is necessary in order to improve our educational systems. With increased accountability, there has been additional pressure placed on educational leaders and teachers to attain higher levels of student achievement. As a result, the leadership of the organization of a district and its schools are viewed either as the catalyst or the anchor for improving student learning.

Individuals with Disabilities Education Act

The purpose of IDEA 2004 is to ensure that all children with disabilities receive a FAPE. IDEA 2004 is the latest of several reauthorizations of the *Education for All Handicapped Children Act of 1975* (EAHCA). In 1987 the EAHCA was renamed the *Individuals with Disabilities Act*, but still serves as the foundation of IDEA. Children that have disabilities that impact their academic achievement may receive special education and related services so that their individual needs can be met under their Individual Education Program (IEP). IDEA 2004 is designed to prepare children with disabilities for further educational opportunities, employment, and independent living (Yell, 2006a). In many ways the IDEA 2004, specifically the Least Restrictive Environment (LRE) provision, supports NCLB. The *Individuals with Disabilities Education Improvement Act of 2004* (IDEA 2004) was developed with an emphasis to complement the standards and requirements of NCLB and is the most current revision of the law since 1997.

LRE is one of the provisions of IDEA that is supported in the language of NCLB. The IDEA Regulations for LRE under section 300.114 require that students with disabilities receive their education from the general curriculum with their nondisabled peers to the maximum extent appropriate. The LRE provision of IDEA 2004 and the regulations extends not only to the setting, but also to the curriculum. Similarly, NCLB addresses the need to improve instruction for students with learning disabilities. NCLB holds states accountable for including students with learning disabilities in all state assessments along with the monitoring of their adequate yearly progress (AYP) in the general curriculum. In order for students with disabilities to make AYP, they must be

exposed to the other requirements of NCLB such as good instruction from very skilled teachers. As a result, one of the intentions of NCLB is to support the fight for inclusion of students with disabilities in the general curriculum.

The goal for children with disabilities is for all to receive a complete education in the general curriculum. According to the federal regulations in section 300.116, school districts and states must make all placement decisions in compliance with LRE. Furthermore, the accountability measures of LRE in IDEA 2004 and Title I under NCLB requiring the inclusion of students with disabilities in state assessments help to avoid some negative consequences such as a large rate increase of special education referrals. Research has shown that when students with disabilities are permitted to be excluded from state assessments measuring accountability, then the number of special education referrals increases considerably (Lehr & Thurlow, 2003).

Summary

National professional standards provide a solid foundation for identifying the roles and responsibilities of leaders of special education, however, federal and state mandates have contributed to the work of leaders of special education becoming more complex. Additional complexities make the expectation of any one leader of special education possessing the expert knowledge or specialized skills necessary to address all situations unrealistic. The ability of leaders to distribute, as opposed to delegate, leadership responsibilities in a meaningful and shared manner while maintaining oversight and accountability opens possibilities and opportunities for providing the best practices for learners with disabilities from diverse backgrounds and engaging multiple stakeholders. Chapter 2 will examine how distributed leadership might begin to help

address the challenge of providing students with disabilities and their families with the services and programs needed to meet their needs.

CHAPTER 2

OVERVIEW OF DISTRIBUTED LEADERSHIP

"Distributed leadership enhances opportunities for the organization to benefit from the capacities of more of its members, permits members to capitalize on the range of their individual strengths, and develops among organizational members a fuller appreciation of interdependence and how one's behavior effects the organization as a whole"

-Leithwood, 2005, p.18

Distributed Leadership

The empirical evidence supporting distributed leadership in schools is not as strongly backed as other leadership styles, such as transformational leadership. In fact, it has been suggested that this form of leadership exists without any or little empirical support at all (Harris, 2007). Mascall, Leithwood, Straus, and Sacks (2008) have added that "systematic evidence is modest, at best, about the factors that influence the nature and extent of distributed leadership in schools, as well as the consequences of distributed patterns of leadership for schools and students." This can be attributed to the fact that this form of leadership has only emerged during the last decade.

Gronn (2008) states, "Distributed leadership arose in reaction to understandings of leadership that emphasized heroic-like individual behavior. It has achieved a high level of theoretical and practical uptake (p. 141)." In addition, some have argued that the term 'distributed leadership' has caused confusion due to the varying definitions (Harris, 2007; Gronn, 2003; Spillane, 2006) and similarities to other forms of leadership (i.e. democratic leadership) in the literature (Bennet, Wise, Woods, & Harvey, 2003; Woods, 2004). However, Gronn (2008) has recently concluded that it appears distributed leadership has survived the initial stage of conceptual exploration and is here to stay, and others have proclaimed that its popularity is increasing (Spillane & Harris, 2008). Gronn (2008)

adds, "[Distributed leadership] is now well into a phase of empirical investigation and may shortly be entering a period when some sense of its impact will become clearer (p. 141)."

Gronn (2002) has provided two broad definitions for distributed leadership. Gronn refers distributed leadership in one perspective as "straightforward numerical" and in another perspective as "concertive action" (p. 654). In brief, these two definitions for distributed leadership are described by as following (Gronn):

- Numerical or additive: Leadership is "dispersed rather than concentrated". As a result, leadership is shared among colleagues rather than placed on one focal individual such as the principal in the school setting. Distributed leadership can include in addition to the principal, assistant principals, teacher leaders, school board members, and even students. This form of leadership does not necessarily provide any more leadership or privileges to any individuals with particular position titles. Numerical leadership allows the possibility of all members in the organization to carry out leadership responsibilities as the situations change from time to time. This form of distributed leadership is most commonly used and is directly contrasted with focused leadership (Bennet, Wise, Woods, & Harvey, 2003).
- Distributed leadership as *concertive action*: This form of distributed leadership is holistic where the sum is greater than its parts. Distributed leadership in this form is structured around concept of division of labor as formal roles are not defined. Gronn (2002) observes three main patterns in concertive action:

a) *Spontaneous collaboration:* Leadership is evident in the interaction and relationships of people from multiple layers or divisions within the organization. Members of the organization, each of whom is comprised with different skills and expertise, pool their talents and resources together to accomplish numerous organizational tasks.

b) *Intuitive working relations*: Leadership is manifest in the shared role when instinctive understandings emerge over time as a result of two or more organizational members developing close working relations built on trust and shared responsibility.

c) *Institutionalized Practices:* Structures of working together such as committees are put into place in an effort to improve upon an organization's current practice.

Distributed leadership has developed its roots from the work of Elmore (2000, 2002) and Spillane (Spillane, Halverson, & Diamond, 2001, 2004; Spillane, 2006; Spillane & Harris, 2008; Spillane, Camburn, Pustejovsky, Pareja, & Lewis, 2008). Elmore (2000, 2002) has argued that distributed leadership is needed for an organization (i.e. schools) to make instructional improvement, and; that leaders need to incorporate the model of distributed leadership in order to work cooperatively around the common task of instructional improvement (Elmore, 2000) and to create and sustain capacity using professional development (Elmore, 2002). According to Spillane et al. (2004), distributed leadership can be defined as an interactive web of leaders and followers who periodically change roles as the needs of the organization change. The model of distributed leadership focuses on the interactions that take place during both informal and

formal leadership roles (Spillane & Harris, 2008) and how these leadership practices influence the organizational and instructional outcomes (Spillane, 2006).

Distributed leadership acknowledges that an organization similar to a school district or school has multiple leaders in which the leadership tasks are widely shared within the organization and recognize that the work of all individuals who contribute to leadership practice (whether formally or informally designated) as leaders (Spillane & Harris, 2008). Spillane's theory (Spillane et al., 2001, 2004) on distributed leadership (in Spillane et al., 2004) is based on two assumptions:

- School leadership is best understood through considering leadership tasks; and
- Leadership practice is distributed over leaders, followers, and the school's situation or context.

Similarly to Gronn, Spillane et al. (2004) described three ways that leadership can be distributed over multiple leaders in regards to distributed leadership. The first way is through collaborative distribution, which occurs when the actions of a leader follows the actions of another leader. The second way is through collective distribution, which occurs when leaders share a common goal, but work interdependently of each other to achieve the goal. The third and last way is through coordinated distribution, which occurs when different individuals attempt to accomplish sequential tasks.

Based on an extensive literature review, Spillane et al. (2004) has identified several functions that provide a framework for analyzing leadership tasks:

- Constructing and selling an instructional vision;

- Developing and managing a school culture conducive to conversations about the core technology of instruction by building norms of trust, collaboration, and academic press among staff;
- Procuring and distributing resources, including materials, time, support, and compensation;
- Supporting teacher growth and development, both individually and collectively;
- Providing both summative and formative monitoring of instruction and innovation; and
- Establishing a school climate in which disciplinary issues do not dominate instructional issues.

In order for distributed leadership to be an effective means of managing an organization, the importance of collaboration among leaders and followers cannot be understated. If numerous leadership tasks are to be distributed among multiple leaders, then a clear, well defined vision and mission need to be in place. This is necessary for the entire organization to work collectively in an effort to demonstrate growth and improve instructionally and organizationally as a whole. Collaboration is essential for the development of a strong organizational culture and producing conversation among staff conducive to the needs of the organization. Leithwood, Mascall, Strauss, Sacks, Memon, and Yashkina (2007) have provided a description of distributed leadership by breaking the leadership tasks into four categories or patterns. These patterns reflect the extent to which the performance of the task is aligned across the sources of leadership

and the degree to which the approach is planned or spontaneous. A summary of the breakdown of the four patterns is as followed (Leithwood et al., 2007):

- Planful alignment: the leadership tasks in this pattern have been given careful, prior reflective thought by members working cooperatively towards shared whole-organizational goals. Various leadership sources consider which leadership practices are best carried out by which source. Due to the careful planning and preparation involved in this pattern, this pattern is expected to lead to positive long-term effects within the organization.
- Spontaneous alignment: the leadership tasks in this pattern are distributed with little or no planning. Leadership tasks typically are assigned by chance through by spontaneous collaboration. This pattern is expected to produce short-term positive outcomes, while expecting to fail to produce long-term results due to the lack of reflective feedback.
- Spontaneous misalignment: the leadership tasks in this pattern are also distributed with little or no planning by chance. However, in these situations this pattern of leadership produces negative outcomes for the organization, thus making it difficult to achieve even short-term success.
- Anarchic misalignment: the leadership tasks in this pattern involve substantial planning and alignment within a unit (i.e. department) with each unit working very independently and competing with other units for resources and with determining the focus for organizational goals. Success of the organization is determined by the level of participation by others in this pattern of leadership. One of the major challenges with this pattern of leadership is receiving the

necessary buy-in and long-term commitment required from members to work towards the wider goals of the organization.

Table 2.1
Patterns of Distributed Leadership
(Leithwood et al, 2007, pp 40-42)

Expected Outcomes	Types of Planning: Purposeful	Types of Planning: Nonexistent
Positive	**Planful Alignment:** careful, reflective, collaborative thought process that leads to long-term positive effects	**Spontaneous Alignment**: tasks distributed by chance through spontaneous collaboration that produce short-term positive effects.
Negative	**Anarchic Misalignment**: involves substantial amount of planning but fails to produce positive results due to failures with buy-in or conflicting agendas	**Spontaneous Misalignment:** tasks distributed by chance producing both short and long-term negative effects

Distributed Practices of Special Education Leaders

Dufour and Eaker (1998) assert that "attempts to persuade educators to participate in reform by assuring them that change will be easy are patently dishonest (p. 50)." Change is always difficult no matter what the initiative. School change is particularly complex and difficult because the notion of changing from the traditional model that schools have function is radical to many long-time educators. Many educators have taught in isolation for a number of years and are now required to work in collaborative teams that require sharing and opening the door to their classrooms with their peers. For years, teaching resembled individual private practice and now it has transitioned into a professional learning community where educators share teaching strategies, best practices, and resources to improve student learning (Drago-Severson & Pinto, 2006). Leadership practice that effectively promotes collaboration and provides opportunities for educators to work cooperatively and collaboratively together draws from the experiences

and expertise of others in an effort to improve the organization. The emphasis is not what students can learn or are taught in isolated classes, but what can be learned and taught in the organization as a whole while addressing a challenging curriculum with high and attainable standards (Drago-Severson & Pinto). A positive school culture with a challenging curriculum focused on high, attainable standards is cultivated through the ongoing collective work of administrators and teachers. Special education administrators not only have the challenge of building a positive collaborative environment, but also in the promoting of collaboration between general and special education teachers and general education administrators to assure that high quality educational programs are available to all students regardless of ability (Lashley and Boscardin, 2003). In order to meet the demands of the job, special education administrators must effectively distribute leadership tasks among multiple leaders and followers while simultaneously working collaboratively and collectively together. It is imperative to the success of educational programs that special education administrators and principals have a collaborative and cooperative relationship. Thus, it is the responsibility of special education administrators to prepare school-level administrators to understand the roles and responsibilities of special educators (Wald, 1998).

In a study consisting of 451 interviews from headteachers and teachers in 11 schools (4 secondary, 2 middle, 3 primary, and 2 junior/infant) in England, MacBeath, Oduro, and Waterhouse (2004) were able to develop six different approaches or perspectives to distributing leadership tasks. This study, sponsored by the National College for School Leadership, was conducted during the 2003 and 2004 years and represented both rural and urban settings. These six processes have been described as

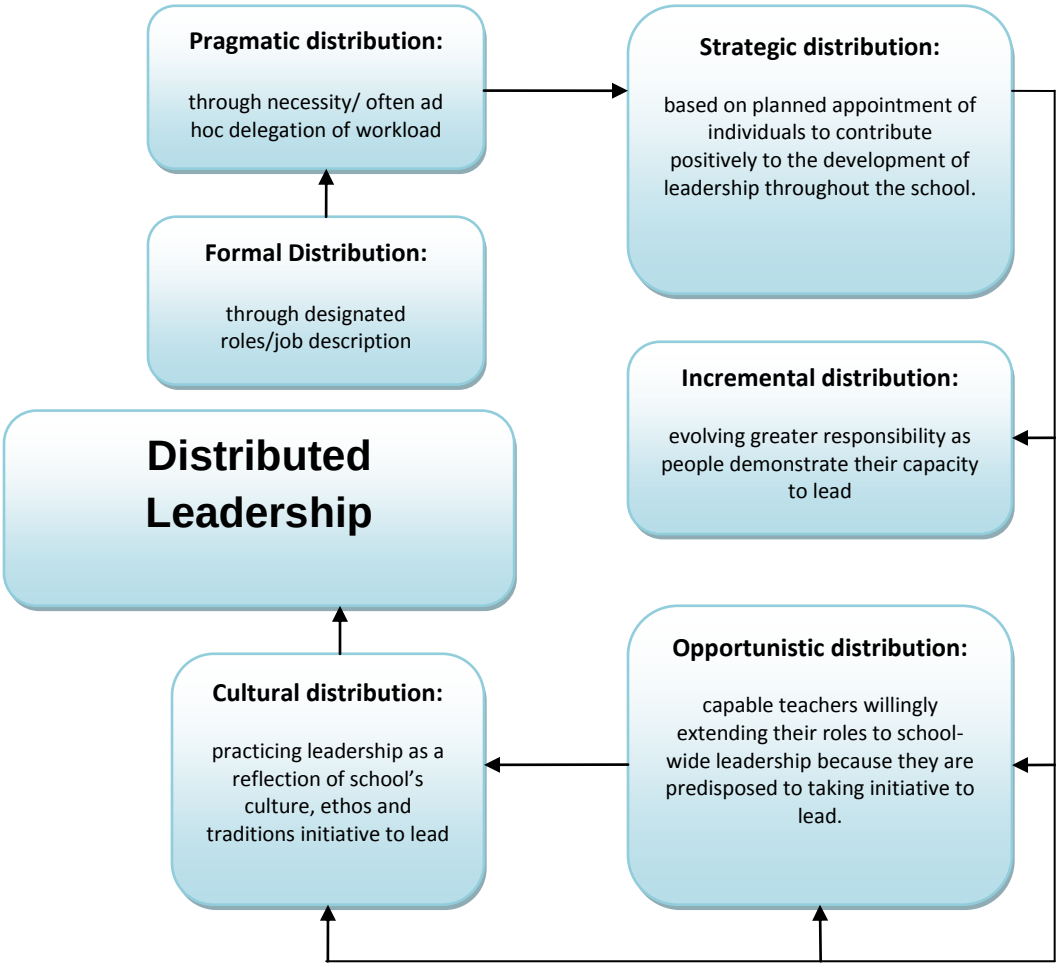
formal distribution, pragmatic distribution, strategic distribution, incremental distribution, opportunistic distribution, and cultural distribution. These six approaches are not defined as either being in isolation or as mutually exclusive of each other; however, when viewing the diagram shown in figure 2.1 below of these six approaches, a natural progression between the approaches is evident. In addition, MacBeath et al. state the categories are not "discrete or watertight" and "exemplify different approaches at different times and in response to external events" (p.35).

Each of the six approaches contains a unique function for distributing leadership tasks. Formal distribution recognizes the expertise of an individual and as a result, responsibility is assigned based on their specialized skills accompanied with performance expectations (MacBeath et al., 2004). Formal distribution provides a sense of ownership and accountability. On the contrary, pragmatic distribution is typically a reaction to external events. Additional tasks are given in response to heavy workloads that can often be associated with the implementation of multiple initiatives (MacBeath et al.). These added responsibilities are not always welcomed by staff. Strategic distribution is goal orientated and the appointment of individuals is largely based on their potential to work collectively with other leaders (MacBeath et al.). Formal, pragmatic, and strategic distribution is typically perceived as top-down leadership practices similar to the leadership practices of the Excellence Movement.

Incremental distribution is driven to support professional development and growth by increasing the responsibility of those demonstrating the capacity to lead. It is based on the belief that the capacity to lead is inherent in everyone, but requires mutual confidence of both leaders and followers to manifest (MacBeath et al., 2004). A shift to a

bottom-up approach takes place when transitioning into opportunistic distribution. It is based on the assumption that the relevance and strength of the initiative will result in capable individuals willingly extending their roles to leadership for the good of the organization. Similar to the leadership practices during the Restructuring Movement, opportunistic distribution provides greater job-site autonomy and individual empowerment. On the contrary though, the practice of opportunistic distribution does not

Figure 2.1
A Taxonomy of Distribution
MacBeath et al. (2004, p.35)



assign leadership, but disperses leadership among staff willing to lead, organize, and provide oversight (MacBeath et al.). Finally, cultural distribution represents the most effective approach to distributed leadership. Cultural distribution emphasizes leadership through activities rather than roles or individual initiative. MacBeath et al. state, "Distribution as a conscious process is no longer applicable because people exercise initiative spontaneously and collaboratively with no necessary identification of leaders or followers… Teamworking, leading and following, looking after others are a reflection of the culture, ethos and traditions in which shared leadership is simply an aspect of the way we do things round here" (p.43). The practice of cultural distribution relies heavily on trust and competence which can only be accomplished in a truly collaborative environment that has been embedded into the culture of the organization. Consequently, collaboration cannot be undervalued and is a necessity to maintaining accountability.

Further, the works of Billingsley (2011) and MacBeath et al. (2004) bring attention to the importance of the practice of distributed leadership in special education. Billingsley's statements of the importance of shared leadership, working with stakeholders towards developing a shared vision, and facilitating the development of a culture in the district is characteristic of MacBeath et al.'s description of cultural distribution. Both works emphasize the value of special and general educators working together as a community of people towards to common goal, which is imperative to providing a continuum of special education services to students with disabilities in their least restricted environment. In addition, Billingsley's statement in regards to expecting resistance and listening to concerns is also representative of the trust and reciprocity needed to achieve cultural distribution. Furthermore, both works outline the importance

for providing opportunities for professional development as well developing accountability systems for progress monitoring.

Developing a Distributed Leadership Model for Special Education

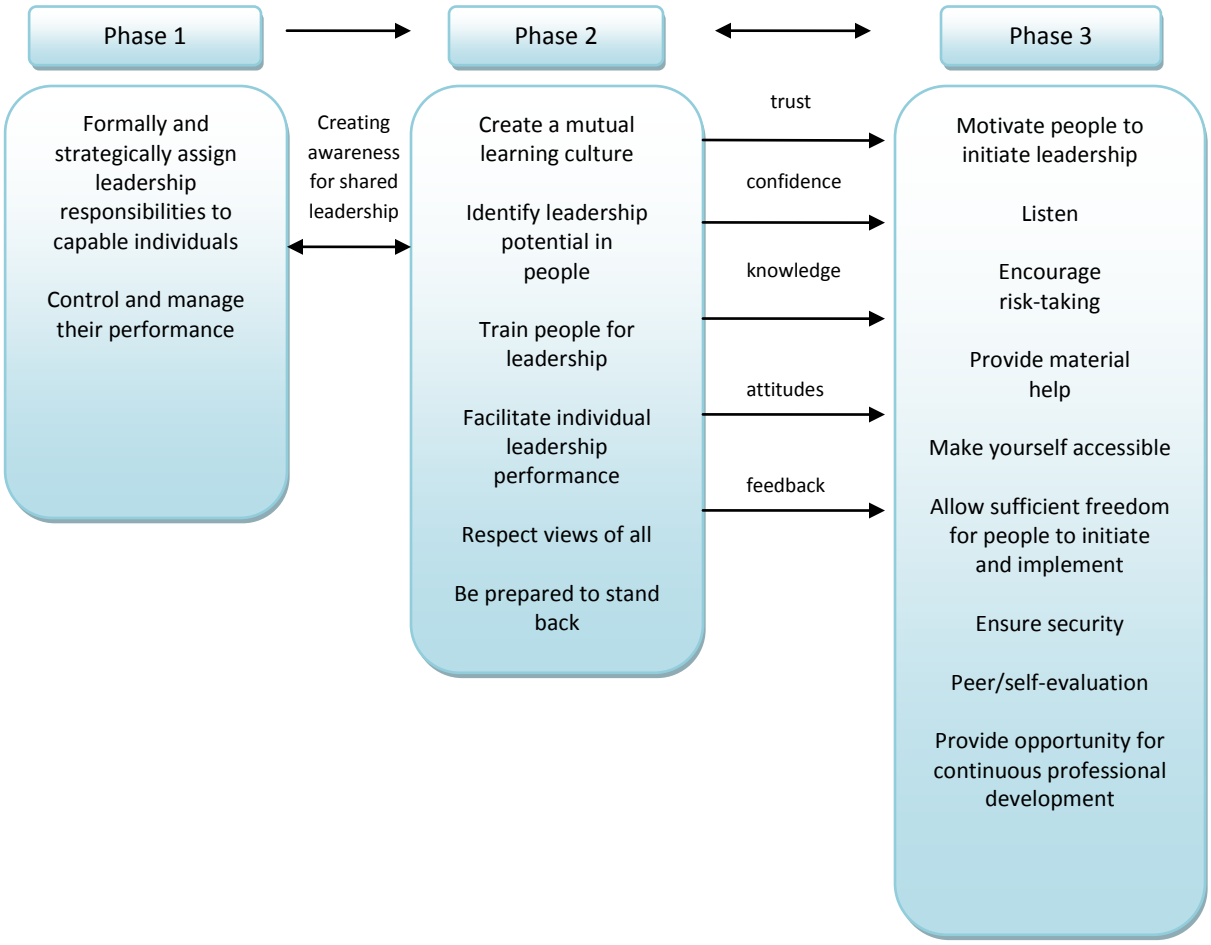
It is logical to associate the effectiveness of special education programs with the leadership practices of special education administrators. However, because the research is limited in this area, it is important to establish a relationship between special education administrators and special education teacher leaders, given there are distinctions between the two roles. A special education administrator is an educational leader who determines and articulates the educational standards and goals for special education programs to special educators through collaborative efforts that lead to enhanced opportunities for individuals with exceptional learning needs (CEC, 2009b). A teacher leader works collegially and collaboratively (Silva et al., 2000) engaging in the problem solving process at the building levels, mentoring new teachers, assisting with redesigning schools, and providing meaningful professional growth activities for colleagues (Darling-Hammond, Bullmaster, & Cobb, 1995; Billingsley, 2007). According to the CEC, the responsibilities and roles of a special education administrator include oversight of special education programs; assisting with program development and implementation; ensuring the quality of special education services; and being involved in the education process by working with teachers and parents (CEC, 2009b). Although few in the educational field would devalue the importance of collaboration to the role of special education administrator, there is lack of research available that measures the significance of impact that collaboration has on the effectiveness of special educator leadership practices. The majority of research performed on the impact of educational leadership analyzes the

effectiveness of various leadership practices and roles of principals, but few examine the role of the leader of special education. The abundance of research on school leadership of principals clearly indicates that leadership does have a direct impact on teaching and learning (Marzano et al., 2005). However, through the analysis of literature on the roles and responsibilities of special educators along with the defining characteristics of distributed leadership a connection can evidently be drawn.

MacBeath et al. (2004) published a report sponsored by the National College for School Leadership on "Distributed Leadership" in which they describe a model for sustaining distributed leadership. This model consists of three major phases of development for distributed leadership (see figure 2.2). And although the model was developed specially for schools, the three phases of development are applicable to larger district organizations, specifically special education departments. In summary, the three phases for sustaining distributed leadership developed by MacBeath et al. are described below:

- **Phase 1** begins as the educational leader, such as a special education administrator, learns the formal structures, history, and culture of the organization. As the (special education administrator) leader, becomes familiar with staff (i.e., special education teacher leaders) and their skill sets, leadership responsibilities are formally and strategically assigned to individuals that comprise of a leadership team. In addition, the leadership team builds a system of accountability by controlling and monitoring progress.

Figure 2.2
A Model for Sustaining Distributed Leadership
(MacBeath et al., 2004, p.46)



- **Phase 2** evolves as the scope of leadership incrementally includes other staff members (i.e., special education teachers, regular education teachers, paraprofessionals, etc.) that do not hold formal leadership positions in an effort to establish a shared leadership as well as a shared vision among staff indicating the mission of the organization. Conscious efforts are made to include all staff in decision making. The (special) educational leader strives to build a strong culture of collaboration that allows both

formal and informal opportunities to staff to learn from one another in effort to improve individual skill and collective practices. The success of the organization is based on the effectiveness of these collaborative efforts.

- **Phase 3** emphasizes sustainability. The organization has established a culture characterized by values of mutual trust, self-confidence and shared goals. The roles of leaders and followers can change according to the context of the situation. Because there is a collaborative culture in which there is a high level of trust, differences in values and work practices can both be tolerated and challenged.

Research indicates that the role of special education administrator continues to evolve and change (Lashley, 1992; Sullivan and Leary, 1991). Thus, distributed leadership naturally becomes a logical preference of leaders of special education based on the definition of distributed leadership as an interactive web of leaders and followers in which roles and responsibilities adjust accordingly to meet the changes within organization (Spillane et al., 2004). Typically, special education administrators serve their position from the district level similar to superintendents. This requires special education administrators to skillfully work with other district level leaders (i.e. superintendent, principals and curriculum director) to align the goals and objectives of the district with the need to meet the needs of students with disabilities. This is quite challenging for many special education administrators (depending on the state and district) because they often do not have the benefit of having input into programs, management, or supervision at the building base level. Thus, it is imperative that special

education administrators delegate responsibility effectively and work extremely well with others collaboratively.

As a result, special education administrators must have effective and well-informed special education teacher leaders at the building levels in order to maintain compliance with the regulations of IDEA 2004 along with state and local statutes while running well-designed programs that meet the students' needs. The accountability system that is established between special education administrators and teachers leaders is a necessary component for controlling and monitoring performance as described in the first phase of MacBeath et al.'s (2004) model for sustaining distributed leadership. The relationship between special education administrators and special education teacher leaders plays a pivotal role with meeting the individual needs of the students with disabilities.

Additionally, special education plays an essential role in attaining the high academic expectations that are commonly set in the curricular frameworks and standards at the state and local levels. MacBeath et al. (2004) state in their work when describing the second phase for sustaining distributed leadership, "(The) explicit purpose is to encourage a sense of collaboration… and a culture in which staff willingly use informal opportunities to discuss…learning and then reflect on their practice as a way of identifying their professional learning skills (p.47)." As mentioned earlier, special education administrators have the challenging responsibility of building a positive collaborative relationship with special education staff, but also in the promotion of collaboration between general and special education teachers and administrators to assure that high quality educational programs are accessible to all students regardless of ability

(Lashley and Boscardin, 2003). As a result, the roles and practices of leadership of special educators are equally as important as those of general educators. Crockett (2002) in an effort to assist decision makers converted five historical themes in special education into principles of administrative practice grounded in FAPE, LRE, and best practices. Crockett developed a framework which presents these five core principles as areas to be developed in the preparation of responsive leaders for inclusive schools. The principles are:

1. *Ethical Practice: Ensuring universal educational access and accountability.* This first principle develops moral leaders who are capable of analyzing complexities, respecting others, and advocating for child benefit, justice, and full educational opportunity.
2. *Individual Consideration: Addressing individuality and exceptionality in learning.* This principle develops leaders who are attentive to the relationship between the unique learning and behavioral needs of students with disabilities and the specialized instruction to address their educational progress.
3. *Equity Under Law: Providing an appropriate education through equitable public policies.* This principle develops leaders who are committed to the informed implementation of disability law, financial options, and public policies that support individual educational benefit.
4. *Effective Programming: Providing individualized programming designed to enhance student performance.* This principle develops leaders who are skilled at supervising and evaluating educational programs in general, and

individualized programming in particular, and who foster high expectations, support research-based strategies, and target positive results for learners with exceptionalities.

5. *Establishing Productive Partnerships.* The fifth principle develops leaders who are effective in communicating, negotiating, and collaborating with others on behalf of students with disabilities and their families.

By taking a closer look at these principles, one realizes that in order to reach the desired goals, an organization must first accomplish the last principle. This fifth and last principal emphasizes the importance of collaboration involving multiple stakeholders that includes both special and general education teachers and administrators along with the families in order to meet the needs of students with disabilities. Crockett goes on to state on the fifth principle that "because educating diverse learners is a complex task, establishing productive partnerships, encourages leaders to question how well the members of their own learning communities collaborate and how effectively they partner with parents and service agencies in responding to the needs of vulnerable youth and families". Special education leaders can only accomplish the five principles if they comprehend the size of impact of the disability along with students' needs, have high but reasonable expectations, and are well-educated and up-to-date on recent law. Because special education administrators do not generally supervise from the building base level, they must distribute leadership tasks by collaboratively working with others in order to effectively perform the duties and responsibilities of the job. The relationship between special education administrators and teacher leaders must be a collaborative partnership

based on trust in order to be effective as described in the third phase MacBeath et al.'s (2004) model for sustaining distributed leadership.

Table 2.2
Characteristics of Distributed Leadership Practices of Special Education Leaders

	Roles/Responsibilities	DL Framework
SPED ADMIN	Determines and articulates the educational standards and goals for SPED programs; Lead collaborative efforts; lead district wide initiatives such as student progress monitoring; being involved in the education process by working with teachers and parents (Boyer & Lee, 2001; Lashley & Boscardin, 2003; Walther-Thomas, Korinek, McLaughlin, & Williams, 2000)	Constructing and selling a vision; Building norms of collaboration; Providing both summative and formative monitoring; Supporting teacher growth and development; distributes resources, time, & support (Spillane et al., 2004)
SPED TL	Works collaboratively; mentoring new teachers; assists with redesigning schools; provides meaningful professional growth activities for colleagues (Darling-Hammond, Bullmaster, & Cobb, 1995; Billingsley, 2007; Silva et al., 2000)	Builds norms of collaboration; supports teacher growth & development; Constructs & sells a vision; distributes resources, time, & support (Spillane et al., 2004)

Summary

The characteristics of the distributed leadership practices discussed in this paper of special education administrators and teacher leaders are displayed in the above in table 2.2. Following the distributed leadership framework of Spillane et al. (2004), utilizing effective forms of collaboration is essential to successfully fulfilling the many responsibilities of special education leaders. Special education administrators demonstrating distributed leadership provide clear vision; however, distributed leaders also reassign roles among multiple leaders periodically depending on the context of the situation. Complementary to special education administrators are special education teacher leaders, who demonstrate distributed leadership by working collectively with multiple leaders and followers to support the vision (Spillane et al., 2004).

CHAPTER 3:

METHODOLOGY

Previously discussed was the importance of associating the effectiveness of special education with leadership practices of special education administrators; however, due to the limited scope of research conducted in this area, and the case is made for further investigation of the relationship between special education administrators and special education teacher leaders regarding perceptions about leadership and the narrowing of the focus to one particular type of leadership theory. While the literature review defined the roles and responsibilities of special education administrators and special education teacher leaders, it is unknown how each perceives distributed leadership practices. Consequently, the literature review was organized in a way that highlighted the purposes of leadership to demonstrate to the reader the importance of distributed approaches to leadership in order to effectively perform administrative and teacher leader responsibilities. As schools become increasingly more inclusive, both general and special education administrators must become increasingly more collaborative in order to meet the needs of diverse learners (Lashley and Boscardin, 2003).

The work of special education administrators has significantly increased, particularly over the last decade, as the laws have changed and strengthened with the reauthorization of Individuals with Disabilities Act 2004 and No Child Left Behind 2001. However, role ambiguity continues to be a problem for special education administrators (Edmonson, 2001). As described in Chapter 1, the roles and responsibilities of special

education leaders along with exploring and learning how special educator leadership tasks and activities are organized and structured differently across and within school districts, with some roles having a school-based focus while others have a district perspective.

Due to the complexities and nature of the job of a special education leader, it is essential to examine and question the distribution of leadership tasks. This study attempts to identify the most prevalent distributed leadership attributes that special education administrators and teacher leaders value the most and the least. Although school districts across the country have various organizational structures, educational services, and student populations; the examination of special education leadership is one that will continue to grow as school districts continue to be held more accountable for the education of all learners with laws such IDEA and NCLB. In this paper, the rationale for the study, participant selection, procedure, and data analysis is presented.

Research Design and Rationale

The primary purpose of this research is to explore the relationship between the distributed leadership practices of special education administrators and special education teacher leaders by using a mixed methods approach. As stated earlier, there is an overall dearth of research conducted in the area of special education leadership and it is the hope that this paper serves as a stepping stone for further research that will lead to a positive impact in the field of special education leadership and administration. This relationship has been explored by investigating the characteristics of Q-sorts performed by special education administrators and special education teacher leaders. The Q-technique is a method of rank-ordering variables followed by an assignment of numbers to those ranks

for statistical analysis (Kerlinger, 1986). In a Q-methodology study, subjects sort statements into categories based on their personal understandings of the concepts under investigation. Additionally, in a Q-methodology, the *n* for the study is the number of items (Q-sample) rather than the number of participants participating in the sorting activity. Through the quantitative analysis of the Q-Sort data it is possible to determine the priority given to each statement representing collaborative and distributive leadership traits.

The Q methodology was developed in response to issues with past practice that focused on the "external standpoint of the investigator" in which studies by the very nature they were constructed produced limited data for analysis (Brown, 1980, p.1). Studying leadership behavior in the context of any analytical framework that has been specified to be a priori has the potential to be problematic. Brown stated, "operational definitions place constraints on behavior by replacing the subject's meaning with the investigators" (p.4-5) because investigator attention is drawn to the constraints rather than to the behavior forcing the investigators in these types of studies to align their results to their operational definitions. Q methodology along with the application of factor analysis provides the investigator "flexible procedures for the examination of subjectivity within an operant framework" (Brown, p.6) and the ability to thoroughly explain factors in terms of commonly shared attitudes or perspectives.

In 1935, Sir Godfrey Thomson, a British factorist, published a paper describing the possibilities of calculating correlations between people instead of tests (VandenBosch, 2001). It was at this time that Thomson first introduced the technique "Q" in effort to differentiate from the traditional R technique; however, Thomson was

reluctant to carry the Q-techniques further (Brown, 1980). Coincidentally and almost simultaneously, William Stephenson was writing on the possibilities of performing person correlations and intrapersonal relationships (Brown; Stephenson, 1935). Thus, it was Stephenson who popularized the Q-methodology as a systematic research method of investigating individuals' judgments, attitudes, and perspectives on a particular topic or in a given situation (Brown, 1996; VandenBosch).

The Q-technique has been described as a very effective technique for the intensive investigation of a small number of people (Thompson, 1998; VandenBosch, 2001). A Q-technique factor analysis is used to identify types or clusters of people with similar perceptions (Thompson) by factoring people over variables holding circumstances constant (VandenBosch). According to Thompson, a Q-technique factor analysis serves to answer the three questions of: 1) How many types (factors) of people are there?, 2) Are the expected people most associated with the expected person factors?, and 3) Which variables were and were not useful in differentiating the various person types/factors?

Although factor analysis has been conceptually available since the early 1900s, its use has only become prevalent with the recent advances of technology and user-friendly statistical software packages (i.e. SPSS) (Thompson, 1998). Pertinent to the field of special education, Johnson (1993) used the Q-methodology to explore teacher attitudes towards the inclusionary model for students with special needs. The participants of this study consisted of 33 special education and regular education teachers. The Q-sort activity was comprised of 36 statements representing teacher perceptions regarding education models, special education students, and methodologies. The Q-sort instrument was adapted from "A Survey of Teacher's Opinions Relative to Mainstreaming Special

Needs Children" by Larrivee and Cook (1979). The Q-sort packages were delivered to special education teachers in each building who were then responsible for disseminating the packages to their peers.

In another study, Bracken and Fischel (2006) applied Q-sort methodology to the development of the Preschool Classroom Practices (PCP) Q-sort. The PCP Q-sort was tested on a sample of 66 preschool teachers and assistants and consisted of 49 classroom practice items. Bracken and Fischel reported that the items reflected a variety of activities targeted at developing school readiness skills in areas such as oral language, early literacy, art, early math, responsibility, self-control, and peer relations (p.420). Bracken and Fischel choose to have the participants complete the Q-sort independently at home in an effort to avoid possible influence by other program staff at their preschool center. Bracken and Fischel were available by phone to answer questions that arose during the completion of the Q-sort. In this study, the researcher was present during the Q-sort activity; however, the Q-sort activity and follow-up interview took place in an appropriate setting away from any influential external factors. Similarly to Johnson (1993), Bracken and Fischel were not present during their Q-sort activity.

An additional study on distributed leadership was conducted Militello and Janson (2007) exploring the working relationship between school principals and counselors. The purpose of this study was to investigate the perceived personal relationship between school counselors and principals through the use of a Q-sort methodology. Specifically, Militello and Janson explored the social and situational distribution of collaboration between both groups. 39 principals and school counselors participated in this study by sorting 45 opinion statements that the authors were able to develop and validate.

Participants sorted the statements into nine categories and prioritized the statements from "most characteristic of my relationship" to "least characteristic of my relationship". In addition to quantitative data, qualitative data was also collected as Militello and Janson followed-up each Q-sort activity with a brief interview to develop a stronger understanding for the participants' thought processes involved with the sorting of the 45 opinion statements.

Provost (2007) conducted Q-methodology consisting of 21 statements in a study investigating the leadership behaviors of principals. Provost utilized the 21 descriptors of principal leadership behavior previously validated for a questionnaire designed by Heck and Marcoulides (1993). In this study, the statements served as an activator for the underlying criteria and perceptions principals consider in regards to the behaviors of an effective principal. The results of this study were reportedly limited due to the sampling method and size (30 administrators), both of which prevented the findings of the perspectives of principals to be generalized (Provost, p.115). Provost focused on the leadership behaviors of principals which were broadly defined. Participants included principals, assistant principals, and other administrators in Massachusetts. Provost aligned comments of the rankings by factor and factor members adding depth to data interpretation.

As stated earlier, empirical support for distributed leadership is lacking (Harris, 2007) primarily due to only being in existence for the last decade. However, there have been recent advances by Hulpia, Devos, and Rosseel (2009) with the development of the Distributed Leadership Inventory (DLI). Hulpia et al. investigated the distribution of leadership among principals, assistant principals, and teacher leaders in large secondary

schools using an inventory that was developed specifically for their research study. In their work they sought to accomplish three goals: (1) examine the theoretical framework of distributed leadership with the development of the DLI; (2) describe the validation and reliability of the scores from the DLI; and, (3) use the results from the DLI to describe and analyze the perceptions of teachers, teacher leaders, assistant principals, and principals on distribution of leadership tasks in large secondary schools.

The DLI was developed and evaluated for the purpose of investigating "leadership team characteristics and distribution of leadership functions between formally designed leadership positions in large secondary schools." Hulpia et al. (2009) state that the DLI questionnaire, which contains 23 statements, "measures the perceived quality of leadership and the extent to which leadership is distributed" (p. 1014). The DLI breaks distributed leadership into the leadership functions of the leadership team members and the characteristics of the leadership team (Hulpia et al.).

Hulpia et al. (2009) state in their research that the development of the DLI was in response to their perceived need for a quantitative tool to assess distributed leadership, specifically in large secondary schools. For questions regarding leadership functions, respondents were required to rate the individual functions of the principal, assistant principals, and teacher leaders based on a five-point Likert scale ranging from never (a zero rating) to always (a four rating). Hulpia et al. developed 10 questions on the DLI pertaining to leadership functions which are based on the research studies of De Maeyer, Ryamenans, Van Petegem, van den Bergh, and Rijlaarsdam (2007), Hoy and Tarter (1997), and Leithwood and Jantzi (1999). The scales used in the questionnaire on leadership functions formed a two-component model that included support and

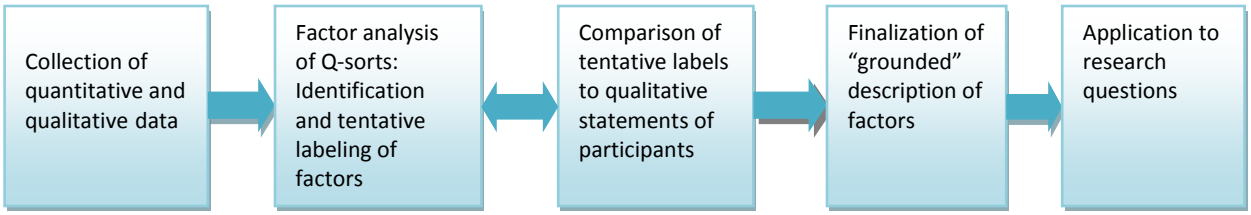
supervision. There are 13 questions on the DLI pertaining to leadership characteristics which are also based on a five-point Likert scale, ranging from strongly disagree (a zero point rating) to strongly agree (a four point rating). The questions related to leadership characteristics [were based on the works of Litwin and Stinger (1968), Rizzo, House, and Lirtzman (1970); and Staessens (1990)] resulted in a one-component model. According to the authors this component represented a coherent leadership team (Hulpia et al.). Although admittedly this study has its limitations, there was enough empirical evidence for Hulpia et al. to conclude that an "adequate" questionnaire was developed to investigate distributed leadership in schools or in organizations.

For this particular study, the Q-sorting activity requested that participants prioritize distributed leadership statements. To accomplish this prioritization task, participants relied on some subjective set of predilections and aversions using their belief and value systems. According to Stephenson (1953, p. 285), "Beliefs and values provide explanations of factors, and may reach into ego dynamics and other schemes for their theoretical substance." By sorting the leadership statements, participants revealed their perspectives about effective leadership attributes of special education leaders and the ones they value the most as well as least. Furthermore, comparisons have been drawn between the two groups of participants.

The sorts provided important information on which leadership statements were ranked positively, neutrally, and negatively among the participants. The qualitative data served as a 'safety net' by allowing the researcher to label perspectives that were revealed with the sorting and comparing of the participants' own statements, thus providing an explanation to why they sorted the statements as they did. As a result, this process

ensured that labels were not only connected to the correlations between sorts but also to the participants' statements about the sorts. A schematic diagram of the steps of the Q-sort process (Provost, 2007) is displayed in figure 3.1 below:

Figure 3.1 Q-sort Process: A Schematic Diagram (Provost, 2007 p. 47)



Research Questions

The primary purpose of this research is to develop a stronger understanding of the distribution of leadership tasks by leaders of special education. This study investigated leadership practices through the quantitative analysis of the Q-sort data by determining the priority given to each statement ranking by special education administrators and special education teacher leaders. In addition, rankings from the Q-sort were used to further describe the relationship of the Q-factors to demographic and district characteristics. The qualitative analysis of the personal interview processes with the participants regarding their sorting rationale and behaviors were used to describe attitudes or perspectives of the behaviors of effective leaders of special education. This research contributes to identifying future research needed to expand the understanding of distributed leadership practices in the field of special education, in addition to drawing conclusions regarding the current state of these leadership practices. The research questions that guided this investigation included:

1. Are there any clusters of participants who ranked the leadership statements similarly and differently?
2. Are the clusters related to demographic or personal characteristics associated with the participants?
3. Were there similarities as to how the items were ranked by the participants among the clusters?
4. Are there themes depicting the clusters based on the statement rankings?
5. To what extent is there a relationship between the cluster composition, demographic, and district variables?

It is the hope that other educators will find the results described in this study insightful and relevant in their own practices.

Definitions

The term "teacher leader" is well rooted in the traditional roles in public education that can include team leaders, department chairs, curriculum developers, and peer mentors/coaches (Murphy, 2005). Silva et al. (2000) described the development of teacher leadership in three distinct waves. The third and latest wave of teacher leader responsibilities include redesigning schools, engaging in the problem solving process at the building level, mentoring new teachers, and providing meaningful professional growth activities for colleagues (Darling-Hammond et al., 1995; Billingsley). This newest wave of development of teacher leadership is based on the values of professionalism, collegiality, and collaboration (Silva et al., 2000). For the purpose of this paper, special education teacher leaders are defined as special educators that serve as

building liaisons, department chairs, and/or team leaders at the district or building base level whose responsibilities are aligned with the core principals of the third wave of teacher leaders described (Silva et al., 2000). The values of professionalism, collegiality, and collaboration identified in the third wave are critical to improving teacher instruction, student programming, and student achievement. The title of the teacher leader positions were secondary to the responsibilities mentioned.

Approximately 30 years after the passage of the Education for All Handicapped Children Act of 1974 (P.L. 94-132, EAHCA), the special education administrator's traditional role of ensuring compliance with federal and state law remains critical, especially as the laws have strengthened (Crockett, 2002). A special education administrator is an educational leader who determines and articulates the educational standards and goals for special education programs to special educators through collaborative efforts that lead to enhanced opportunities for individuals with exceptional learning needs (CEC, 2009b). Special education administrators are expected to lead district wide initiatives such as the introduction of positive behavioral improvement supports, response to intervention, and student progress monitoring as schools become more inclusive and increasingly more collaborative (Boyer & Lee, 2001; Walther-Thomas, Korinek, McLaughlin, & Williams, 2000). Special education administrators' responsibilities also commonly include mediation and due process hearings, out of district placements, and issues involving suspension/expulsion, in addition to the daily responsibilities of managing or supervising special education staff (i.e. teachers, paraprofessionals, related service providers, etc.) and programs. In addition, it is not uncommon for special education administrators to be responsible for section 504 in their

respective districts; however, this does give the misperception that section 504 is a special education mandate when indeed it is a civil rights law (Yell, 2006b).

In circumstances in which the responsibilities of some participants resulted in difficulty differentiating their formal role as a teacher leader or an administrator, the roles of these participants were identified by their contractual status as a teacher or as an administrator.

Participants

Similar to Johnson (1993), Militello and Janson (2007), and Provost (2007) the selection of participants in this Q methodology was nonrandom. This research investigated the subjectivity of special education leaders with respect to the roles of special education teacher leaders and special education administrators. In Q methodology, participants are viewed as variables rather than sample items. Q methodology does not require a random participant sample because the objective is to intentionally access a range and diversity of pertinent attitudes and perspectives on the topic being investigated (Brown, 1980). The participants were selected from Massachusetts school systems for two reasons. The first and most important reason is Massachusetts has a high standard for licensing administrators of special education. As a result, selecting participants from Massachusetts compared to other states increases this study's validity. Massachusetts is the only state that incorporates the six CEC Administrator of Special Education Standards along with requiring a Master's degree, prior teaching and special education teaching experience, completion of a practicum; as well as course work in special education, special education administration, and education administration (Boscardin, Weir, & Kusek, 2010). It is essential to the quality of this

study that the participants had prior relevant experience in the field of special education along with meeting the requirements of *Highly Qualified* such as in Massachusetts. Secondly, Massachusetts requirements for licensure of special education administrators include having at least an initial license in a specialized educational role and three full years employment in an educational setting (Massachusetts Department of Education, 2003).

A non-random sample of 15 special education administrators and 15 special education teacher leaders were selected to sort the statements. The researcher selected 5 special education administrators whose districts are currently making AYP for both Math and English Language Arts (ELA), along with 4 special education teacher leaders whose schools are currently making AYP for both Math and ELA, as defined by state standardized test scores. An additional 10 special education administrators and 11 special education teacher leaders were selected whose districts/schools are labeled as underachieving in either Math or ELA or both. There were a total of 8 special education administrators that worked in districts that achieved AYP for the aggregate. However, three districts failed to make AYP because of the MCAS scores of their subgroups. Additionally, there were a total of 6 special education teacher leaders that worked in districts that achieved AYP for the aggregate. Two of these districts also failed to make AYP due to the scores of their subgroups. There was one additional teacher leader and special education administrator that worked in districts that made AYP for the aggregate only in the area of ELA. Overall, there were 9 participants total that work in districts that achieved AYP for both ELA and math, 7 additional participants that worked in districts

that achieved AYP for both ELA and math for the aggregate only, and 12 participants that worked in districts that did not achieve AYP status in any area.

This sample size afforded the researcher the opportunity to understand the role of special education leaders from a variety of perspectives in the achievement era. From a theoretic perspective, the sample size included special education administrators and special education teacher leaders working in school districts. The Q methodology is often criticized because of sample size referring to number of participants taking the Q sort; however, the structure of the sample usually allows for the possibility of explanation of any data that may be accumulated (Brown, 1980, p.173-174). Brown states only a few participants are required (e.g., in the range of thirty participants) in Q methodology. There needs to be enough to establish the existence of a factor for the purposes of comparing one factor to another (Brown, p. 192). Years of experience working in the role of special education administrator will likely vary among participants as some special education administrators have entered administration through various administrative programs and certification procedures. For this study, the researcher defined 'special education administrator' as the person that oversees the school district's special education programs and assists with program administration to ensure the quality of special education services to students with disabilities and their families, and work with teachers in the education process (CEC, 2009b).

The researcher defined 'special education teacher leader' as a person whose responsibilities include navigating the structures of schools, nurturing relationships, modeling professional development, encouraging effective change, and challenging the status quo for positive results (Silva et al., 2000). Special education teacher leaders serve

as building liaisons, department chairs, and/or team leaders at the building base or district levels. Two of the teacher leader participants in this study served their role at the district level. As a result, the data in table 3.2 is displayed for 13 special education teacher leaders in the categories of school enrollment, free and reduced lunch, and school AYP status. In this study, special education teacher leaders must have held a current Massachusetts educator license in an area of special education (i.e., Teacher of Students with Moderate Disabilities, 5-12) indicating the participants have demonstrated competence in field of special education by meeting the subject matter knowledge requirements of the Massachusetts Department of Education along with acquiring the needed pedagogical skills and knowledge through the completion of an approved teacher preparation program (Massachusetts Department of ESE, 2010). As a result of meeting these licensure requirements, the participants fulfilled their responsibilities to meet the Massachusetts Professional Standards for Teachers. In addition, years of experience working in the role of special education teacher leader varied among participants. Thus, this information allowed the researcher to access differences based on years of experiences.

Background information on the participants and their districts was collected in variety of methods that included a participant demographic questionnaire, the Massachusetts Department of Education website, and the participants' school and district websites. Tables 3.1 and 3.2 indicate the specific location for obtaining each datum. The characteristics of the participants' gender, age, ethnicity, years in current position, teaching experiences, number of years in the position, student enrollment, school district

enrollment, certification level, and education for both special education administrators and special education teacher leaders are also documented in tables 3.1 and 3.2.

For the purpose of this study, gender is defined as either male or female. Age is indicated by "year of birth". Classification for ethnicity included the following ethnic backgrounds: African-American or Black, Asian, Hispanic or Latino, Multi-race (Non-Hispanic), Native American, Native Hawaiian or Other Pacific Islander, or White. The vast majority of participants, 29 out of 30, were of the White background. Although the researcher would have liked to have a sample containing diversity, the reality is that diversity is nonexistent in the profession of special education. A statistical profile conducted by Bergert and Burnette (2001), reported that 87% of females and 80% males enrolled in special education teacher preparation programs were white. In addition, Bergert and Burnette reported that the ratio of males to females enrolled in special education teacher preparation programs was 1:6.

The category of years in the position was defined as the number of years that the special educator leader had been employed as either as special education administrator or special education teacher leader including years worked in the position of special education administrator or special education teacher leader in another school district prior to participation in the study. The majority of special education teacher leader participants were employed at the secondary level. This is attributed to a lack of leadership opportunities at the elementary school level. The 15 participants in the special education teacher leader category represented 10 school districts. Only one of the districts offered an elementary leadership position at the building base level. Teaching experience is defined as number of years accumulated at the pre-school, elementary, secondary, and

post secondary levels in both general and special education. Educational level is defined as participants holding the maximum level of education (e.g. a bachelor's degree, a master's degree, a master's degree plus 30 credits, a doctorate degree). Levels of current licensures included all licenses held by participants at the time of their participation in the study.

District data was gathered from the school district profiles on the Massachusetts Department of Education website. Following the organizational characteristics described by the Massachusetts Department of Education, the type of district will be classified as: institutional school, county agricultural, independent public, independent vocational, local school, regional academic, or regional vocational tech. Student enrollment is reported as greater than or less than 3,000 as opposed to the district's actual enrollment. School district profiles on the Massachusetts Department of Education provides actual enrollment. In addition, special education enrollment for districts is reported. This serves as a preventative measure to conceal the identity of the actual school districts and schools that participated in the study and to protect and to honor the confidentiality of the participants. In addition, the Massachusetts Department of Education provides certain demographic information. Tables 3.1 and 3.2 below outline the comparisons between each district's AYP status along with per pupil expenditures and per pupil special education expenditures. According to the Massachusetts Department of Education, the 2009 state average per pupil expenditure was $13,006 with 20.1 percent of total school district budgets being occupied by special education expenditures. Participants' per pupil expenditures and per pupil special education expenditure percents from their districts are shared (although participant and district identities remain concealed) which allowed for

comparisons to be drawn. District pupil expenditures and percents for general and special education students were collected from the Massachusetts Department of Education website. In addition, the percentages of students receiving free or reduced lunch were taken from the 2010-2011 school district directory profile information that is located on the Massachusetts Department of Education's website.

The district level student achievement data is reported in terms of the Massachusetts Comprehensive Assessment System (MCAS) scores, which is a measure of the distribution of student performance relative to achieving proficiency. The MCAS scores are artifacts that are used to measure AYP (Adequate Yearly Progress) for each school and district in Massachusetts. The MCAS was designed to meet the requirements of the Education Reform Law of 1993 for school law in Massachusetts. In addition, the MCAS meets the participation requirements for state standardized testing of No Child Left Behind 2001. MCAS is administered to students in grades three through eight, and grade 10 to evaluate their knowledge in the content areas of English Language Arts, Math, and Science. In order for students to earn a high school diploma, they must earn a passing score in each of the three areas before they graduate 12^{th} grade.

Table 3.1
Characteristics of Special Education Administrator Participants

Background Information	Group	Number of Participants	% of Participants
Current Position N=15	District SPED Administrator	12	80%
	Elementary SPED Administrator	1	7%
	MS SPED Administrator	1	7%
	K-8 SPED Administrator	1	7%
	HS SPED Administrator	0	0%
Gender N=15	Male	5	33%
	Female	10	67%
Years in Current Position N=15	Less than 5 years	6	40%
	5 or more years	9	60%
Level of Education N=15	Master	5	33%
	Master +30	9	60%
	Doctorate	1	7%
Teaching Experience N=15	Elementary	9	60%
	Secondary	10	67%
	Both elementary and secondary	4	27%
	General education only	4	27%
	Special education only	13	87%
	General and special education	3	20%

Background Information		Number of Participants	% of Participants
Age N=15	20-30	0	0%
	31-40	3	20%
	41-50	5	33%
	51-60	7	47%
Ethnicity	Hispanic/Latino	1	7%
	White	14	93%
District Enrollment N=15	> 3,000 student enrollment	8	53%
	< 3,000 student enrollment	7	47%
	> 17% (state average) special education student enrollment	10	67%
	< 17% (state average) special education student enrollment	5	33%
School Enrollment N=3	> 400 student enrollment	2	13%
	< 400 student enrollment	1	7%
Expenditures N=15	> $13,055 (state average) Per Pupil Expenditures	7	47%
	< $13,055 (state average) Per Pupil Expenditures	8	53%
	> 20.1% (state average) SPED expenditures as a percent of Total School Budget	13	87%
	< 20.1% (state average) SPED expenditures as a percent of Total School Budget	2	13%

Background Information		Number of Participants	% of Participants
Free and Reduced Lunch N=15	> 34.2% (state average) of district population	5	33%
	< 34.2% (state average) of district population	10	67%
Student Achievement N=15	AYP District ELA	5	33%
	Non-AYP District ELA	10	67%
	AYP District Math	5	33%
	Non-AYP District Math	10	67%
	AYP District ELA & Math	5	33%
	District Aggregate AYP ELA	9	60%
	District Aggregate AYP Math	8	53%

Table 3.2
Characteristics of Special Education Teacher Leader Participants

Background Information	Group	Number of Participants	% of Participants
Current Position N=15	ES Special Education TL	1	7%
	K-8 Special Education TL	1	7%
	HS Special Education TL	11	73%
	ES & Secondary SPED TL	1	7%
	District Special Education TL	1	7%
Gender N=15	Male	7	47%
	Female	8	53%
Years in Current Position N=15	Less than 5 years	6	40%
	5 or more years	9	60%

Background Information		Number of Participants	% of Participants
Level of Education N=15	Bachelor	1	7%
	Master	4	27%
	Master +30	11	73%
	Doctorate	0	0%
Teaching Experience N=15	Elementary	5	33%
	Secondary	14	93%
	Both elementary and secondary	4	27%
	General education only	1	7%
	Special education only	8	53%
	General and special education	6	40%
Age N=15	20-30	1	7%
	31-40	5	33%
	41-50	7	47%
	51-60	2	13%
Ethnicity N=15	Hispanic/Latino	0	0%
	White	15	100%
District Enrollment N=15	> 3,000 student enrollment	8	53%
	< 3,000 student enrollment	7	47%
	> 17% (state average) special education student enrollment	11	73%
	< 17% (state average) special education student enrollment	4	27%

Background Information		Number of Participants	% of Participants
School Enrollment N=13	> 1,000 student enrollment	7	54%
	< 1,000 student enrollment	6	46%
	> 17% (state average) special education student enrollment	10	77%
	< 17% (state average) special education student enrollment	3	23%
Expenditures N=15	> 20.1% (state average) SPED expenditures as a percent of Total School Budget	12	80%
	< 20.1% (state average) SPED expenditures as a percent of Total School Budget	3	20%
Free and Reduced Lunch N=13	> 34.2% (state average) of school population	5	38%
	< 34.2% (state average) of school population	8	62%
Free and Reduce Lunch N=15	> 34.2% (state average) of district population	6	40%
	< 34.2% (state average) of district population	9	60%
Student Achievement N=13	AYP School ELA	5	38%
	Non-AYP School ELA	8	62%
	AYP School Math	4	31%
	Non-AYP School Math	9	69%
	AYP School ELA & Math	4	31%
	School Aggregate AYP ELA	7	54%
	School Aggregate AYP Math	6	46%

Background Information		Number of Participants	% of Participants
Student Achievement N=15	AYP District ELA	6	40%
	Non-AYP District ELA	9	60%
	AYP District Math	4	27%
	Non-AYP District Math	11	73%
	AYP District ELA & Math	4	27%
	District Aggregate AYP ELA	6	40%
	District Aggregate AYP Math	4	27%

Item Selection and Instrumentation

According to Donner (2001), "there is no clear rule of thumb for the number" of items that should be included in a Q-sort activity, as sorts may include as few as 20 or as many as 60 items. However, Kerlinger (1986) argues that the optimal range of items is between 60 and 90. On the other hand, Schlinger (1969) recommends 55 to 75 as an adequate number of items in order to maintain validity without overwhelming participants as they sort statements. According to Brown (1980, p.200),

> "As a rule, Q samples smaller than N=40 can safely utilize a range of +4 to -4; from 40 to 60, a range of +5 to -5 is generally employed; beyond 60, =6 to -6 is not untypical, although there are few occasions for a wider range to be utilized since Q samples exceeding 60 are rarely required; most Q samples contain 40 to 50 items and employ a range of +5 to -5 with a quasinormal flattened distribution."

For this particular study, n= 40 indicating 40 distributed leadership statements. With regards to the range of distribution, the larger the number of statements, the wider the range of available scores should be (Brown). It is the belief of the researcher that 40 statements was a sufficient number of statements that would not overwhelm, confuse, or frustrate the participants; and at the same time resulted in yielding valid results.

In this study, the researcher incorporated items used in surveys and previous Q-sorts (Johnson, 1993; Militello and Janson, 2007; Provost, 2007; Hulpia et al., 2009; Mosley, 2011) to investigate the relationship between special education administrators and special education teacher leaders. The researcher analyzed how leadership is perceived among special educator leaders within school districts by having the participants complete a Q-sort ranking the items representing distributed and collaborative forms of leadership from "most necessary to the job as an effective leader of special education" to "least necessary to the job as an effective leader of special education". The statements were generated from the DLI (Hulpia et al.) and from statements in the work of Militello and Janson. Twenty-three of the statements were generated from the DLI which represent the DLI in its entirety. Hulpia et al. report in their research on the development of the DLI that the scores revealed internal-consistency reliability estimates greater than .79.

The work of Militello and Janson (2007) produced 45 concourse statements investigating how school counselors and principals perceive their professional relationship through the lens of distributed leadership. In this study, the 45 statements from work of Militello and Janson were reduced to 26 statements. Some statements were eliminated because they specifically address the roles of school counselors and/or principals and thus, irrelevant for the purpose of this study (e.g., Statement #5: *The principal's understanding of the national model for school counseling programs facilitates the relationship between the school counselor(s) and the principal.*). The additional statements were eliminated due to presenting a negative connation (e.g., Statement #4: *It is almost as if the school counselor role and the principal role are*

Table 3.3
***Distributed Leadership Inventory* (DLI) by Hester Hulpia, Geert Devos, and Yves Rosseel (2009)**

Statements #1-23 generated from the ***Distributed Leadership Inventory*** **(DLI) by Hester Hulpia, Geert Devos, and Yves Rosseel (2009)**

DLI: Coherent Leadership Team #1-10

1. ensure there is a well-functioning leadership team
2. ensure the special education leadership team behaves professionally
3. ensure the leadership team supports the goals we like to attain
4. ensure all members of the leadership team work in the same strain on the core objectives
5. ensure the right person sits on the right place, taken the competencies into account
6. ensure members of the management team divide their time properly
7. ensure members of the leadership team have clear goals
8. ensure members of the leadership team know which tasks they have to perform
9. ensure the leadership team is willing to execute a good idea
10. ensure members of the leadership team have clear roles and responsibilities

DLI: Support #11-20

11. premise a long term vision
12. debate the school vision
13. compliment teachers
14. help teachers
15. explain reasons for constructive criticism to teachers
16. be available after school to help teachers when assistance is needed
17. look out for the personal welfare of teachers
18. encourage teachers to pursue their own goals for professional learning
19. encourage teachers to try new practices consistent with their own interests
20. provide organizational support for teacher interaction

DLI: Supervision #21-23

21. evaluate the performance of the staff
22. be involved in the summative evaluation of teachers
23. be involved in the formative evaluation of teachers

almost set up to be antagonistic.). It was anticipated that the sorting these statements would fall in the negative continuum based solely on the semantics of the statements. Twenty-three statements were eliminated in total for these reasons. Some of the terms were changed in the remaining 22 statements to reflect the positions and professional working relationships of special education teacher leaders and special education administrators. For example, the terms *school counselor(s)* and *principal* were changed

to special education teacher leader and special education administrator. In addition, four of the statements expressed two concepts and therefore were broken into two separate statements. For example, the statement of "*The principal trusts the counselor(s) enough to make decisions and provide insight when needed."* was broken down into the statements of "*trust teachers enough to make decisions*" and "*provide insight to teachers*".

Table 3.4
45 Concourse Statements from Militello and Janson (2007)

1. The counselor(s) educate(s) the principal as to what the appropriate role of what a school counselor is based on the school counselor national model.
2. The principal makes sure that the counselor(s) has/have time to address the most important needs of students.
3. The school counselor(s) and the principal are in agreement as to what are appropriate school counseling responsibilities and tasks.
4. It is almost as if the school counselor role and the principal role are almost set up to be antagonistic.
5. The principal's understanding of the national model for school counseling programs facilitates the relationship between the school counselor(s) and the principal.
6. School counselor(s) do not have the skill set or training to make decisions in and around curriculum and instruction.
7. The principal allows the counseling department to function autonomously.
8. Administrative decisions made by the principal are often undermined by the school counselor(s).
9. The counselor(s) and the principal both understand that administrative tasks hinder the counselors' ability to work with students.
10. The principal and the school counselor(s) work together to develop programs that can benefit struggling students.
11. If forced to it, the principal would rather cut a teacher and increase class sizes in order to maintain an appropriately sized school counseling department.
12. The principal acknowledges the expertise of the school counselor(s).
13. The principal trusts the counselor(s) enough to make decisions and provide insight when needed.
14. The principal and counseling roles are pretty defined, but the principal and counselor(s) are not afraid to pitch in with each other's jobs.
15. The principal supports the counselor(s) in developing a leadership role in the school.
16. Communication between the principal and the counselor(s) is usually informal unless it is an important issue that requires documentation.
17. The school counselor(s) and the principal regularly discuss issues relative to the school improvement plan.
18. The school principal and the counselor(s) communicate openly with each other.
19. School counselor(s) and the principal collaborate on both issues of professional development and assessing instructional needs, but school counselor(s) have not been involved in any types of discussions regarding instructional evaluation.
20. Consultation between the counselor(s) and the principal does not occur on a whole lot of issues.
21. Counselors speak with teachers about administrative matters, but as colleagues, not as an administrator.
22. The school counselor(s) collect data on the ground and then lets the principal know about the smaller operational things the principal isn't able to track on a daily basis.

23. The principal and the school counselor(s) focus on analyzing appropriate interventions to better align action to the desired outcome and evaluating the degree to which this has been accomplished.
24. The school counselor(s) are not involved with the principal in instructional decisions or organizational practices to support effective instruction such as tracking or not tracking students, sequencing the curriculum, etc.
25. The school counselor(s) consult(s) with the principal in order to better understand how schools systems operate.
26. The counselor(s) and principal both understand the importance of confidentiality.
27. The counselor(s) and the principal consult regarding the teaching that they observed in the classrooms.
28. The principal is wary about consulting with school counselors on issues involving teachers.
29. The relationship between the principal and the school counselor(s) hinges on the belief that leadership should be distributed.
30. The counselor(s) and principal each value the other's tasks and responsibilities.
31. The principal is sometimes frustrated with how little the school counselor(s) share regarding student issues.
32. The counselor(s) do(es) not consult with the principal in regard to decisions involving students unless it is an obvious administrative decision that must occur.
33. The school counselor operates at the nexus of where administrative and instructional duties converge.
34. The principal views the school counselor(s) as providing ancillary services that only indirectly support student learning.
35. The principal and the counselor(s) agree that counseling services should include classroom guidance lessons.
36. The principal and the counselor(s) have different goals - the counselor(s) seek to remove barriers to the personal and academic success of kids; the principal seeks to protect the public perception of the school.
37. The relationship between the principal and the counselor(s) is one of interdependency.
38. If the parameters of the relationship between the principal and counselor(s) were clearer in the first place, the relationship wouldn't be so difficult.
39. Principal collaboration with the counselor(s) is integral to developing home-school relations - especially with challenging students and parents.
40. The principal understands that he/she is not a school counselor and the counselor(s) understand that they are not principals.
41. There are many facets of the school counseling and principal jobs that cannot be easily accomplished without mutual support, advice, and understanding.
42. The principal and counselor(s) are in agreement not to involve the counselor(s) in discipline.
43. The relationship between the school counselor(s) and the principal is more friendly than collegial.
44. Given the administrative function of the principal, the relationship between the counselor(s) and the principal is characterized by an element of fear.
45. The counselor(s) and the principal engage in specific discussions relative to closing the achievement gaps for traditionally underserved groups of students.

All 23 statements from the DLI and the additional 26 statements from the work of Militello and Janson (2007) produced 49 statements that were piloted before being finalized for this study. The 49 statements generated from works of Hulpia et al. (2009) and Militello and Janson were shared with a cohort of 8 special education leaders that are currently enrolled in doctoral special education leadership program at the University of

Massachusetts, Amherst. The cohort participated in a Q-sort activity involved in the sorting of the 49 statements listed in table 3.5 below:

Table 3.5

Distributed Leadership Statements

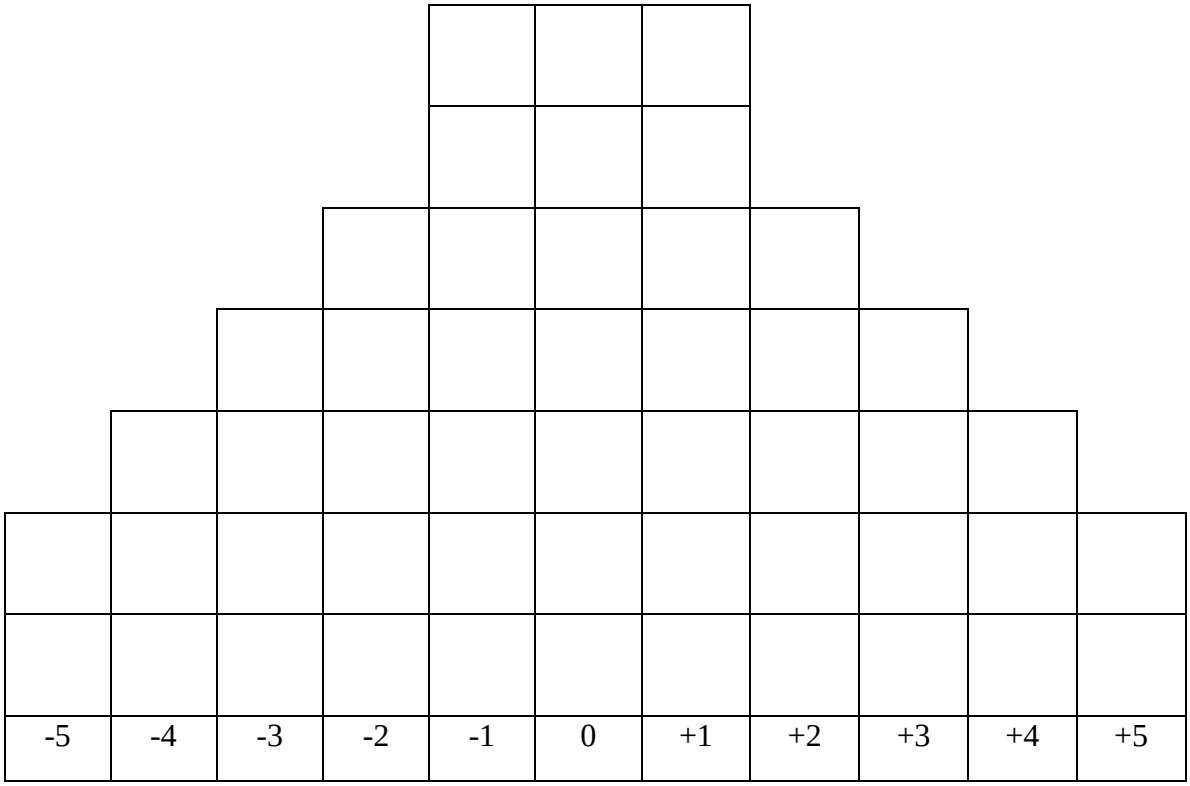
Sort statements from most necessary to the job as an effective leader of special education to least necessary to the job as an effective leader of special education…

1. ensure there is a well-functioning leadership team
2. ensure the special education leadership team behaves professionally
3. ensure the leadership team supports the goals we like to attain
4. ensure all members of the leadership team work in the same strain on the core objectives
5. ensure the right person sits on the right place, taken the competencies into account
6. ensure members of the management team divide their time properly
7. ensure members of the leadership team have clear goals
8. ensure members of the leadership team know which tasks they have to perform
9. ensure the leadership team is willing to execute a good idea
10. ensure members of the leadership team have clear roles and responsibilities
11. premise a long term vision
12. debate the school vision
13. compliment teachers
14. help teachers
15. explain reasons for constructive criticism to teachers
16. be available after school to help teachers when assistance is needed
17. look out for the personal welfare of teachers
18. encourage teachers to pursue their own goals for professional learning
19. encourage teachers to try new practices consistent with their own interests
20. provide organizational support for teacher interaction
21. evaluate the performance of the staff
22. be involved in the summative evaluation of teachers
23. be involved in the formative evaluation of teachers
24. ensure that teachers have time to address the most important needs of students
25. agree with fellow leaders of special education as to what are appropriate special education teacher responsibilities and tasks
26. allow the special education department to function autonomously
27. work together with teachers to develop programs
28. acknowledge the expertise of teachers
29. trust teachers enough to make decisions
30. provide insight to teachers
31. ensure roles within the special education department are clearly defined
32. allow some flexibility with responsibilities
33. support teacher(s) in developing a leadership role
34. routinely communicate informally to teachers
35. promote a professional collegial atmosphere
36. support open communication
37. collaborate with teachers on professional development
38. collaborate with teachers on assessing instructional needs
39. collect data on the ground to be shared collaboratively
40. assist special education teachers on analyzing appropriate interventions
41. consult with teachers
42. ensure that all staff understands the importance of confidentiality
43. consult with other district and/or school leaders on the teaching they observe

44. understand that the relationship with teachers hinges on the belief that leadership should be distributed
45. appreciate the work performed and the responsibilities involved with each staff member
46. understand that the relationship with teachers is one of interdependency
47. collaborate with teachers to develop home-school relations
48. understand that there are many facets involved with special education services that cannot be easily accomplished without the mutual support, advice, and understanding of other staff members
49. engage in specific discussions relative to closing the achievement gaps

This cohort was asked to perform two activities. First, the cohort was asked to participate in a Q-sort of the 49 items. The participants were requested to rank the 49 distributed leadership statements from +5 (most necessary of the job as an effective leader of special education) to -5 (least necessary to the job as an effective leader of special education) by using the following continuum shown in figure 3.2 below:

Figure 3.2
Q-sort diagram: Special Education Leadership Cohort



Participants were made aware that only 2 leadership statements can be assigned to the +5 column; 3 leadership statements to the + 4 column; 4 leadership statements for the +3 column; 5 leadership statements for the +2 column; and 7 leadership statements for the + 1 column. In addition, participants were instructed to follow the same procedures for the negative side of the continuum. Furthermore, 7 statements were assigned to the 0 column. This particular continuum is designed to allow for neutral sorted statements to be categorized in the middle rather than at the extreme ends. The participants completed the Q-sort individually but simultaneously spread out in two classrooms located on the university campus. The researcher was present while participants completed the sorts and provided support and clarification of directions upon request only.

Next, upon completion of the Q-sort, the participants were asked to respond to a specific set of questions regarding the statements. The researcher presented the participants with the follow-up questionnaire in which the participants were instructed to complete individually. In addition, the researcher notified participants that a whole group discussion facilitated by the researcher would take place upon completion of the questionnaire. The participants were instructed to hold onto their questionnaires for the follow-up discussion.

The follow-up sort questions were designed to document the participants' thoughts behind their sorts allowing the researcher to gain the necessary insight to improve the quality of statements to be used in this study. The purpose was to obtain feedback from the participants about the materials and process. It was anticipated that because the statements were generated from two separate studies on distributed leadership that there would be some redundancy among the items. Therefore, the cohort

Table 3.6
Follow-up Questionnaire: Special Education Leadership Cohort

Distribution of Leadership Tasks of Administrators and Teacher Leaders of Special Education Participant Follow-up Questionnaire

1) Please list any statements that are duplicate of each other.

2) Please list what statements should be eliminated. Briefly explain.

3) Please list what statements should be kept. Briefly explain.

4) What statements need changing (i.e. wording/language)? Please list any suggestions for changes.

was asked to identify any item redundancy to avoid unnecessary overlaps with the statements to be used in the Q-deck for this study. Feedback was also gathered about item clarity, accuracy, and appropriateness. Some statements were eliminated as a result of this process, or rewritten to conform to the Q-prompt guiding the sort.

At the completion of the Q-sort activities and follow-up questionnaires, the researcher engaged the participants in a whole group discussion regarding their sorts and follow-up questionnaires. Feedback was taken in effort to ensure the statements were written with clarity. Nineteen statements were eliminated during this process and 13 statements were rewritten to ensure clarity, accuracy, and appropriateness for the purpose of this research. The term "teacher" was changed to "educator" to allow participants to reflect on the numerous interactions that take place among multiple constituents. Feedback from two of the participants indicated that the word "ensure" carried a negative connation. It was suggested that for many of these statements the verb could be changed to *encourage, assist, consult,* etc. However, it was determined that by changing verb

would result in the loss of accountability associated with the word "ensure". As a result, it was determined by the researcher that the verb "ensure" would remain unchanged. In addition, some of the statements made reference to *leadership team* while other statements made reference to *special education leadership team*. Based on feedback, any reference to *leadership team* was changed to *special education leadership* team to provide clarity. As a result of this process the statements were reduced from 49 to 40 to eliminate some repetitiveness that was expressed through the follow-up questionnaires and discussion. For example, the statements of *ensure members of the leadership team have clear roles and responsibilities* and *ensure roles within the special education department are clearly defined* are repetitive. Consequently, these two statements were modified producing the one statement of *provide clear roles and responsibilities to members of the special education leadership team*. Furthermore, some statements were eliminated during the process as the researcher determined the concepts involved were not relevant for this study (i.e., debate a long term vision). Twenty-seven of the original 49 statements shared with the cohort remained completely intact.

The final set of statements generated were modified in response to the infinitive intentionally to obtain the participants' perceptions of effective leadership practices of special educators by attempting to limit personal basis that can be associated with the participants' current leadership position. Below in table 3.7 are the 40 distributed leadership questions that made up the Q-sort in this study.

Table 3.7
Distributed Leadership Statements

Sort statements from most necessary to the job as an effective leader of special education to least necessary to the job as an effective leader of special education is to…

1. ensure there is a well-functioning special education leadership team
2. be accountable for the professional behavior of the special education leadership team
3. ensure the special education leadership team supports the district goals
4. ensure all members of the special education leadership team work in the same strand on the core objectives
5. ensure people are assigned responsibilities based on competencies
6. ensure members of the special education leadership team divide their time properly
7. ensure members of the special education leadership team have clear goals
8. ensure members of the special education leadership team prioritize tasks they have to perform
9. ensure the special education leadership team is willing to execute a good idea
10. ensure members of the special education leadership team have clear roles and responsibilities.
11. provide feedback to educators
12. explain reasons for constructive criticism to educators
13. be available after school to help educators when assistance is needed
14. encourage educators to pursue their own goals for professional learning
15. encourage educators to try new practices consistent with their own interests
16. provide organizational support for educator interactions
17. be involved in the summative evaluation of educators
18. be involved in the formative evaluation of educators
19. provide educators with time to address the most important needs of students
20. allow the special education leadership team to function autonomously
21. work together with educators to develop programs
22. acknowledge the expertise of educators
23. trust educators enough to make decisions
24. allow some flexibility with responsibilities
25. support educator(s) in developing a leadership role
26. routinely communicate informally to educators
27. promote a professional collegial atmosphere
28. support open communication
29. collaborate with educators on professional development
30. collaborate with educators on assessing instructional needs
31. collect data on the ground to be shared collaboratively
32. assist special education educators on analyzing appropriate interventions
33. consult with educators
34. ensure that all staff understands the importance of confidentiality
35. understand that the relationship with educators hinges on the belief that leadership should be distributed
36. appreciate the work performed and the responsibilities involved with each staff member
37. understand that the relationship with educators is one of interdependency
38. collaborate with educators to develop home-school relations
39. understand that special education services cannot be accomplished without the mutual support, advice, and understanding of other staff members
40. engage in specific discussions relative to closing the achievement gaps

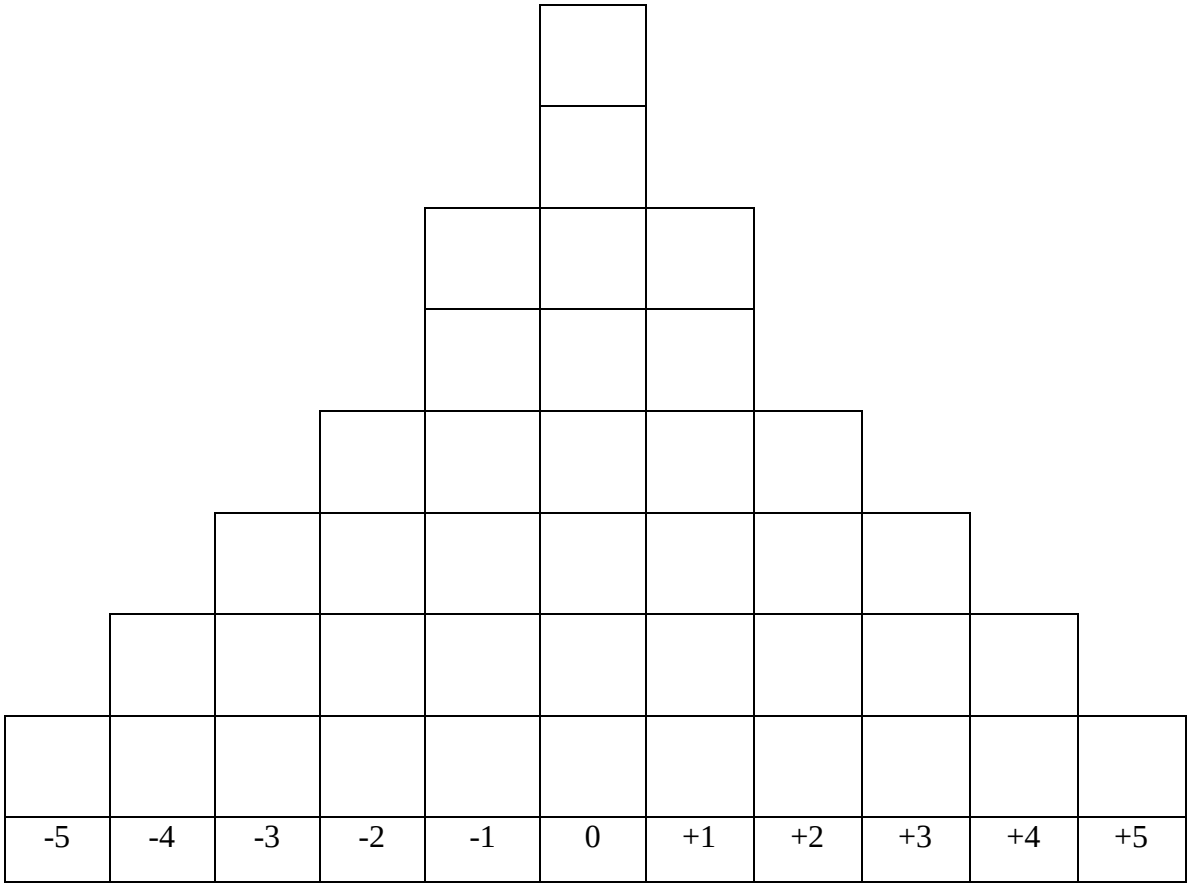
Procedure

In this study, special education leaders' sorting behaviors were first observed and then their perspectives were labeled and/or identified based on their sorts. In addition, there were no predetermined scales for participants to rank their items high or low, nor were participants asked to agree or disagree with any rank items in the sort. Participants did not receive positive reinforcements for statements they agree with, nor did they receive negative reinforcements for statements that they disagree with.

At the beginning of each special education leader session, participants were required to read and sign the consent form (See Appendix A). Next, participants completed 12-14 questions (depending on the information obtained from district and state websites) providing information on their personal backgrounds (i.e. gender, age, ethnicities, years of working as administrator, education background, etc.). The researcher gathered the demographic information about the participants, schools and districts prior to the sort. In the event that clarification of information was needed, inquires were made at the time of the sort. Participants began the Q-sorting activity following the completion of the personal background information form. Similar to the procedure of the work of Johnson (1993), the Q statements were adapted from previous works. The Q-sorting procedures require subjects to assign a specific number of statements to each column as indicated by the number of the blank cells (Donner, 2001). In Q-sort activity, the distribution of statements takes the form of a bell-shaped curve. In addition, the researcher explained to participants how to rank the 40 distributed leadership statements from +5 (most necessary to the job as an effective leader of special

education) to -5 (least necessary of the job as an effective leader of special education) by using the following continuum shown below:

Figure 3.3
Q-sorting Diagram



For instance, participants were made aware that only 1 leadership statement could be assigned to the +5 column; 2 leadership statements for the +4 column; 3 leadership statements for the +3 column; 4 leadership statements for the +2 column; and 6 leadership statements for the +1 column. Participants followed the same procedures for the negative side of the continuum. In addition, 8 leadership statements were assigned to

the 0 column. This particular continuum was designed to allow for neutral sorted statements to be categorized in the middle rather than at the extreme ends. Next, the participants responded orally to follow-up sort questions that were designed to document the participants' thoughts behind their sorts.

The researcher was present while participants completed the sort and provided support and clarification of directions. The researcher took precaution not to influence participants' answers and only answered clarifying questions when needed or upon request. On average, participants needed 45 minutes to complete all of the required tasks in the study. Copies of all printed materials that were given to the participants are located in Appendix A of this study.

Following the completion of the Q-sort activity, each participant participated in a structured interview. The follow-up questions allowed the researcher to gather qualitative data on 1) the participants thought process in regards to completing the sorts, 2) the strategies participants utilized to rank the distributed leadership statements, 3) any particular difficulties with ranking of the statements, and 4) issues or thoughts that arose while completing the Q-sort activity. The interview contained questions that captured the participants' thought process involved with the Q-statements rankings and the process of prioritizing the distributed leadership tasks during the sorts. An essential component of the follow-up interview was to gather qualitative data on the participants' explanation (Brown, 1980) as to why they ranked specific statements most and least necessary as en effective leader of special education (see appendix). The interviews combined with the rankings provided insight into the participants' attitudes and perspectives (Brown, 1980) and helped to establish areas of need for professional development (i.e. mentoring). The

participants answered the questions with the researcher present. However, the researcher was only present to provide clarification and support, but not to influence the participants' responses. The follow-up questions are listed below:

Table 3.8
Q-sort Follow-up Questions

1) Briefly describe what went into your choices of statements that are "most necessary to the job as an effective leader of special education?(+4's and +5).
Please list the one statement in the +5 column and your reasons for placing it there.

2) Briefly describe what went into your choices of statements that are "least necessary to the job as an effective leader of special education? (-4's and -5).
Please list statement in the -5 column and your reasons for placing it there.

3) If there were other specific statements that you had difficulty placing, *please list the number of the statements and describe your dilemma.*

4) What other issues/thoughts emerged for you while sorting the cards?

5) Describe how you arrived at your overall most important statements of the job as an effective leader of special education regarding the distribution of leadership tasks/responsibilities?

6) Describe how you arrived at your overall least important statements of the job as an effective leader of special education regarding the distribution of leadership tasks/responsibilities?

7) What factor(s), e.g., time, resources, your own knowledge, your skills, and/or your dispositions, contributed most to the sorting through the distributed leadership statements? *Please give specific examples for each if applicable*.

Data Analysis

Participants were asked to rank 40 distributed leadership statements. In addition, the researcher compared participants' sorts to determine whether there were themes, patterns, and/or differences among them. As a result, the researcher was able to make inductions based on the participants' sorts. For example, the researcher was able to determine whether participants sorted statements in a random manner or whether there were clusters of participants who produced identical sorts, which would indicate shared

perspectives about leadership attributes. This process allowed the researcher to make generalizations on the participants' sorts.

The qualitative data collected through the use of follow-up interviews with the participants allowed for the description of each group's attitudes or perspectives of the behaviors they envisioned of effective special education leaders. The pre-sort questionnaires collected important demographic and district data. Rankings from the Q-Sort data were used to assist with the description of the relationship of the demographic and district characteristics, and comparisons were also drawn here.

Analyzing both the qualitative and quantitative data revealed the presence of valued distributed leadership attributes; ranked categories for special education leadership qualities; and essential leadership qualities special education administrators possess when distributing leadership tasks through their school districts. Participant's responses from the above questions provided further details into the manner in which they value leadership attributes. When discrepancies were present in the data, the researcher analyzed and explained the anomalies by using multiple methodologies. Throughout the study, qualitative and quantitative data was collected simultaneously, but analyzed at different stages throughout this process. The quantitative methods were essential with establishing meaning with regards to the sorting. Through the analysis of correlations, the researcher was able to identify the sorting patterns or themes of participants.

The computer software, (Statistical for the Social Sciences) SPSS was used to analyze the results of the participants' sorts. First introduced in 1968, SPSS is widely used in the field of social science, statistics, and mathematics. Its statistic software

includes descriptive statistics, bivariate statistics, prediction of numerical outcomes, and prediction of identifying groups. For this particular study, the SPSS method was useful in creating several descriptive statistics to evaluate the study's data. For example, this software is capable to produce the following: 1) the mean rank 2) factors 3) correlations, and 4) z-scores. As a result, the mean rank of each distributive leadership statement was calculated to determine the extent to which the participants, as a cluster, perceived each statement as being characteristic of an effective attribute of special education leaders. Finally, the correlations among the sorts were calculated and factors were monitored and extracted from the data. Z-scores were calculated for leadership statements through the use of factor analysis.

A correlation matrix was constructed to determine the extent of similarities between the different sorts. In summary, the correlation matrix searched for consistency within the clusters of participants. In addition, correlations that exceed two times the standard error in either direction are significant (Brown, 1992). The estimate for the standard error is $1\sqrt{N}$, where N is the number of statements (N=40 in this case). As a result, the value is $1\sqrt{40}= 1/(6.71)= .15$. Statistically, alike correlations suggest that similarity in the sorts among the participants cannot be explained by random variations and thus, the participants hold similar perspectives about the most and least important attributes necessary to the job of effective leader leaders of special education. Conversely, statistically different correlations are interpreted as dissimilarities among sorts of the two participants and therefore cannot be explained by random variations resulting in the participants having differing perspectives on attributes of effective special education leaders.

Factor analysis is a well accepted method for reducing the multiplicity of tests, variables or other entities and is used by researchers to explore the underlying latent variables that make up a certain construct and with analyzing two-dimensions or modes (Kerlinger 1986; Gorsuch, 1983; VandenBosch, 2001). Using the principal components method, factors were extracted and the eighenvalues for each of the components were compared to determine the number of components to carry out the analysis. The principal components method is commonly used in empirical applications as an 'aggregating technique' and can be described as "a pure data reduction technique that seeks linear combinations of the observed indicators" designed to replicate as closely as possible the original variance (Krishnakumar and Nagar, 2008). The factor analysis identified clusters of participants who sorted the distributed leadership statements similarly in a way that separated themselves from the rest of the participants' sorts as to represent common perspectives about the leadership attributes of special education leaders. Additionally, the factor analysis identified patterns of magnitude in the correlation matrix among sorts. A scree plot was constructed to determine the number of factors and the strength of each factor that contributed to the variance observed in sorts. Once constructed, the scree plot illustrated the factors that were present prior to the break or elbow that is formed in the line. In summary, the scree provided a visual of the significant eigenvalues that resulted in indentifying factors compared to the remaining eigenvalues that are insignificant and fail to identify factors.

The calculated principle component scores will be used to determine leadership statement rankings of items within each factor. Statements ranked least necessary to the job of an effective leader of special education (-5), neutral (0), and most necessary to the

job of an effective leader of special education (+5), will be closely examined to determine whether there are any commonalities among the statements at the top, in the middle, and at the bottom that reveal possible criteria used by the participants to sort the statements.

The constant comparative method of data analysis is a popular technique used in most qualitative methods that includes grounded theory (Merriam, 1998). This method consists of examining 'chunks' of data to identify meanings or patterns that may exist among the data. In this study, participants' quotes from the follow-up questionnaire were compared to the tentative labels assigned to the sorts, which allowed the researcher to utilize grounded theory to create labels within the qualitative data. Grounded theory is a unique approach to interpreting qualitative data (Glaser & Strauss, 1967; Merriam).

Grounded theory as prescribed by Merriam (1998), assists with the: 1) identification of appropriate labels and/or categories for the perspective, 2) description of the components of the labels, and 3) explanation of theory regarding the combination of components used to create the perspective described by the labels.

Labels, Dimension, Descriptors, and Hypotheses

The purpose of creating labels is to correctly reflect specific leadership perceptions, to include all data that is pertaining to specific distributive leadership practices, and to take into account data that is not pertaining to specific distributive leadership practices. In this study, the term 'label' maintained the same meaning as it would in a qualitative study. For this study, the qualitative data was effectively used in the development of dimensions because the qualitative questions are designed to force the participants to think about their choice selections and supply the researcher with additional information about their sorts. Appropriate labels were constructed to describe

the sorts, using both item rankings and the qualitative statements of participants. Essentially, the qualitative questions asked participants to reflect about their choices in their selections during the sorting activity. Participants' responses provided the researcher with details about the dimensions and their personal beliefs regarding the important leadership qualities of distributive leadership.

Similar to labels, descriptors identify and describe concepts in data. However, descriptors are primarily used to illustrate and/or provide descriptive details for labels. As a result, descriptors recognize subcategories that break the labels into various parts. The relation between descriptors and labels is comparable to the relation between "properties" and "categories" described by Merriam (1998).

The development of hypotheses connected the dimensions to the labels and provides a more comprehensive explanation of the subjectivity of the participants (Merriam, 1998). The questions are designed to phase out each participant's subjectivity as several of the questions require the participants to elaborate on their thinking processes that will be used during the sorting of statements. Participants' answers were useful when developing hypotheses about the criteria that leads to the motivation pertaining to the placement and arrangement of the sorting of statements.

An overall framework emerged through the process of constantly comparing incident with incident, comparing incidents with emerging conceptual categories, and reducing similar categories into a smaller number of highly conceptual categories (Merriam, 2003). In summary, categories can be defined as a classification of similar concepts and serve are the foundation for generating theory through the process of coding (Strauss and Corbin, 1990).

Summary

This study's research questions are factual in addition to being viewed as interpretive. As a result, the quantitative section of this study is used to respond to the factual questions in relation to effective attributes of special education leaders. Furthermore, the Q-methodology found clusters of people that demonstrate similar as well as different responses to the distributed leadership statements. The researcher interprets the participants' responses in effort to establish an understanding of the reasoning involved with their sorts and on their perspectives on special education leadership. At the conclusion of the study, the researcher was able to develop labels for various perspectives, explain the dimension of participants' perspectives, determine if participants' sorts are similar or different based on demographic factors, and was able to discuss the specific leadership attributes of special educators that participants' value the most as well as the least.

Through the use of quantitative and qualitative research methods, the researcher investigated the preferred leadership practices of today's special education leaders. This study helps to understand under what circumstances special education administrators and teacher leaders in Massachusetts may develop their leadership style and have opportunities of growth in this area. In addition, this study outlines some of the benefits and hindrances associated with the engagement of distributing leadership tasks. The results provide special education leaders with some understanding of what leadership characteristics to look for when considering professional growth and employment opportunities. This is particularly important in the development of well-rounded administrators in any field. In closing, chapter 3 clearly outlines the process and

methodology the researcher implemented to develop a better understanding of the decision making processes of special education leaders in regards to prioritizing the daily demands of the job within the practical world by using a variety of measurements.

CHAPTER 4:

FINDINGS

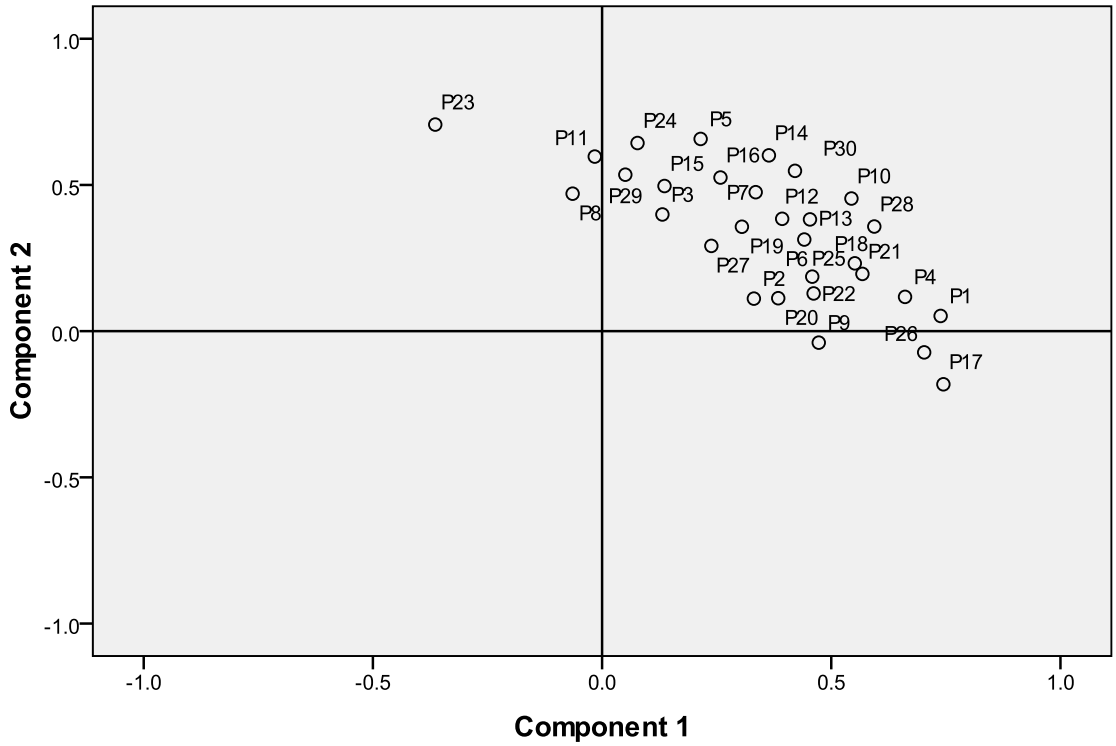
The results of participants' perceptions of distributed attributes in this study are delineated in this chapter. The research questions provide the organizational structure for discussion about the findings in this study of special education leadership. Quantitative and qualitative data are used to answer five research questions as well as capture the factor member's perspectives and comments with respect to distributed leadership attributes. The identification of leadership attributes invoked both positive and negative reactions from Massachusetts special education administrators and teacher leaders who participated in the study. Using the data, it was possible to uncover salient labels and descriptors that explain the participants' perceptions of distributed leadership attributes and the reasons for their decisions involved in the sorting.

Factor Membership

The data was initially subjected to factor analysis to determine if any of the participants sorted distributed leadership attributes similarly to form distinct groups. Using the principal component method, factors were extracted and the eigenvalues for each of the components were compared to determine how many components to carry forward in the analysis. Initially, participants' sorts were plotted to illustrate similarities and differences among the sorts (see figure 4.1). The graph shows three participants (P12, P13, and P19) who marginally fit clusters and one participant (P27) who did not fit into a cluster on the component plot. Participants that marginally fit clusters were determined through visual inspection and calculation when verifying those participants whose sum of the squared factor loadings (a^2) score fell within .03, half the common

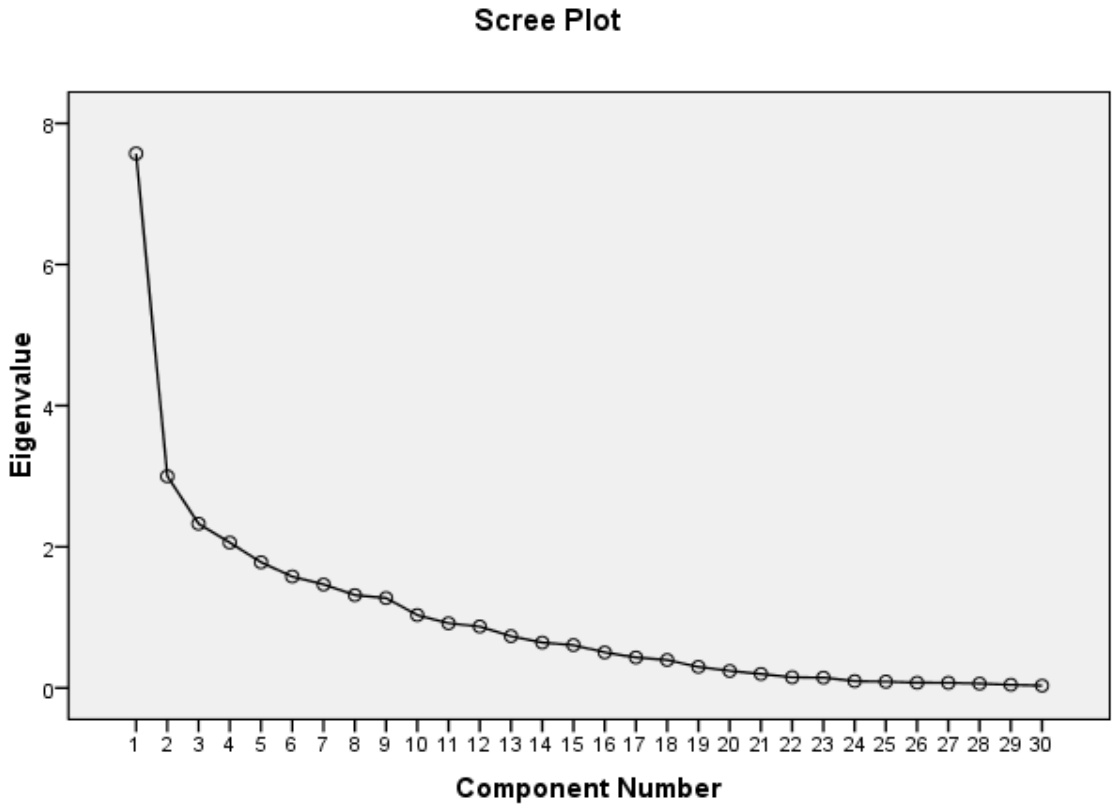
variance ($h^2/2$). P12 was the only participant that had the same number of years teaching at both the elementary and secondary levels, and was the only participant to have administrative experience at all three levels (Pre-k, elementary, and secondary). P13 was the youngest administrator that participated in this study. P19 was one of only two participants that had experience teaching at the postsecondary level. P27 was the only k-8 building based administrator in this study.

Figure 4.1
Component Plot in Rotated Space



The scree plot (see figure 4.2) was then used to validate that two factors or groups of participants from the entire sample could be distinguished from the sorts of the group as a whole and contributed to most to the variance observed in the sorts prior to the break or elbow on the plot line. Factor A had an eigenvalue of 7.573 and Factor B had an eigenvalue of 2.999. Factor A members recorded higher factor scores on the scatter plot than Factor B members. This was not surprising given it was the stronger factor of the two factors in terms of the eigenvalues. The remaining eigenvalues were insignificant, as they did not result in identifying factors as shown by the leveling of the plot slope.

Figure 4.2
Factor Scree Plot



While a high number of statistically significant positive correlations were found among the special education leaders who participated in the Q-sort, there were no statistically significant negative correlations that exceeded the .05 levels. Correlations that exceed two times the standard error in either direction are significant (Brown, 1996), in this case the value is $1/\sqrt{\#\text{ of Cards}}$ = 1/6.325 = .158. Participants associated with Factor A generally sorted leadership statements similarly, as did the participants connected to Factor B, resulting in each factor demonstrating significant correlations ($p \leq .05$) among its group members. For example, Participants 1 and 2 had a significant correlation, and later both were found to be members of Factor A (see table 4.1).

A "***pre-flagging algorithm"*** developed by Schmolck (2002) was used to determine factor membership. Two conditions had to be met for participants to be assigned membership to a particular rotated factor: (1) $a^2 > h^2/2$ (factor 'explains' more than half of the common variance) where *a* is the factor loading and "$h^{2"}$ is computed as the sum of the squared factor loadings (a^2) for the number of factors extracted (Schmolck, 2002, p.15)"***and*** (2) a significant factor loading by participants at either the *p<.01* or *p<.05*. The "h²" value was computed through the extraction method of principal component analysis utilizing SPSS software. The standard error is calculated by dividing 1 by the square root of N, where N is the number of statements/items, $1/\sqrt{40}$ = .158. The value for *p* is then calculated by multiplying the standard error (σ = .158) by the selected level of significance, +/- 2.58 for *p<.01* (2.58 x .158) and +/-1.96 for p<.05 (1.96 x .158) which equal .408 and .31, respectively. Rotation of a given number of extracted (rotated) factors, does not change communality coefficients. For example, to be a member of Factor A, P1 needed an *a* score that exceeded .31 (p<.05) and an a^2 that

Table 4.1
Correlation Matrix Between Sorts

1	**100**																												
2	**36**	**100**																											
3	18	19	**100**																										
4	27	31	23	**100**																									
5	12	09	30	24	**100**																								
6	**34**	12	20	**47**	27	**100**																							
7	**36**	03	**43**	23	27	**45**	**100**																						
8	*-03*	*-21*	10	*-13*	**40**	*-02*	16	**100**																					
9	31	10	23	15	29	09	*-01*	*-01*	**100**																				
10	**49**	31	**38**	**42**	**51**	**52**	**48**	05	**33**	**100**																			
11	09	07	**35**	28	**39**	07	15	**23**	*-04*	27	**100**																		
12	33	16	15	09	31	17	**39**	-01	26	**39**	00	**100**																	
13	31	06	25	25	**37**	*-03*	25	27	30	25	30	**43**	**100**																
14	28	03	17	26	**44**	23	**45**	17	16	**54**	**35**	**43**	**33**	**100**															
15	03	05	*-13*	02	29	18	11	17	*-09*	25	21	24	**42**	**34**	**100**														
16	**33**	11	03	17	28	**41**	21	26	*-05*	14	23	26	13	**52**	25	**100**													
17	**54**	20	02	**43**	05	09	**34**	14	25	15	*-21*	26	**42**	12	*-07*	09	**100**												
18	**37**	27	19	**55**	30	**48**	**34**	*-10*	15	**39**	08	20	22	13	21	11	27	**100**											
19	15	09	27	20	**39**	06	25	01	15	**38**	**33**	26	**51**	**37**	**32**	08	10	08	**100**										
20	08	02	12	23	11	20	13	05	**34**	**32**	03	05	25	03	**36**	*-10*	17	**47**	23	**100**									
21	**47**	*-07*	23	**34**	02	22	**33**	13	18	28	18	19	**45**	**43**	26	22	**33**	**41**	23	**35**	**100**								
22	30	**39**	25	**41**	27	13	*-04*	05	23	**32**	15	**34**	27	02	12	09	29	26	13	25	15	**100**							
23	*-20*	09	11	*-05*	**32**	18	15	20	*-15*	09	**37**	08	02	17	30	28	***-45***	24	*-07*	*-02*	*-09*	*-09*	**100**						
24	15	27	21	06	25	**35**	**33**	**36**	07	26	18	31	11	27	**35**	**47**	*-01*	10	05	16	13	**34**	**53**	**100**					
25	20	30	*-11*	**49**	30	17	*-05*	**34**	14	18	25	12	29	19	14	29	**36**	28	09	04	23	**34**	02	16	**100**				
26	**53**	04	***-21***	**39**	09	**48**	16	*-12*	22	28	*-08*	12	15	31	26	**49**	**43**	23	20	23	29	13	***-34***	*-01*	26	**100**			
27	25	16	*-12*	**33**	*-02*	**39**	24	02	*-25*	16	08	30	04	23	15	**44**	17	16	16	*-15*	10	11	29	**41**	19	29	**100**		
28	**39**	18	*-01*	29	**38**	**32**	10	28	**45**	**43**	10	**43**	31	**49**	26	**48**	27	**37**	20	26	**34**	26	09	**33**	**48**	**48**	30	**100**	
29	05	18	**38**	04	**42**	15	31	13	*-01*	29	22	**35**	23	20	17	**26**	*-01*	25	16	28	*-04*	17	28	19	02	01	*-03*	13	**100**
30	30	17	22	**32**	**39**	12	**52**	**33**	06	29	31	28	**53**	**65**	26	**43**	**42**	29	**34**	12	**50**	01	14	26	28	22	15	**42**	30	**100**
	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

*Expressed in 1/100ths with values in bold indicating statistically significance at the .05 level

exceeded .274 or $h^2/2$. As another example, for Factor B membership, P3 needed an *a* score that exceeded .31 ($p<.05$) and an a^2 that exceeded .089 ($h^2/2$).

In addition, there were a high number of statistically significant positive correlations among the special education leaders that participated in this study. The correlation matrix between sorts is illustrated in table 4.1. Statistically significant correlations *($p<.05$)* have been displayed in boldface type, and sorts with a negative correlation have been italicized. The correlations validate factor or group membership. Participants associated with Factor A generally sorted leadership statements similarly as did participants connected to Factor B demonstrated by the significant correlations among the group members.

Demographic Characteristics of Members

Of the thirty participants who participated in the study, sixteen participants were members of Factor A, thirteen participants were members of Factor B and one participant did not meet the membership conditions for either Factor A's or Factor B's level of significance. Table 4.2 illustrates participant factor membership. The next step investigates the individual special education leaders who comprised the membership for each factor by considering the demographic composition.

Table 4.2
Factor Significance and Membership

	Factor A		Factor B			Factor A*	Factor B*
Participant #	**a score**	**a^2 score**	**a score**	**a^2 score**	**$h^2/2$**	**Membership**	**Membership**
P1: ADM, NAYP, NFRL	(.739)	.546	.052	.003	.274	Member	
P2: ADM, NAYP, NFRL	.331*	.11	.111	.012	.061	Member	

	Factor A		Factor B			Factor A*	Factor B*
Participant #	**a score**	**a^2 score**	**a score**	**a^2 score**	**$h^2/2$**	**Participant #**	**a score**
P3: ES TL, NAYP, NFRL	.132	.017	.399*	.159	.089		Member
P4: ADM, AYP, FRL	(.661)	.437	.117	.014	.226	Member	
P5: ADM, NAYP, FRL	.215	.046	(.657)	.432	.239		Member
P6: ADM, NAYP, FRL	(.441)	.194	.313*	.098	.146	Member	
P7: ADM, NAYP, FRL	.335*	.112	(.475)	.226	.169		Member
P 8: ADM, NAYP, FRL	.064	.004	(.470)	.221	.113		Member
P9: ADM, NAYP, NFRL	(.473)	.224	.039	.002	.113	Member	
P10: ADM, NAYP, NFRL	(.544)	.296	(.454)	.206	.251	Member	
P11: ADM, NAYP, NFRL	.016	.000	(.597)	.356	.178		Member
P12: ADM, AYP, NFRL	.393*	.154	.384*	.147	.151	Member	
P13: ADM, AYP, NFRL	(.454)	.206	.382*	.146	.176	Member	
P14: ADM, AYP, NFRL	.364*	.132	(.601)	.361	.247		Member
P15: HS TL, NAYP, NFRL	.136	.018	(.496)	.246	.132		Member
P16: ADM, AYP, NFRL	.258	.067	(.525)	.276	.172		Member
P17: DL TL, NAYP, FRL	(.745)	.555	.182	.033	.294	Member	
P18: HS TL, NAYP, FRL	(.551)	.304	.232	.054	.179	Member	
P19: HS TL, AYPE, NFRL	.305	.093	.357*	.127	.110		Member
P20: HS TL, AYPE, NFRL	.384*	.147	.113	.013	.080	Member	
P21: HS TL, NAYP, FRL	(.568)	.323	.196	.038	.181	Member	
P22: DL TL, AYP, NFRL	(.462)	.213	.129	.017	.115	Member	
P23: HS TL, AYP, NFRL	.364*	.132	(.706)	.498	.315		Member
P24: HS TL, AYP, NFRL	.077	.006	(.643)	.413	.210		Member
P25: HS TL, NAYP, FRL	(.458)	.210	.186	.035	.123	Member	
P26: HS TL, NAYP, FRL	(.703)	.494	.073	.005	.250	Member	
P27: ADM, NAYP, NFRL	.238	.057	.292	.085	.071	Non-member	Non-member

	Factor A		Factor B			Factor A*	Factor B*
Participant #	**a score**	**a^2 score**	**a score**	**a^2 score**	**$h^2/2$**	**Participant #**	**a score**
P28: K8 TL, NAYP, FRL	(.594)	.353	.358*	.128	.212	Member	
P29: HS TL, NAYP, NFRL	.051	.003	(.535)	.286	.145		Member
P30: HS TL, AYP, NFRL	(.421)	.178	(.548)	.300	.239		Member

Note: The two following conditions must be met for factor membership: (1) $a^2 > \mathbf{h^2/2}$ (factor 'explains' more than half of the common variance located in the 6th column in the table) ***and*** (2) that *a* exceed .31 for the p<.05, as calculated by the +/- 1.96 times the standard error, as denoted by (). ADM: Special Education Administrator, ES TL: Elementary special education teacher leader, K8 TL: K-8 special education teacher leader, HS TL: High school special education teacher leader, DL TL: District level special education teacher leader, FRL: Free and reduced lunch district, NFRL: Non-free and reduced lunch district. AYP: District achieved AYP, NAYP: District did not achieve AYP, AYPE: District achieved AYP for English Language Arts only.

Factor A demographic composition. The demographic and professional characteristics of this group of 16 participants are shown in tables 4.3 and 4.4. Fifty percent of the Factor A members were employed as special education administrators while the remaining half of the 16 members were employed as special education teacher leaders. Factor A members were equally split between males and females. The majority of Factor A members at 56 percent had less than 5 years of experience at their current position, which included 4 special education teacher leaders and 5 special education administrators. Seventy-five percent held an education level beyond a master's degree. The remaining 25 percent included one special education teacher leader and 3 special education administrators, all of whom held a master's degree. In addition, 88 percent of Factor A members had teaching experience at the secondary level, and 43.5 percent had experience at the elementary level. Thirty-one percent of the members had teaching experience in both special and general education; however, 25 percent were teachers leaders as only one special education administrator held dual teaching experience in both general and special education.

The majority of Factor A members, 82 percent, fell into the 31-50 age groups. There was no significant differences in regards to age between the two subgroups, although the youngest participant in the study was a teacher leader belonging to Factor A. Eight-one percent of Factor A members (consisting of 7 teacher leaders and 6 administrators) worked in districts whose special education enrollment was above the state average. Fifty percent of Factor A members were working in districts whose free and reduced lunch populations were above the state average, which consisted of primarily special education teacher leaders as the majority of special education administrators were working in districts whose free and reduced lunch populations were below the state average. Further, twenty-five percent of Factor A members were working in districts that made AYP for both English language arts and mathematics, which included only one special education teacher leader. Special education teacher leaders (seven of eight TLs) also represented the majority of the sixty-three percent of Factor A members working in districts with student enrollments greater than 3,000 students. Five out of the eight special education administrators were working in district with student enrollments less than 3,000 students. Factor A contained both the youngest participant (P28) as well as the oldest participant (P25) in this study.

Factor B demographic composition. The demographic and professional characteristics of this group of 13 participants are shown in tables 4.3 and 4.4. Factor B members comprised of 46 percent of special education administrators and 54 percent of special education teacher leaders. Seventy-seven percent were females with an equivalent percent having more than 5 years experience in their current position. Fifty-four percent of Factor B members held an education level beyond a master's degree. In

addition, there was very little variability between teacher leaders and administrators in the areas of gender, years in current position, and level of education.

Fifty-four percent of Factor B members had experience teaching at the elementary level and 69 percent had experience at the secondary level. However, there were vast differences between teacher leaders and administrators as 83 percent of administrators had teaching experiences at the elementary level and 50 percent at the secondary level, whereas, eighty-six percent of teacher leaders had teaching experiences at the secondary level and 29 percent at the elementary level. Furthermore, 54 percent of Factor B members had teaching experience only in special education with another 46 percent having experience in both general and special education. There were twice as many teacher leaders than administrators with experiences in both general and special education. The majority of Factor B members fell into the 41-60 age groups at 84 percent with the majority teacher leaders falling into the 41-50 age group, and the majority of administrators falling into the 51-60 age group.

Thirty-one percent of Factor B members represented school districts whose free and reduced lunch populations are above the state average. The administrators were split equally between school districts that were above and below the state average. In comparison, the majority of teacher leaders worked in school districts whose free and reduced lunch populations were below the state average. Sixty-two percent of Factor B members worked in school districts whose special education populations were above the state average with insignificant differences between teacher leaders and administrators. Thirty-eight percent of Factor B members worked in districts with student populations greater than 3,000 students which is represented by the majority of administrators (four

out of six) as the majority of teacher leaders (six out of seven) worked in school districts with populations less than 3,000 students. Thirty-eight percent of Factor B members, representing 2 administrators and 3 teacher leader teachers, worked in districts that achieved AYP for both English language arts and mathematics. All five members worked in districts whose free and reduced lunch populations were below the state average. In comparison, the remaining eight Factor B members consisted of three special education leaders working in districts whose free and reduced lunch populations were above the state average.

Factor B included the one participant (P16) holding a doctorate degree and the one minority participant (P8) in this study. P16 also was the only participant to have more general education administrative experience (15 years) than special education administrative experience (6 years). In addition, P8 was the only participant to hold an administrative position in a related service area (speech and language) in special education.

Table 4.3
Demographic Information from Factor A and Factor B

		Factor A		Factor B	
		N= 16	**%**	**N= 13**	**%**
Current Position	Special Education Teacher Leader	8	50%	7	54%
	Special Education Administrator	8	50%	6	46%
Gender	Male	8	50%	3	23%
	Female	8	50%	10	77%

		Factor A		Factor B	
		N= 16	**%**	**N= 13**	**%**
Years in Current Position	Less than 5 years	9	56%	3	23%
	5 or more years	7	44%	10	77%
Level of Education	Bachelor	0	0%	1	8%
	Master	4	25%	5	38%
	Master +30	12	75%	6	46%
	Doctorate	0	0%	1	8%
Teaching Experience	Elementary only	2	12.5%	4	31%
	Secondary only	9	56%	6	46%
	Both elementary and secondary	5	31%	3	23%
	General education only	1	6%	0	0%
	Special education only	10	62.5	7	54%
	General and special education	5	31%	6	46%
Free and Reduced Lunch	> 34.2% (state average) of district population	8	50%	4	31%
	< 34.2% (state average) of district population	8	50%	9	69%
Age	21-30	1	6%	0	0%
	31-40	6	38%	2	15%
	41-50	7	44%	5	38%
	51-60	2	12%	6	46%

		Factor A		Factor B	
		N= 16	**%**	**N= 13**	**%**
Ethnicity	White	16	100%	12	92%
	Minority	0	0%	1*	8%
District Enrollment	> 3,000 student enrollment	10	63%	5	38%
	< 3,000 student enrollment	6	38%	8	62%
	> 17% (state average) special education student enrollment	13	81%	8	62%
	< 17% (state average) special education student enrollment	3	19%	5	38%
Student Achievement	AYP District ELA	5	31%	6	46%
	Non-AYP District ELA	11	69%	7	54%
	AYP District Math	4	25%	5	38%
	Non-AYP District Math	12	75%	8	62%
	AYP District ELA & Math	4	25%	5	38%
	District Aggregate AYP ELA	9	56%	8	62%
	District Aggregate AYP Math	8	50%	8	62%

*Indicates that P7, a special education administrator, was the one minority participant in this study and was a member of Factor B.

Table 4.4

Demographic Information by Position from Factor A and Factor B

		Factor A		Factor B	
		N= 16	**%**	**N= 13**	**%**
Current Position	Special Education Teacher Leader	8	50%	7	54%
	Special Education Administrator	8	50%	6	46%

		Factor A		Factor B	
		N= 16	**%**	**N= 13**	**%**
Gender (TL)	Male	5	31%	2	15%
	Female	3	19%	5	38%
Gender (Admin)	Male	3	19%	1	8%
	Female	5	31%	5	38%
Years in Current Position (TL)	Less than 5 years	4	25%	2	15%
	5 or more years	4	25%	5	38%
Years in Current Position (Admin)	Less than 5 years	5	31%	1	8%
	5 or more years	3	19%	5	38%
Level of Education (TL)	Bachelor	0	0%	1	8%
	Master	1	6%	3	23%
	Master +30	7	44%	3	23%
	Doctorate	0	0%	0	0%
Level of Education (Admin)	Bachelor	0	0%	0	0%
	Master	3	19%	2	15%
	Master +30	5	31%	3	23%
	Doctorate	0	0%	1	8%

		Factor A		Factor B	
		N= 16	**%**	**N= 13**	**%**
Teaching Experience (TL)	Elementary only	0	0%	1	8%
	Secondary only	5	31%	5	38%
	Both elementary and secondary	3	19%	1	8%
	General education only	0	0%	0	0%
	Special education only	4	25%	3	23%
	General and special education	4	25%	4	31%
Teaching Experience (Admin)	Elementary only	2	12.5%	3	23%
	Secondary only	4	25%	1	8%
	Both elementary and secondary	2	12.5%	2	15%
	General education only	1	6%	0	0%
	Special education only	6	37.5%	4	31%
	General and special education	1	6%	2	15%
Free and Reduced Lunch (TL)	> 34.2% (state average) of district population	6	37.5%	1	8%
	< 34.2% (state average) of district population	2	12.5%	6	46%
Free and Reduced Lunch (Admin)	> 34.2% (state average) of district population	2	12.5%	3	23%
	< 34.2% (state average) of district population	6	37.5%	3	23%

		Factor A		Factor B	
		N= 16	**%**	**N= 13**	**%**
Age (TL)	21-30	1	6%	0	0%
	31-40	3	19%	2	15%
	41-50	3	19%	4	31%
	51-60	1	6%	1	8%
Age (Admin)	21-30	0	0%	0	0%
	31-40	3	19%	0	0%
	41-50	4	25%	1	8%
	51-60	1	6%	5	38%
District Enrollment (TL)	> 3,000 student enrollment	7	44%	1	8%
	< 3,000 student enrollment	1	6%	6	46%
	> 17% (state average) special education student enrollment	7	44%	4	31%
	< 17% (state average) special education student enrollment	1	6%	3	23%
District Enrollment (Admin)	> 3,000 student enrollment	3	19%	4	31%
	< 3,000 student enrollment	5	31%	2	15%
	> 17% (state average) special education student enrollment	6	37.5%	4	31%
	< 17% (state average) special education student enrollment	2	12.5%	2	15%

		Factor A		Factor B	
		N= 16	**%**	**N= 13**	**%**
Student Achievement (TL)	AYP District ELA	2	12.5%	4	31%
	Non-AYP District ELA	6	37.5%	3	23%
	AYP District Math	1	6%	3	23%
	Non-AYP District Math	7	44%	4	31%
	AYP District ELA & Math	1	6%	3	23%
	District Aggregate AYP ELA	3	19%	5	38%
	District Aggregate AYP Math	2	12.5%	5	38%
Student Achievement (Admin)	AYP District ELA	3	19%	2	15%
	Non-AYP District ELA	5	31%	4	31%
	AYP District Math	3	19%	2	15%
	Non-AYP District Math	5	31%	4	31%
	AYP District ELA & Math	3	19%	2	15%
	District Aggregate AYP ELA	6	37.5%	3	23%
	District Aggregate AYP Math	6	37.5%	3	23%

Demographic similarities between Factors A and B members. Overall, Factor A and Factor B shared few similarities in relation to demographic group composition. Both factors had an even distribution within their membership of special education administrators and special education teacher leaders, with Factor A being evenly split and Factor B members having slightly more special education teacher leaders. Data indicates that members from both factors had limited variety in their educational work experiences. For example, 62.5 percent of Factor A members and 54 percent of Factor B members had

teaching experiences in only special education. Within both factors, there was a significantly higher percent of special education teacher leaders with teaching experience in both general and special education compared to special education administrators. In addition, a small percentage of participants belonging to each factor had teaching experience at both the elementary and secondary levels with 31 percent of Factor A and 23 percent of Factor B members. The majority of special education teacher leaders belonging to each factor had the bulk of their teaching experience at the secondary level. Further, the one minority special education leader in this study was a special education administrator belonging to Factor A. This participant was also the only administrator in a related service field.

There were also some similarities among the subgroups within each factor. For example, each factor contained one member in the oldest age group (51-60) for the subgroup of special education teacher leaders. Additionally, each factor had two special education administrators that work in school districts in which their special education populations were below the state average of 17 percent, representing 12.5 percent of Factor A members and 15 percent of Factor B members. Moreover, there were insignificant AYP differences among special education administrators belonging to each factor. For instance, 19 percent (3 ADM) of Factor A and 15 percent (2 ADM) of Factor B members were special education administrators working in districts that achieved AYP for both Math and English Language Arts (ELA).

Demographic differences between Factors A and B members. There were several demographic differences that existed between Factor A and Factor B. Based on the data from this study, Factor A members were generally younger, more educated

males with less experience in their current position and worked in larger school districts with higher rates of poverty. Factor B members were generally more experienced, older, females working in smaller, more affluent school districts with higher achievement levels. For instance, female participants comprised of 50 percent of the Factor A membership, while 77 percent of the Factor B members consisted of female participants. There also existed differences within each participant subgroup for each factor. For example, Factor B consisted of only one male special education administrator compared to three in Factor A, representing 8 percent of Factor B members and 19 percent of Factor A members.

There were significant differences between the two factors in regards to years in current position, levels of education, and level of teaching experiences. Factor A members tended to be less experienced and more educated. Forty-four percent of Factor A members had been in their current position for 5 or more years compared to 77 percent of Factor B members. The largest discrepancy between subgroups in this area was between special education administrators, as 38 percent of Factor B were administrators who were working in their current position for 5 or more years compared to 19 percent of Factor A. Factor B consisted on only one administrator with less than 5 years experience in his/her current position. Seventy-five percent of members of Factor A held education levels beyond a master's degree compared to 54 percent of members of Factor B. The majority of teacher leaders (seven of eight of the TL participants) within Factor A held education levels beyond a master's degree representing 44 percent of Factor A members, whereas 23 percent (representing three of seven of the TL participants) of Factor B members were teacher leaders holding education levels beyond a master's degree. Forty-

six percent of Factor B members had teaching experiences in both general and special education compared to 31 percent of Factor A members. In addition, 69 percent of Factor B and 88 percent of Factor A held teaching experience at the secondary level, while 54 percent of Factor B and 43.5 percent of Factor A held teaching experiences at the elementary level. There was three times the amount of special education teacher leaders belonging to Factor A with experience at both levels compared to Factor B.

Factor A members were generally younger educators, working in larger school districts with higher poverty levels in comparison to Factor B members. For example, 44 percent of Factor A members was under the age of 40 compared to 15 percent of Factor B members. The largest discrepancy for age between factors was special education administrators. For example, the majority of administrators in Factor A (seven of eight ADM participants) were 50 years or younger representing 44 percent of the members of Factor A, whereas the majority of administrators in Factor B (five out of six ADM participants) were older than 50 years representing 38 percent of the members of Factor B.

Thirty-one percent of Factor B members worked in school districts whose free and reduced lunch populations were greater than the state average of 34.2 percent in comparison to 50 percent of the members of Factor A. Further, there were more Factor A members than Factor B members that worked in larger school districts, as 63 percent of Factor A members worked in districts greater than 3,000 students compared to 38 percent of the members of Factor B. The most significant difference in this area between subgroups was special education teacher leaders. The majority of special education teacher leaders (seven of eight TL participants) belonging to Factor A worked in districts

greater than 3,000 students representing 44 percent of Factor A members, whereas 46 percent of teacher leaders belonging to Factor B (six of seven TL participants) were working in school districts less than 3,000 students.

Factor A also consisted of more members working in districts with lower achievement scores on state standardized tests and higher special education populations. Factor A had significantly more members working in districts whose special education population was above the state average of 17 percent with Factor A represented at 81 percent and Factor B at 62 percent. The majority of teacher leaders belonging to Factor A (seven of eight TL participants) were working in districts whose special education population was above the state average, whereas the majority of teacher leaders belonging to Factor B (four of seven TL participants) were working in districts whose special education population was below the state average. Moreover, 25 percent of Factor A and 38 percent of Factor B members were employed in districts that achieved AYP benchmarks for both ELA and Math. Only one teacher leader belonging to Factor A was working in a district that achieved AYP for both ELA and Math representing 8 percent of Factor A members, in comparison to 23 percent of Factor B special education teacher leader members (three of seven TL participants).

Leadership Attribute Statement Rankings

The distributed leadership statements were ranked using the principle component scores (see table 4.5). The extent to which the highest and lowest ranked distributed leadership statements differ from each other was assessed, analyzed, and compared. Further, the rationale participants employed for ranking their statements were analyzed to aid with the understanding of the item rankings.

Table 4.5
Factor A and Factor B Item Rankings

Item #	Leadership Statements	Factor A factor scores n=40	Factor B factor scores n=40
1	Ensure there is a well-functioning special education leadership team	2.82013(1)	1.48701 (4)
2	Be accountable for the professional behavior of the special education leadership team	0.26850 (12)	0.35939 (15)
3	Ensure the special education leadership team supports the district goals	1.26607 (5)	-1.42646 (35)
4	Ensure all members of the special education leadership team work in the same strand on the core objectives	-0.15165 (21)	-1.84327 (40)
5	Ensure people are assigned responsibilities based on competencies	0.92982 (7)	0.02726 (20)
6	Ensure members of the special education leadership team divide their time properly	0.45157 (10)	-1.81584 (39)
7	Ensure members of the special education leadership team have clear goals	2.38797 (2)	-0.48833 (28)
8	Ensure members of the special education leadership team prioritize tasks they have to perform	1.50974 (4)	-1.56554 (37)
9	Ensure members of the special education leadership team is willing to execute a good idea	0.50045 (9)	-0.69279 (33)
10	Ensure members of the special education leadership team have clear roles and responsibilities	1.95758 (3)	0.66281 (12)
11	Provide feedback to educators	0.40403 (11)	0.69273 (11)
12	Explain reasons for constructive criticism to educators	-1.02101 (35)	-0.52242 (29)
13	Be accountable after school to help educators when assistance is needed	-1.63027 (40)	-0.52985 (30)
14	Encourage educators to pursue their own goals for professional learning	-1.05848 (36)	-0.37154 (26)
15	Encourage educators to try new practices consistent with their own interests	-1.12218 (37)	-0.64585 (31)
16	Provide organizational support for educator interactions	-0.74246 (32)	-0.48292 (27)
17	Be involved in the summative evaluation of educators	-0.73541 (31)	-0.13207 (21)

Item #	Leadership Statements	Factor A factor scores n=40	Factor B factor scores n=40
18	Be involved in the formative evaluation of educators	-0.50926 (29)	-0.23962 (24)
19	Provide educators with time to address the most important needs of students	-0.41456 (27)	1.82812 (2)
20	Allow the special education leadership team to function autonomously	-0.28170 (25)	-1.45248 (36)
21	Work together with educators to develop programs	0.10826 (14)	0.64977 (13)
22	Acknowledge the expertise of educators	-0.10327 (18)	0.73621 (10)
23	Trust educators enough to make decisions	-0.00654 (17)	0.46274 (14)
24	Allow flexibility with responsibilities	-0.68635 (30)	-0.35550 (25)
25	Support educator(s) in developing a leadership role	-0.17953 (23)	-0.22485 (23)
26	Routinely communicate informally to educators	-0.85764 (33)	0.86673 (9)
27	Promote a professional collegial atmosphere	-0.23771 (24)	1.13516 (5)
28	Support open communication	0.13789 (13)	1.61476 (3)
29	Collaborate with educators on professional development	-0.98502 (34)	0.34614 (16)
30	Collaborate with educators on assessing instructional needs	-0.14229 (20)	0.91361 (8)
31	Collect data on the ground to be shared collaboratively	0.07122 (16)	-0.19523 (22)
32	Assist special educators on analyzing appropriate interventions	-0.16945 (22)	1.12858 (6)
33	Consult with educators	-0.31195 (26)	0.22407 (18)
34	Ensure that all staff understands the importance of confidentiality	-0.44605 (28)	-0.65169 (32)
35	Understand that the relationship with educators hinges on the belief that leadership should be distributed	0.96595 (6)	-1.68271 (38)
36	Appreciate the work performed and the responsibilities involved with each staff member	-0.13038 (19)	0.32232 (17)
37	Understand that the relationship with educators is one of interdependency	0.07950 (15)	-1.01418 (34)

Item #	Leadership Statements	Factor A factor scores n=40	Factor B factor scores n=40
38	Collaborate with educators to develop home-school relations	-1.58294 (39)	0.10887 (19)
39	Understand that special education services cannot be accomplished without the mutual support, advice, and understanding of other staff members	0.86980 (8)	1.84428 (1)
40	Engage in specific discussions relative to closing the achievement gaps	-1.22241 (38)	0.92256 (7)

Factor A Rankings

Factor A members' rankings of distributed leadership items ranged from 2.82 to -1.63. This group of special education leaders favored eight items (1, 3, 10, 8, 3, 35, 5, 39) that emphasized (a) a well-functioning leadership team, (b) clear goals, (c) clear roles and responsibilities, (d) task prioritization, (e) support for district goals, (f) the belief in distributing leadership, (g) assignment of responsibilities linked to competencies of staff, and (h) an understanding that service delivery requires mutual support, advice, and understanding (see table 4.6). The seven lowest ranked Factor A items (13, 38, 40, 15, 14, 12, 29) ranged from -.98 to -1.63 (refer back to table 4.6). The distributed leadership items represented in Factor A's low rankings, pertained to (a) developing home-school relations, (b) closing the achievement gaps, (c) collaborating with educators on professional development, and (d) encouraging educators to try new practices.

According to the follow-up interviews, Factor A members ranked items high because they (a) established a well-functioning team, (b) conveyed clear goals, roles and responsibilities, (c) promoted open communication, and (d) ensured members work towards a common purpose by prioritizing tasks they need to perform (see table 4.7). Two Factor A members provided the comments referencing a top-down approach when

commenting to item #1, *Ensure there is a well-functioning special education leadership team*. One special education administrator stated, "I see there's a place for top-down at times, and then there's a place where you have to share it and own it to move something forward." A second special education administrator explained, "It's more of a top-down model…But the idea of collaborating with educators on professional development, but again, the notion of collaborating with teachers is to really sit down and develop things, and that's a portion of just the Massachusetts curriculum with having a professional development plan…And so that's not something you collaborate on."

Table 4.6
Rankings for Factor A Highest and Lowest Rated Statements

High Item #	High Distributed Leadership Statements (Attributes)	Factor A High Scores	Low Item #	Low Distributed Leadership Statements (Attributes)	Factor A Low Scores
1	Ensure there is a well-functioning special education leadership team	2.82013(1)	13	Be accountable after school to help educators when assistance is needed	-1.63027 (40)
7	Ensure members of the special education leadership team have clear goals	2.38797 (2)	38	Collaborate with educators to develop home-school relations	-1.58294 (39)
10	Ensure members of the special education leadership team have clear roles and responsibilities	1.95758 (3)	40	Engage in specific discussions relative to closing the achievement gaps	-1.22241 (38)
8	Ensure members of the special education leadership team prioritize tasks they have to perform	1.50974 (4)	15	Encourage educators to try new practices consistent with their own interests	-1.12218 (37)
3	Ensure the special education leadership team supports the district goals	1.26607 (5)	14	Encourage educators to pursue their own goals for professional learning	-1.05848 (36)

35	Understand that the relationship with educators hinges on the belief that leadership should be distributed	0.96595 (6)	12	Explain reasons for constructive criticism to educators	-1.02101 (35)
5	Ensure people are assigned responsibilities based on competencies	0.92982 (7)	29	Collaborate with educators on professional development	-0.98502 (34)
39	Understand that special education services cannot be accomplished without the mutual support, advice, and understanding of other staff members	0.86980 (8)			

Table 4.7
Rationale of Factor A Members for Highest Ranked Items

Factor A High Item#	Statement	Reason
1	Ensure there is a well-functioning special education leadership team	• I chose this because it said, "well-functioning," and so in my mind a lot of other things have to happen for it to be well-functioning, and that means that, looking at the data, supporting your people with feedback, making sure the roles, goals, making sure that people are effectively using time, and also effectively supporting them follows a well-functioning team, and also open communication. (ADM) • Now, that's kind of a loaded statement; everybody wants to have a well-functioning leadership team, but what does that mean, and how do you develop it? You don't always want yes people; you want a positive, collaborative effort when you're looking at vision of the district, resources of the district, and service delivery models in the district. And so you have to develop a team that responds to that, or else you find yourself again in trouble. You can have dissension, but it has to be dissension with respect. (ADM) • I think without that you can't really do anything to ensure that students are going to get services and teachers are going to get the supports that they need so we as a team need to be organized and functioning well. (ADM) • I'm looking at my chart here, move across and start with a good foundation, a base. So I felt like those three things

		(statements #1, #5, and #10) gave me that base, to start a good leadership team. (ADM) • I think to have a well balanced and effective Special Ed department you have to have a strong team so I think that that kind of drives the whole rest of the cards here so making sure that people understand what their job is, that they understand how to do it and just having good leadership skills is essential. I've seen it where you don't have it and it doesn't work. (ADM) • I don't see how it gets more important than that because if that's not functioning well, it's going to be chaos. (TL) • Ensure there is a well functioning Special Education leadership team because as far as Special Ed department can't function without competent leaders that are well respected. That's what I was looking for. (TL) • For me that is critical, that's everything. (TL) • I picked number 1 because I thought that that encapsulated a lot of the good points in these entire 40 cards but especially the number 7 and the number 10...If you don't have a well functioning team, the people in the team have to have the same thought process and we all have to work together in the best interest of the students. If we're not all on the same page then it's not going to work for the student. (TL)
7	Ensure members of the special education leadership team have clear goals	• That goes back to being able to define what you're doing and why you're doing it. And if a leader can't articulate what those pieces are and develop a vision, then nobody's going to follow. (ADM) • Right off of that number 7 and number 10 having clear goals and their roles and responsibilities... if everybody on the team, the teachers, the guidance counselors, the parents, ETLs, everybody needs to know what they're supposed to be doing and what role they play in the whole IEP Process, Special Ed process. (TL) • Members of the Special Ed leadership team have clear goals because in order to run a department or even within a district you have to have some type of idea where you're going. (TL) • There is no I in team or leadership (realistically) in terms of goals. Statement #7 states "ensures members of the

		special education leadership team have clear goals." Members cannot know where their students stand academically without setting a goal, both team and personal...tracking team data and academic goals, and monitoring progress. (TL)
10	Ensure members of the special education leadership team have clear roles and responsibilities	• That's what I was looking for. Any type of leadership roles and making sure that everyone has their responsibilities, everything is clear. That's set number 10 and number 7. Ensure members of the Special Education leadership team have clear goals, responsibilities. That goes along with communication. I was looking for communication as well. (TL) • You have to make sure that with number 10 everyone's on the same page and they know their roles and responsibilities to get the department moving forward. (TL)
8	Ensure members of the special education leadership team prioritize tasks they have to perform	• I think that's a big piece of it. We have to really decide what's important and just trick down the list. It's like this sort. They're all important. If you left one of them out you'd have a problem. It was hard to sort it. I really think that that's why I tried to get all the leadership stuff at one end and then more of the actual work. I think it comes if you have the right leadership style and the functioning team. (ADM) • Ensure members of the Special Ed leadership team prioritize their tasks so we are able to improve Special Ed within a district. What areas do we want to focus on first and then you have to make sure that with number 10 everyone's on the same page and they know their roles and responsibilities to get the department moving forward. (TL)
3	Ensure the special education leadership team supports the district goals	• I guess to me, this is an overarching principle so that, to start this is really important. (ADM) • I think that's got to be the clear message as strategic plan goals you have those and then you have to look at how your work is in service to those goals all the time. That starts with the leadership team and then that sifts down to all of the staff, teachers, principals in schools in the different buildings, paras, secretaries, everybody. (ADM)
35	Understand that the relationship with educators hinges on the belief that leadership should be	• For me, picking the first one was really the essence of the belief system which I picked. "Understand the relationship with educators hinges on the belief that leadership should be distributed." Because, I think, in the

	distributed	field of special ed, there are so many nuances and aspects to it, no one entity can hold it, and no one administrative team. I think everybody has a role and a part to play in the process. So, but for me, that really captures that if you don't, if you don't believe, fundamentally, and you sit in the lens that, as a special ed leader, that it's all you, and all the successes are yours, all the failures are yours, or all the responsibility is yours, there's no way that it's manageable and anything would ever move forward, obviously. But I think, in order to figure out, then, how do you move it forward, for me, I think the big piece is often directors who sit on their own and don't see the role everybody has to play in the process, I don't think they're effective to moving forward with change. I think the complexity is the, I think, when I was sorting to this, I said something to you about, you know, all of these things, there's a value to them, and then there's, what's the practicality of implementation, and how do you create systems. And I think the piece that adds to this is when you're functioning in a larger system. So we can operate under what our belief system is around leadership, distributed leadership in special ed, but if you're not sitting within the larger context or the frame of the district and the superintendent and their belief system about leadership, you kind of can get bogged down in really weird ways. So it's definitely way more complex, the bigger the system is. And if the styles are very different. Obviously, this notion of top-down leadership, what do we know, I think, about education, because it's hard for me to separate special ed administration from education and teaching and learning, and where we want to affect change, I see there's a place for top-down at times, and then there's a place where you have to share it and own it to move something forward. (ADM) • The team has to be well functioning. In order to do that you need to have some common philosophy. That means making sure that everyone understands that the educators, the people on the ground doing the work have to be part of this. If they're not a real part of it and a valued part of it then we're in trouble. Understand that the relationship with educators is one of interdependency is right along with that. It's sort of connecting the top and the bottom and making sure we're working together. That was really it. (TL)
5	Ensure people are assigned responsibilities based on	• Well, my thought is, on those three (statements #1, #5, and #10), if you can build the team on the competencies

	competencies	that they are capable of doing and that they have clear roles of what their responsibilities are, you're then able to move across the (sort), you know. (ADM)
39	Understand that special education services cannot be accomplished without the mutual support, advice, and understanding of other staff members	• I think that's not just special education; it's general education, related staff, when you're dealing with districts, you know, vocational, and the like. We've heard it all before. You have to have everybody buying in to provide special education services. If you don't come with that ethic to help mediate those relationships, the only person that suffers is the kids, so you have to understand that special education services cannot be accomplished without mutual support. (ADM) • I chose those (statements #39, #1, and #27) because those are the things that I have seen lacking in some schools that I've worked and things that I feel that a special ed leader can actively change, themselves. A lot of the things on here are all collaborative things, you know, working with teachers, working with other people. But I feel like these things come directly from the top. Places that have had a professional atmosphere, places that have had mutual support and advice, have started with someone who's a leader who makes that atmosphere happen, regardless of who else is in the building. So I thought that those were things that a special ed leader can do themselves and that nobody else can do for them if the leader is lacking those. (ADM) • I thought this one was the most important one understanding that Special Ed services can't be accomplished without the mutual support, advice and understanding of all of the staff members. I see it as a collaborative effort to develop good services and programs in Special Education. So the top down management style of administration is not helpful to those who are working directly with the students. That doesn't mean that there shouldn't be a leadership team that needs to function well and be in a position where they take an overview of what's going on and see the bigger picture and see what needs to be fine tuned or changed. (TL)

In addition, comments from the follow-up interviews by Factor A members indicate that the highly ranked items of #7, #10, and #3 were segregated by role. These three items pertained to ensuring the special education leadership team has clear goals

(item #7), roles and responsibilities (item #10), as well as ensuring the special education leadership team supports the district goals (item #3). The comments by special education teacher leaders signify this group clearly feels that a necessity of being an effective leader of special education includes ensuring the leadership team has clear goals (item #7), in addition to ensuring the leadership team has clear roles and responsibilities (item #10). Special education teacher leaders were the only Factor A members to comment on item #10 and were the majority (three of four) to comment on item #7. The comments on these two items reveal that the Factor A teacher leader members value the importance of ensuring the special education leadership team has clear roles, responsibilities, and goals. Moreover, special education administrators were the only Factor A members to comment on item #3 by stating they strongly valued the necessity of ensuring the special education leadership team supports the district goals. Overall, Factor A members commented on the importance of creating a well-functioning special education leadership team by establishing open channels of communication, prioritizing tasks, and providing clear roles and goals, as well as supporting staff.

One reason Factor A members stated that they assigned low rankings to these items was for the simple reason that the statements were not perceived to be as important as the higher ranking items (see table 4.8). Similar to some of the highest ranked items, the lowest ranked items of #13, #38, and #14 were segregated by role. Special education administrators were the only Factor A members to comment on items #13 and #38, as well as representing the majority (four ADM to one TL) that commented on item #14. The focus of these three items was related to the following responsibilities of special education leaders when working with educators: (a) being accountable to help after

school (item #13), (b) collaborating to develop home-school relations (item #38), and (c) encouraging the pursuit of goals linked to professional learning (item #14). Their comments reveal that Factor A special education administrator members ranked these items low because: being accountable after school to help educators is viewed as mechanic and not essential to special education leadership; collaborating with educators to develop home-school relations is systematically set-up, not the teachers responsibility and it was not considered to be as essential as the majority of statements in the Q deck; and, encouraging educators to pursue their own goals for professional learning must be connected to the district's goals and curriculum.

Table 4.8
Rationale of Factor A Members for Lowest Ranked Items

13	Be accountable after school to help educators when assistance is needed	• I think the piece for me was trying to shift those things that I felt were, had the least impact on leadership, or distributed leadership. And so the one I picked at the far end was, "Be available after school to help educators." Because I see that as a mechanic, but not as a theoretical belief system. So the mechanics of after school, that's just a detail. It's really, are you accessible to staff and engage in an active process up front, so that it isn't just when they get out of work? It's, how do you infuse your belief about leadership so it's not an addition to their day; it's part of everybody's work day. (ADM) • And as far as being available after school, that's, that's fine, but I don't think that's an essential element. I feel like you can collaborate during school, before school. I don't think that it is that, that one thing, is critical. (ADM)
8	Collaborate with educators to develop home-school relations	• Although an important component, the way that I am thinking about educators here currently is primarily teachers, and a home-school component is something that gets set up systematically. You have teacher night. You have situations that the administrator and/or the district leadership team identify as points where your teachers have to put themselves in that position. You're not collaborating with the educators; it's more of a top-down model, in my experience. Any training or

		collaboration that you do might occur with your student adjustment counselors or an outreach social worker, but not your on the teachers, for the most part. (ADM) • And those are things that I feel that teachers should handle. Those aren't things that necessarily that an administrator or director or leader of special education has to have. Teachers have to develop their own home-school relations with their students. (ADM)
40	Engage in specific discussions relative to closing the achievement gaps	• As a special education person, we're already there. I've asked before, what is the achievement gap? Is it the black/white achievement gap? From my standpoint, that falls under the realm of "at-risk," or looking at students who have economic or environmental disadvantages, which is actually something that precludes you from receiving special education services. And so, as a special education director, it's, what's the wording? It's nicer than what I was just going to say. "Less necessary." It's still part of the discussion, especially in a continuum of services, but as a headset for a special education administrator, it's not something that is primary. (ADM) • Personally data bores the hell out of me and I think too often we get caught in that minutia. It's like the kid you have in your class a lot of times the IEP is the individual and they don't need the data. You got to kind of focus on that kid separate from everything else. That happens often so it's a lot of kids. That to me it was like okay, you need it. Again, achievement gaps. I don't care about testing. I'm focusing on the kids in my class right now and how I can make them successful. I don't care about the overall thing. That's where I come from those. (TL)
15	Encourage educators to try new practices consistent with their own interests	• "Encouraging new practices in their own interests." I kind of feel like you need to stay focused on what the goal is of the district, the core, you know, curriculum. So, yeah, you have interests, but, really, you need to stay up with what's the focus of the district. (ADM) • I don't know that their own interests necessarily coordinate with curriculum and framework so I put that as last. I don't want them going off on a tangent, especially in Special Ed if you're trying to do specialized instruction you don't have the kids for a lot of time so it has to be highly effective and efficient...especially when there's an IEP involved.

		(ADM) • Trying new practices that are of an educators interest are not always in the best interest of the student population. I would encourage teachers to explore new practices that are in the students best interest. Then it would have been a statement placed in a different column. (TL)
14	Encourage educators to pursue their own goals for professional learning	• I value that professional growth, but the hard part is, is their own goals, too often, we see professional learning that's independent, that's not connected to the broader system and where we want to move forward and affect change. So what ends up happening is we have people doing their own growth for their own interests, but it's not connected to the district work, the vision, and the mission. So I encourage people to do that, but that was a struggle for me, because I didn't want to suggest that I didn't. I think the one that weighed higher, that weighed more to the right for me on the scale was collaborating with them on professional development, because that allows us the opportunity to really talk about, how is it connected to the work of the district and the needs. (ADM) • Well, I mean, if I'm encouraging educators to try new practices, consistent with their own interests, to me, that kind of falls under that sub-heading, in a lot of ways. So what I did was, I took the idea that I thought was the bigger picture, and I put that as more important. And the components of that bigger picture, I said, okay, that's only one aspect of that, so I kind of pushed that to the side. And that's how I answered. (ADM) • Encouraging new practices in their own interests. I kind of feel like you need to stay focused on what the goal is of the district, the core, you know, curriculum. So, yeah, you have interests, but, really, you need to stay up with what's the focus of the district. (ADM) • I don't know that their own interests necessarily coordinate with curriculum and framework so I put that as last. I don't want them going off on a tangent, especially in Special Ed if you're trying to do specialized instruction you don't have the kids for a lot of time so it has to be highly effective and efficient...especially when there's an IEP involved. (ADM)

		• Trying new practices that are of an educators interest are not always in the best interest of the student population. I would encourage teachers to explore new practices that are in the students best interest. Then it would have been a statement placed in a different column. (TL)
12	Explain reasons for constructive criticism to educators	• To educators. I guess, I would think that that is not as necessary, that it's likely that people have been exposed to that in the past, and that you would hope that you would not have to spend a lot of time explaining constructive criticism to people that you're working with. (ADM) • I'm not sure why you'd have to explain constructive criticism. I think in this job, you need to be open to that and willing to have that in your life. (ADM) • Statement #12 because educators should not need you to explain constructive criticism. They should know all criticism is constructive. (TL)
29	Collaborate with educators on professional development	• But the idea of collaborating with educators on professional development, again, the notion of collaborating with teachers is to really sit down and develop things, and that's a portion of just Massachusetts curriculum with having a professional development plan, an IPDP (Individual Professional Development Plan). And so that's not something you collaborate on. And so they have to have one. They don't get a choice. And if they're in special education, they need to be targeted on that. We're not talking about somebody who wants to be a pottery teacher and to talk about how that might work for them. You've got an expectation; it's professional. You can talk with them about it, but "collaboration" seems to be kind of a grandiose term. (ADM)

Overall, Factor A members stated the reasons they assigned low rankings to the items (14, 15, and 29) on professional development and professional growth was because professional development is typically driven by the Massachusetts curriculum frameworks and the goals and needs of the district. Factor A members stressed the need for the professional development interests and goals of educators to be consistent with

(and not independent of) the goals and interests of their districts in order to be supported and viewed as important by special education leaders.

Factor A Summary. Factor A members were generally comprised of younger, more educated males with less experience at their current position, who were working in larger school districts with higher rates of poverty. Overall, there was a higher ratio of special education teacher leaders working in larger districts with higher rates of students on free or reduced lunch, and that had experiences teaching in both general and special education. In addition, there were significantly more special education administrators that were working in districts that achieved AYP for both Math and ELA. Factor A participants valued distributed attributes that establish a (a) well-functioning leadership team, (b) clear goals, (c) clear roles and responsibilities, (d) task prioritization, (e) support for district goals, (f) the belief in distributing leadership, (g) assignment of responsibilities linked to competencies of staff, and (h) an understanding that service delivery requires mutual support, advice, and understanding. Factor A members assigned low rankings to items pertaining to the development of home school relations, closing the achievement gaps, collaborating with educators on professional development, and encouraging educators to explore new practices.

In follow-up interviews, Factor A members expressed that effective leaders of special education develop well-functioning leadership teams by establishing open channels of communication, prioritizing tasks, supporting staff, and by providing clear roles, responsibilities, and goals. Special education administrators in particular, expressed the general feeling during the follow-up interviews of the necessity for special education leaders to support the district goals. Special education teacher leaders

specifically valued the importance of ensuring the special education leadership team has clear roles and responsibilities, as well as clear goals. Rationale provided for the low rankings included: the low ranked items were perceived not as important as the higher ranked items; professional development is viewed as something driven by external factors and therefore does not require collaboration; and the professional development interests and goals of educators must be in alignment with the goals and interests of their districts in order to be supported by special education leaders. Special education administrators specifically ranked items pertaining to being accountable after school to help educators, collaborating with educators to develop home-school relations, and encouraging educators to try new practices consistent with their own interests low because: being accountable after school to help educators is viewed as mechanic; collaborating with educators to develop home-school relations is systematically set-up; and, encouraging educators to pursue their own goals for professional learning must be connected to the district's goals and curriculum.

Factor B Rankings

Factor B's 10 highest ranked distributed leadership items (39, 19, 28, 1, 27, 32, 40, 30, 26, 22) ranged from 1.84 to .73 (see table 4.9). Factor B members ranked these statements highly because they (a) acknowledged that special education services require mutual support, advice, and understanding of other staff, (b) provided time to address the most important needs of students, (c) supported open communication, (d) ensured a well-functioning special education team, (e) promoted a professional collegial atmosphere, (f) helped analyze appropriate interventions, (g) addressed closing the achievement gaps, (h)

collaboratively assessed instructional needs, (i) supported routine informal communication, and (j) acknowledged the expertise of educators (see table 4.10).

The lowest item rankings (4, 6, 35, 8, 20, 3, 37, 9, 34, 15) for Factor B ranged from -1.84 to -1.01. Factor B's low rankings were associated with items pertaining to (a) working in the same strands of the core objectives, (b) managing the special education leadership team's time, (c) understanding that leadership should be distributed, (d) prioritizing tasks, (e) allowing autonomy, (f) ensuring support for the district goals, (g) understanding relationships require interdependency, (h) ensuring members of the special education leadership team are willing to execute a good idea, (i) understanding the importance of confidentiality, and (j) encouraging educators to try new practices consistent with their interests.

Table 4.9
Rankings for Factor B Highest and Lowest Rated Statements

High Item #	High Distributed Leadership Statements (Attributes)	Factor B High Scores	Low Item #	Low Distributed Leadership Statements (Attributes)	Factor B Low Scores
39	Understand that special education services cannot be accomplished without the mutual support, advice, and understanding of other staff members	1.84428 (1)	4	Ensure all members of the special education leadership team work in the same strand on the core objectives	-1.84327 (40)
19	Provide educators with time to address the most important needs of students	1.82812 (2)	6	Ensure members of the special education leadership team divide their time properly	-1.81584 (39)
28	Support open communication	1.61476 (3)	35	Understand that the relationship with educators hinges on the belief that leadership should be distributed	-1.68271 (38)

1	Ensure there is a well-functioning special education leadership team	1.48701 (4)	8	Ensure members of the special education leadership team prioritize tasks they have to perform	-1.56554 (37)
27	Promote a professional collegial atmosphere	1.13516 (5)	20	Allow the special education leadership team to function autonomously	-1.45248 (36)
32	Assist special educators on analyzing appropriate interventions	1.12858 (6)	3	Ensure the special education leadership team supports the district goals	-1.42646 (35)
40	Engage in specific discussions relative to closing the achievement gaps	0.92256 (7)	37	Understand that the relationship with educators is one of interdependency	-1.01418 (34)
30	Collaborate with educators on assessing instructional needs	0.91361 (8)	9	Ensure members of the special education leadership team is willing to execute a good idea	-0.69279 (33)
26	Routinely communicate informally to educators	0.86673 (9)	34	Ensure that all staff understands the importance of confidentiality	-0.65169 (32)
22	Acknowledge the expertise of educators	0.73621 (10)	15	Encourage educators to try new practices consistent with their own interests	-0.64585 (31)

In addition, comments from the follow-up interviews by Factor B members indicate that the highly ranked items of #39 (emphasizing the need for mutual support, advice, and understanding to accomplish special education services) and #26 (routinely communicating informally to educators) were segregated by role. Special education teacher administrators were the only Factor B members to comment on distributed item #39. The comments pertaining to the highest ranked item reveal that Factor B special education administrator members clearly feel that special education services cannot be

accomplished without the mutual support, advice and understanding of other staff members. Further, special education teacher leaders were the only Factor B members to comment on item #26 that stressed the importance of routine informal communication with educators.

The reasons Factor B members assigned low ranking to these statements were as follows: (a) the goals and objectives of the district are secondary to the programming and individualized instruction needed to effectively support students with special needs; (b) constructive feedback should not be a practice but embedded in the culture of the organization; (c) the distribution and prioritization of leadership tasks should not be assigned, but take place naturally ("tasks prioritize themselves") within the special education leadership team; and (d) similar to Factor A, the statements were viewed as important, but not as important as the higher ranking items (see table 4.11).

Table 4.10
Rationale of Factor B Members for Highest Ranked Items

Factor B High Item#	Statement	Reason
39	Understand that special education services cannot be accomplished without the mutual support, advice, and understanding of other staff members	• The reason I put that there is because I'm not in all my buildings all the time; I am basically someone that walks through programs to make sure they're running okay. I attend tough team meetings, where something is either adversarial or there's something in question. And so my vision of how special ed works is that everyone has to buy in to their role in educating the student, from the top, the building head, all the way down, and most importantly, in the trenches. I taught for 30 years in a special ed classroom, and I have to tell you that it wasn't all about *me*; it was all about *us*, and getting different perspectives on how to work with a student, getting fresh insight into methods, a whole bunch of different strategies you could use with students. So I think, really, if what you want is the best education, and it should be about the kids, first and foremost, this is what has to be the focus.

		(ADM) • And that, for me, is kind of going in that same theme of being able to communicate, being collegial. I want to get away from the "us and them" kind of mentality between some general ed and some special ed, like, "Those are your kids. Those are not my . . . " It follows that, like, inclusive model. (ADM) • For me, I think that it's really important, when you're working with a team of teachers, to work as a team, both special educators and general educators, working collaboratively. I think it's important to share decision making, to validate other people's perspectives, and just to work together. (ADM)
19	Provide educators with time to address the most important needs of students	• The reason I chose this one as the most important is because I think that that's why we're in education. Students' needs should be the priority, and if we work around that, we'll be able to determine how to make that happen. (ADM) • It also means that you don't have to focus on the things that are constantly coming back to bite you that have nothing to do with a high quality of education. You've got to get the system running smoothly so that you can focus actually on curriculum instruction and assessment and fun stuff, yes. The fun stuff of education I feel like in Special Ed we never have time for, so it's that kind of the management thing I think are really important. (TL) • Focus on children is what I would say is that. It's a focus on how we're going to make sure that all kids learn at high standards. (ADM) • The reason that I chose that statement is because unless you actually give people the time to address the needs, none of the other things matter. Particularly in Special Ed, teachers are often required to do whole bunches of things for kids and they're not actually given the resources to actually make sure that those things happen. We can have all the great IEP people of the world but unless you actually give them the time and the resources to do it, it doesn't really matter. (TL)
28	Support open communication	• So in general, the most necessary choices that I put out there have to do with keeping open communication and supporting those people who are working under you, to make sure that they're always going to be there to support

		you. And when they feel supported, I think you're going to get a lot more out of them. (TL) • I'm really feeling, with the way things are in the district right now, because we've had such a turnover of people . . . And I think there's just been, people we're feeling that there wasn't open communication. And I'm feeling like I'm just trying to build that up, that people can feel they can speak to each other and support each other in that way. So right now, we've been kind of trying to build that up with people. So that's why, even as a supervisor, when I was supervising the schools here in district, I think my staff always knew that they could come to me and talk to me about anything. So I want to keep that going, because that was a way for us to get our work done. (ADM)
1	Ensure there is a well-functioning special education leadership team	• Well, I definitely chose, for number, for the plus five statement, that there has to be a well-functioning special education leadership team. If the special education leadership team isn't well functioning, then it's not going to be possible to complete the chores of, of special education, to deliver services, to be out there creating programs. Everything will fall away from that and be just as dysfunctional, so I really think that a special education department is as functional as the leadership team is. And so the more functional the leadership team is, the more functional the SPED department will be, and so forth. (ADM) • I looked at it like a pyramid and starting with leadership working its way down without that leadership, nothing else is going to work. (TL) • I had to really think about the word necessary and what that meant and what I think is the most important element I guess of a high functioning department and that sort of lead me to what I chose which actually was number 1 which said ensure there is a well functioning Special Education leadership team. I think that closely underneath that are things to do with open communication and collaboration and I think that those are really key elements in terms of something that's necessary to be an effective leader in Special Ed because you really interface with so many different groups and needs and philosophies but ultimately if you don't have sort of like a well functioning team at the top I think things can fall apart really fast so that's why I chose that card. (TL)

27	Promote a professional collegial atmosphere	• I think, where people, right now, we're feeling that it hasn't been professional; it hasn't been collegial. And for me, as far as SPED staff, and not only for SPED staff, but for elementary staff, any of the staff, general ed staff, I think that almost needs to be fixed right now. (ADM)
32	Assist special educators on analyzing appropriate interventions	• What other issues, thoughts emerged while you were sorting the cards? I guess that I just noticed that there was some themes. There was the theme of collaboration. There was the theme of specific interventions. Then there was the sort of interesting themes sort of like holding the Special Education team accountable. There was are you a good manger for the Special Education team which was interesting. I don't think those statements would be in there. Those are the themes that popped up. I think that all the stuff about making sure the Special Education team is held accountable is important but I don't know if it's as critical as one of the other things. (TL)
40	Engage in specific discussions relative to closing the achievement gaps	• No specific comments made by Factor B participants regarding this item
30	Collaborate with educators on assessing instructional needs	• No specific comments made by Factor B participants regarding this item
26	Routinely communicate informally with educators	• The way that I came to my statements was that based on my own personal experience. Again working in Special Ed, if you can have the best IEP in the world but if you can't routinely communicate informally to educators about those plans and I stress the word informally because teachers don't want to hear that they need to follow a plan. They want to want to actually talk to a person who can translate this for them and they could actually seem. (TL) • Number 3, if there are other specific statements that you had difficulty placing please list the number of the statements and describe your dilemma. I struggled. It was interesting for me I was noticing myself do this that I was sort of starting with the positive side of the Q sort. I was really focused on how this falls and the rest just fell, but I really struggled with the neutral eight because I don't necessarily believed that these are neutral although it was useful for me to have to position one over the other. For instance, things like number 26, routinely communicate informally to educators. I think that's really important. I think communication is huge especially in a public high

		school and that things change so quickly and often it's the more informal connections you make with people that make a difference in the trenches of what actually gets performed or what happens inside the classroom. That's really extremely important and yet I can sort of easily dissect routinely or does it matter if it's informal or not so I ended up putting it there. I struggled the most with the neutral eight more than anything. (TL)
22	Acknowledge the expertise of educators	• No specific comments made by Factor B participants regarding this item

Table 4.11
Rationale of Factor B Members for Lowest Ranked Items

Factor B Low Item#	Statement	Reason
4	Ensure all members of the special education leadership team work in the same strand on the core objectives	• And if you're talking about the curriculum frameworks…Well, I guess that sometimes I feel that the core objectives could vary by level. So my focus, as a middle school special education supervisor might be very different than they are at the elementary or that they are at the high school level. And so while we have to have some sort of common mission, our individual objectives could be very different. Like, I know, for example, students in elementary special education that I have looked at have done better on test scores in certain areas than they have at the middle school level. So their objective or their focus might be very different than mine. There will be some commonality, but that's not to say that everything has to be cut from a cookie cutter, nor should it be in special ed. (ADM) • Sorry, I think our work is really about individualizing, doing what each kid needs, doing it well. I do think that core objectives in the general curriculum are extremely important and they're a part of that work but our focus is on how do we make this work for each individual kid who has a disability. (TL) • That to me is the least important because to me I think it's a very small and narrow view of Special Ed. I think in Special Ed you always look at the big picture rather than being that focused. (TL) • To have all the Special Education teachers working on

		the same core objectives isn't realistic at the high school level because students have so many different needs and for everyone to be kind of focused on the same strands it doesn't seem realistic to me. (TL)
6	Ensure members of the special education leadership team divide their time properly	• That kind of takes care of itself in scheduling. I don't have to focus on that too much. (TL)
35	Understand that the relationship with educators hinges on the belief that leadership should be distributed	• The reason that I chose that is because one, is that the other things seemed more practical like giving people collaboration time or helping people work on professional development goals or helping people come up with the specific interventions to work with kids where that one seems more theoretical. I don't think that the person needs to have awareness that they understand that leadership is distributed. I think that they probably just naturally distribute it and even if they've never heard the phrase distributed leadership they could still be doing it very effectively. (TL)
8	Ensure members of the special education leadership team prioritize tasks they have to perform	• I would hope that you would have that group of people that are professionals and can manage their job that you kind of assume that. (TL)
20	Allow the special education leadership team to function autonomously	• There is nothing worse that you can do to your people than just leave them alone. Special Education is so complex. There are so many opinions, ideas, methods, strategies that if you do not support your people you are not going to have a team because there's a million and one different ways to do it. I think that kind of idea of autonomous functioning is what kills us as school districts and we're trying to kind of create of a cohesive piece and lead people to do things with our students who need the most individualization we shall always be a team and we should always feel like we're supported as a team. (TL) • I don't want them to be completely autonomous because I don't think they are. I think they have to have a little bit of autonomy but if they're too autonomous there's a problem. (ADM) • I feel like that could actually be really detrimental, especially inside of a school like this where we have this inclusion model and you're just always working together. We're moving towards trying to create a culture where Special Education students are owned and

		worked with and supported by all educators. Shared responsibility to educate the kid. Exactly so... that would be that. (TL)
3	Ensure the special education leadership team supports the district goals	• I think it'll be ideal if the district goals always aligned with the goals of special ed. I think for a lot of different reasons they don't always and regardless either I guess I just don't think that being an effective leader hinges on that necessarily. They don't always line up frequently. (TL)
37	Understand that the relationship with educators is one of interdependency	• "Understand that the relationship with educators is one of interdependency," and then, "Allow the special ed leadership team to function autonomously." Again, for me, I guess, I think, in my head, that they already know this, so I'm feeling like that's not an area that I have to really worry about right now. I don't know; I could be wrong. It's already part of the culture. (ADM) • I think that anybody in education that's a given. You should already know that. (TL)
9	Ensure members of the special education leadership team is willing to execute a good idea	• No specific comments made by Factor B participants regarding this item
34	Ensure that all staff understands the importance of confidentiality	• Well, as I mentioned before, it's kind of funny. As a compliance officer, I put in the importance of confidentiality being least-important. I figure, at this stage of the game, if the leadership team doesn't understand that confidentiality is important, then it, you're in trouble. You know, basically, if you have people on the team that don't understand that, the same thing. (ADM) • Least important? Again, I just, I actually just sort of worked from what I felt was the strongest, things that were the strongest, all the way to the least. Some people work from the opposite direction; I just worked from that way, so it sort of ended up being confidentiality. (ADM)
15	Encourage educators to try new practices consistent with their own interests	• Well, one of the things that I noticed in trying to place the cards was that, for me, there was a lot of interrelationship or a lot of cross-over between some of the statements. So when I looked at laying out the statements, what I tried to do was look at "big picture" as being the most important, and least important

		maybe being the individual components of that big statement. So for example, let me just try to find one here. Well, I mean, if I'm encouraging educators to try new practices, consistent with their own interests, to me, that kind of falls under that sub-heading, in a lot of ways. So what I did was, I took the idea that I thought was the bigger picture, and I put that as more important. And the components of that bigger picture, I said, okay, that's only one aspect of that, so I kind of pushed that to the side. (ADM) • I think everyone should be encouraged to pursue their own goals for professional learning. However, and I think that they should be thinking about what kinds of things are out there, and what they could do better, as a self-reflection. But I also see it being the role of the special education supervisor or administrator to provide information to them about what some of the strategies are that are out there, what some of the newer research is telling us, and to give them information, too. (ADM)

Similarly to some of the highest ranked items, the lowest ranked distributed leadership items of #4, #34, and #15 were segregated by role. Special education teacher leaders were the majority (three out of four) of Factor B members to comment on item #4. During the follow-up interviews, special education teacher leaders expressed that they ranked item #4, *Ensure all members of the special education leadership team work in the same strand on the core objectives*, low because this is not always realistic when addressing and meeting the individual needs of students with special needs. Special education administrators were the only Factor B members to comment on item #34, *Ensure that all staff understands the importance of confidentiality*, and item #15, *Encourage educators to try new practices consistent with their own interests*. In addition, special education administrators shared that they ranked items #34 and #15 low because confidentiality and encouraging educators to try new practices are not as

important as the remaining distributed leadership items in the Q deck, especially when pertaining to the importance and function of leadership.

Factor B Summary. Factor B members were generally more experienced, less educated, older, and females that work in smaller school districts with lower rates of poverty. Factor B special education teacher leader members were generally younger and exhibited higher percentages of elementary teaching experience and having dual experience in both general and special education. On the contrary, Factor B special education administrators were older and displayed higher percentages of teaching experience at the secondary level.

Factor B members ranked statements high that favored attributes that (a) established an environment of collegiality and professionalism; (b) supported routine communication; (c) promoted collaboration, (d) created an understanding for the need for mutual support, advice, and understanding of other staff; (e) provided time to address needs; (f) ensured well-functioning special education leadership team; (g) helped identify appropriate interventions; (h) addressed closing the achievement gap; (i) collaboratively assessed instructional needs; and (j) acknowledged the expertise of educators. In particular, Factor B special education administrator members clearly feel that special education services cannot be accomplished without the mutual support, advice and understanding of other staff members. Specifically, special education teacher leaders expressed the importance of routinely communicating informally with educators as a necessity of a special education leader.

Factor B's low rankings were associated with items pertaining to accountability through oversight of time and prioritization of tasks, confidentiality, encouraging

educators to try new practices, autonomy, interdependency, and alignment of the work in special education to the district goals and core objectives. Specifically, special education administrators expressed that confidentiality and encouraging educators to try new practices are not as important as the other distributed leadership attributes. In addition, special education teacher leaders particularly felt that having the leadership team work in the same strand on the core objectives is not realistic when taking into consideration the individual needs of the students.

Similarities Among Special Education Distributed Leadership Statements

Within both factors, item #1, *Ensure there is a well-functioning special education leadership team*, was ranked highly. Several Factor A special education teacher leader and special education administrator members commented on item #1 during their follow-up interviews. Factor A members stated, in order for a special education leadership team to be well-functioning, then certain processes must be in place that include (a) supporting staff, (b) ensuring roles and goals are clearly defined, (c) providing open and effective channels of communication, and (d) prioritizing tasks accordingly to the needs of the organization. Three Factor B members also provided commentary about item #1. For example, one Factor B special education administrator stated that he chose to rank card 1 high because "If the special education leadership team isn't well-functioning, then it's not going to be possible to complete the chores of special education, to deliver services, and to be out there creating programs." The remaining two Factor B members, both special education teacher leaders, provided similar responses that "ultimately if you don't have a well-functioning team at the top, things can fall apart really fast", and "without leadership, nothing else is going to work."

Table 4.12
Factors A and B Rationale for High Ranked Item

High item#	Statement	Factor A participant rationale	Factor B participant rationale
1	Ensure there is a well-functioning special education leadership team	• I chose this because it said, "well-functioning," and so in my mind a lot of other things have to happen for it to be well-functioning, and that means that, looking at the data, supporting your people with feedback, making sure the roles, goals, making sure that people are effectively using time, and also effectively supporting them follows a well-functioning team, and also open communication. (ADM) • Now, that's kind of a loaded statement; everybody wants to have a well-functioning leadership team, but what does that mean, and how do you develop it? You don't always want yes people; you want a positive, collaborative effort when you're looking at vision of the district, resources of the district, and service delivery models in the district. And so you have to develop a team that responds to that, or else you find yourself again in trouble. You can have dissension, but it has to be dissension with respect. (ADM) • I think without that you can't really do anything to ensure that students are going to get services and	• If the special education leadership team isn't well functioning, then it's not going to be possible to complete the chores of, of special education, to deliver services, to be out there creating programs. Everything will fall away from that and be just as dysfunctional, so I really think that a special education department is as functional as the leadership team is. And so the more functional the leadership team is, the more functional the SPED department will be, and so forth. (ADM) • I looked at it like a pyramid and starting with leadership working its way down without that leadership, nothing else is going to work. (TL) • I think that closely underneath that are things to do with open communication and collaboration and I think that those are really key elements in terms of something that's necessary to be an effective leader in Special Ed because you really interface with so many different groups and needs and philosophies but ultimately if you don't have sort of like a well functioning team at the top I think things can fall apart really fast so that's why I

		teachers are going to get the supports that they need so we as a team need to be organize and functioning well. (ADM) • I'm looking at my chart here, move across and start with a good foundation, a base. So I felt like those three things (statements #1, #5, and #10) gave me that base, to start a good leadership team. (ADM) • I think to have a well balanced and effective Special Ed department you have to have a strong team so I think that that kind of drives the whole rest of the cards here so making sure that people understand what their job is, that they understand how to do it and just having good leadership skills is essential. I've seen it where you don't have it and it doesn't work. (ADM) • I don't see how it gets more important than that because if that's not functioning well, it's going to be chaos. (TL) • Ensure there is a well functioning Special Education leadership team because as far as Special Ed department can't function without competent leaders that are well respected. That's what I was looking for. (TL) • For me that is critical, that's	chose that card. (TL)

		everything. (TL) • I picked number 1 because I thought that that encapsulated a lot of the good points in these entire 40 cards but especially the number 7 and the number 10...If you don't have a well functioning team, the people in the team have to have the same thought process and we all have to work together in the best interest of the students. If we're not all on the same page then it's not going to work for the student. (TL)	

Factor A members and Factor B members shared only one low ranked distributed leadership item, #15, *Encourage educators to try new practices consistent with their own interests*. Members of Factor A and Factor B ranked distributed leadership item #15 low because managing individual interests was not viewed as a priority (see table 4.13). This feeling appeared particularly true for administrators as four special education administrators (2 Factor A ADM and 2 Factor B ADM) provided comments pertaining to this item compared to only one special education teacher leader that belong to Factor A. As one Factor A special education administrator stated, when referring to item #15, "Encouraging new practices in their own interests. I kind of feel like you need to stay focused on what the goal is of the district, the core, you know, curriculum. So, yeah, you have interests, but, really, you need to stay up with what's the focus of the district." A Factor A special education teacher leader added, "Trying new practices that are of an educator's interest are not always in the best interest of the student population. I would encourage teachers to explore new practices that are in the students' best interest."

Further, the one Factor B administrator expressed that the role of special education administrator includes providing information and strategies to teacher leaders.

Table 4.13
Factors A and B Rationale for Ranking Item #15 Low

Low item #	Statement	Factor A participant rationale	Factor B participant rationale
15	Encourage educators to try new practices consistent with their own interests	• Encouraging new practices in their own interests. I kind of feel like you need to stay focused on what the goal is of the district, the core, you know, curriculum. So, yeah, you have interests, but, really, you need to stay up with what's the focus of the district. (ADM) • I don't know that their own interests necessarily coordinate with curriculum and framework so I put that as last. I don't want them going off on a tangent, especially in Special Ed if you're trying to do specialized instruction you don't have the kids for a lot of time so it has to be highly effective and efficient...especially when there's an IEP involved. (ADM) • Trying new practices that are of an educators interest are not always in the best interest of the student population. I would encourage teachers to explore new practices that are in the students best interest. Then it would have been a statement placed in a different column. (TL)	• Well, one of the things that I noticed in trying to place the cards was that, for me, there was a lot of interrelationship or a lot of cross-over between some of the statements. So when I looked at laying out the statements, what I tried to do was look at "big picture" as being the most important, and least important maybe being the individual components of that big statement. So for example, let me just try to find one here. Well, I mean, if I'm encouraging educators to try new practices, consistent with their own interests, to me, that kind of falls under that sub-heading, in a lot of ways. So what I did was, I took the idea that I thought was the bigger picture, and I put that as more important. And the components of that bigger picture, I said, okay, that's only one aspect of that, so I kind of pushed that to the side. (ADM) • I think everyone should be encouraged to pursue their own goals for professional learning. However, and I think that they should be thinking about what kinds of

			things are out there, and what they could do better, as a self-reflection. But I also see it being the role of the special education supervisor or administrator to provide information to them about what some of the strategies are that are out there, what some of the newer research is telling us, and to give them information, too. (ADM)

Summary

The data collected from this study was subjected to factor analysis using Schmolck's pre-flagging algorithm. Factor A and Factor B consisted of 16 and 13 special education leaders respectively. Factor A was composed of 8 teacher leaders and 8 administrators, while Factor B included 7 teacher leaders and 6 administrators. There was one minority special education leader between the two factors.

Factor A accounted for the majority of the variance and were generally younger, more educated with less experience at their current position, and that were working in larger school districts with higher rates of poverty. Members of Factor A assigned high scores to distributed leadership attributes linked to (a) a well-functioning leadership team, (b) clear goals, (c) clear roles and responsibilities, (d) task prioritization, (e) support for district goals, (f) the belief in distributing leadership, (g) assignment of responsibilities linked to competencies of staff, and (h) an understanding that service delivery requires mutual support, advice, and understanding. Special education administrators specifically expressed the necessity for special education leaders to support the district goals, as special education teacher leaders distinctively conveyed the importance of ensuring the

special education leadership team has clear roles and responsibilities, as well as clear goals. Factor B was responsible for a smaller portion of the variance in the data; predominantly comprised of more experienced, less educated, older, females working in smaller and more affluent school districts. Also, Factor B members ranked high leadership items connected to the qualities of (a) mutual support and understanding, (b) time to address student needs, (c) open communication, (d) well-functioning teams, (e) collegiality, and (f) professionalism, which are closely linked to cultural distribution.

The qualitative data established an understanding of the participants' thought processes from Factor A and Factor B in the sorting of distributed leadership items in distinct ways. Factor A members comments supported these findings with statements such as "well-functioning means looking at data, supporting your people with feedback, making sure the roles and goals (are clear), making sure that people are effectively using time, and also effectively supporting them", "you want a positive, collaborative effort when you're looking at vision, resources, and service delivery of the district", and "we all have to work in the best interest of the students." Factor A members favored attributes that are closely connected to strategic distribution.

Factor B special education administrator members clearly felt that special education services cannot be accomplished without the mutual support, advice and understanding of other staff members, while special education teacher leaders expressed the importance of routinely communicating informally with educators as necessity of a special education leader. Factor B members stressed these qualities with their comments of "everyone has to buy into educating the student from the top all the way down, and most importantly in the trenches", "being able to communicate, being collegial", and "it's

really important to work as a team, both special educators and general educators, working collaboratively."

CHAPTER 5

DISCUSSION

This section will explore possible interpretations of the results obtained from Massachusetts special education leaders' perceptions of distributed leadership. The focal point of this discussion will be an exploration of the findings in relationship to participant roles and the interaction of roles with distributed leadership statement rankings. A suggested continuum of distributed leadership based on the findings of this study is explored in the context of emerging leadership approaches. The discussion culminates with suggestions for future studies in the areas of special education and distributed leadership.

Demographic Similarities and Differences among Participant Distributed Leadership Sorts

The demographic similarities and differences of Factor A and Factor B participants offer some insight on the distributed leadership attributes that members favored from each factor. The sorting patterns of members belonging to each factor are consistent with many of the trends and patterns reported in the literature. In addition, participant role (as special education teacher leader or special education administrator) helped to provide further explanation of the participants' perceptions of the necessary distributed leadership attributes required in special education.

Demographic Influence on Perceptions of Distributed Leadership

Factor demographics provided some understanding of Factor A members' perceptions of special education through the lens of distributed leadership. Factor A members were generally younger, more educated, and less experienced at their current

position, and were working in larger school districts with higher poverty levels. Factor A included the youngest (P28) participant in the study. Research indicates that novice administrators have a greater tendency to be described as more bureaucratic, driven, direct, and less democratic, indicating a preference to practicing a top-down approach (Schmidt, Kosmoski, & Pollack, 1998). In addition to Factor A members' age, the lack of dual experience in the areas of general and special education could also explain why there was a preference to top-down compared to more collaborative forms of distributed leadership. Additional research shows that differences in experiences and with perceptions of the need for change of school leaders lead to the employment of different effective improvement strategies (Day, Leithwood, & Sammons, 2008).

Further, the majority of Factor A members (including 4 special education teacher leaders and 5 special education administrators) had less than 5 years of experience at their current position indicating an increased probability that these special education leaders work in districts with higher levels of turnover. Numerous special educators have been found to leave teaching every year or transfer into general education (McLeskey, Tyler, & Flippen, 2004). Often these vacancies are filled by unqualified special education teachers. Districts with high turnover will likely have fewer teachers available to assume leadership positions, and the teacher leaders in the district will be spending an increased amount of time dedicated to mentoring new colleagues and less time on leadership tasks (Billingsley, 2007, 2007; Billingsley et al., 2004). As a result, it's not surprising that Factor A members favored items pertaining to roles, responsibilities, and goals, especially when considering very few have been able to define teacher leadership in the literature (York-Barr & Duke, 2004). Overall, Factor A members' age and lack of

experiences helps to explain why Factor A members may have favored a planned form of distributed leadership.

In addition, there were some demographic differences in members of Factor B compared to members of Factor A. A larger percentage of Factor B members, particularly the special education teacher leaders, had teaching experience in both general and special education. Specifically, P16 also was the participant to have more general education administrative experience (15 years) than special education administrative experience (6 years), as well as being the only participant to hold a doctorate degree. There was evidence by a number of Factor B participants who discussed the importance of the relationship between general and special educators. Research has found that the support from general education teachers was an important aspect of the support needed for a long-term career in the field of special education (Prather-Jones, 2011). Special education administrators have the challenging responsibility of building positive relationships not only with special education staff, but also between general and special education teachers and administrators to assure that high quality educational programs are accessible to all students regardless of ability (Lashley & Boscardin, 2003). The difference in the type of teaching experience could explain why members of Factor B favor distributed leadership that prefers professional collegiality.

Factor B members predominantly comprised of more experienced, older, females working in smaller, more affluent school districts. Loder and Spillane (2005) report that women school administrators experience some role conflict in their first five years of transitioning from teacher to administrator. However, the female participants belonging to Factor B were generally older and more experienced as seventy-five percent of Factor

B members had more than 5 years experience in their current position. The majority of Factor B members fell into the 41-60 age groups at 84 percent with the majority teacher leaders falling into the 41-50 age group, and the majority of administrators falling into the 51-60 age group. Research suggests that age is a factor in the consideration in appointing educators for leadership positions (Ibukun & Oyewole, 1997). In addition, literature has found that older, more experienced administrators have been perceived as more effective (Ibukun, Oyewole, & Abe, 2011). The age of the members of Factor B could have contributed to the high ranking of statements pertaining to professionalism and collegiality in their approach to distributed leadership. Research conducted on business executives found that the oldest group was more open to learning compared to younger professionals, thus demonstrating a greater desire to work with others (Klein, Astrachan, & Kossek, 1996). This offers another possible explanation of why Factor B members ranked items high that pertained to collegiality. Although 77 percent of Factor B members were female and consisted of one male administrator (compared to 50 percent of Factor A members being female), research indicates that gender differences have minimal influence when men and women have relatively similar power (Barry, 2002).

Further, Factor B included the one minority participant (P8) in this study who was also the only participant to hold an administrative position in a related service area (speech and language) in special education. Unfortunately, the lack of diversity in these two areas in this study also represents the trend in the educational school system. For example, only one out of the 17 school districts from Massachusetts that were represented in this study offered an administrative position in the related service field. Additionally, although there is an overall dearth of research on minority special education

administrators, 17.6 percent of all U.S. school principals were of minority backgrounds in 2007-2008 school year (Sanchez, Thornton, & Usinger, 2009).

Factor B contained significantly more teacher leaders whose districts made AYP for both English Language Arts (ELA) and Math than Factor A. Research suggests that positive working conditions such as "fostering a collegial, trusting, team-based, and supportive culture; promoting ethical behavior; encouraging data use; and creating strong lines of communication" directly influences the quality of instruction (Clifford, Behrstock-Sherratt, & Fetters, 2012). Moreover, research indicates an association between positive working conditions and student achievement (Ladd, 2009). In addition, Factor B special education teacher leaders represented the largest subgroup from either factor that (a) worked in districts with student populations less than 3,000 students, (b) attained AYP for both ELA and math, and (c) worked in districts whose free and reduced populations were below the state average. Research suggests that smaller school districts with smaller populations of disadvantaged students perform better on standardized assessments (NCTAF, 1996; Roza, 2001).

Furthermore, the student demographics in which members of Factor B were serving may have contributed to the high ranking of collegiality. Sixty-nine percent of the members of Factor B worked in school districts in which their free and reduced lunch populations were less than the state averages compared to 50 percent of members of Factor A. The majority of these members of Factor B were teacher leaders. The smaller the proportion of disadvantaged students in a school, the more capable a school is to engage in effective problem-solving processes (Pallas, Natriello, and McDill, 1989). Overall, factor demographics played a significant role with understanding Factor B

members' perceptions of special education through the lens of distributed leadership. Factor B members are drawn to distributed leadership that empowers leaders and followers through mutual work and trust. Factor B members' sorting patterns, comments, and demographics suggest that they value distributed leadership in which leadership is embedded in the culture of the organization, decisions are data-driven, and accountability maintain through professional collegiality. As a result, these attributes are connected to the embedded form of distributed leadership on the continuum.

Factor Profiles

Distinct profiles of each factor emerged as a result of the sorting patterns and responses of Factor A and Factor B members. The sorting patterns and comments of Factor A members indicated that this group required time for careful planning to accomplish the highly ranked distributed leadership tasks, whereas the sorting patterns and comments of Factor B members revealed the need for high levels of support, collegiality, and communication in order for special education services to be accomplished.

The Planned Distribution Profile of Factor A Special Education Leaders

The distributed leadership perspectives of Factor A members are consistent with strategic distribution. Macbeath et al. (2004) define strategic distribution as a "planned appointment of individuals to contribute positively to the development of leadership throughout the school." Macbeath et al. state the distinct characteristic of strategic distribution is its goal orientation with an emphasis on a long-term goal of school improvement. Leaders practicing strategic distribution are very calculated in their appointments of individuals as they attempt to match the compatibility of skill sets within

teams of educators and less in terms of individual competencies. Once roles and responsibilities have been assigned, a leader provides "professional trust" by presuming competence in performance unless proven otherwise (Macbeath et al.).

Factor A members favored distributed leadership items pertaining to accountability through the implementation of clear roles, responsibilities, and goals. The responses from members of Factor A indicate a theme of strategic distribution, especially with the high ranking of item #5, *Ensure people are assigned responsibilities based on competencies*. Factor A members' highest ranked statement was item *#1, Ensure there is a well-functioning special education leadership team*.

Eight out of the 10 top items for Factor A participants began with the verb "ensure", results which implies a desired higher level of accountability than the remaining statements that began with verbs such as *provide, encourage,* and *allow.* As mentioned in chapter 2, Spillane et al. (2004) identified several leadership functions that included *constructing and selling a vision* and *providing both summative and formative monitoring*. Both of these functions are a framework for providing accountability and establishing clear goals. In addition to favoring the approach of strategic distribution, the high ranking of item #5 suggests a preference for distributing leadership through collective distribution. Spillane et al. describes collective distribution as leaders working separately but interdependently to achieve a shared common goal.

In addition, comments from the follow-up interviews with Factor A members provide evidence that the highly ranked items of #7, #10, and #3 were segregated by role. The comments by special education teacher leaders indicate this group feels strongly that a necessity of being an effective leader of special education includes ensuring the

leadership team has clear goals (item #7), as well as ensuring the leadership team has clear roles and responsibilities (item #10). These highly valued attributes of Factor A special education teacher leaders are sensible when taking into consideration that special educators may be "overwhelmed with the idea of leadership" because of various role problems that exist in special education (Billingsley, 2007). In order for special education teacher leaders to address some of these role problems, they need the support from district administrators to meet their responsibilities in order to effectively meet the needs of students with disabilities (Billingsley). Factor A special education administrators identified the necessity for providing support for district goals by being the only Factor A members stating they strongly valued item #3 –ensuring the special education leadership team supports the district goals.

Additionally, special education administrators were the only Factor A members to comment on the lowest ranked items of #13 and #38, as well as representing the majority (four ADM to one TL) that commented on item #14. Their comments implied that Factor A special education administrator members ranked these items low because these three items were related to lower level, managerial tasks that were not directly related to the instruction and programming of students with disabilities. More specifically, the comments of Factor A special education administrators revealed: being accountable after school to help educators (item #13) is viewed as mechanic and not essential to special education leadership; collaborating with educators to develop home-school relations (item #38) is systematically set-up, not the teachers responsibility and it was not considered to be as essential as the majority of statements in the Q deck; and, encouraging educators to pursue their own goals for professional learning (item #14)

must be connected to the district's goals and curriculum. Although the general conception of educational leadership traditionally views administrators as handling non-teaching responsibilities (Silva et al., 2000), there is an increased awareness of the necessity of teacher leadership for educational reform efforts (Fullan, 1994). Based on the responses of Factor A members, they evidently recognize the importance of teacher leadership as the special education teacher leaders favored items pertaining to roles, responsibilities, and goals; and special education administrators ranked items low that were considered not as essential as the higher ranked items. Assigning reasonable roles and responsibilities is one effective strategy that administrators can implement to retain special education teachers (Leko & Smith, 2010). Understanding the necessity of teacher leadership for educational reform efforts could be attributed to high educational levels of the members of Factor A, particularly the special education teacher leaders.

Factor A members' reactions and comments about the necessities of effective leaders of special education reflect attributes described in the distributed leadership approaches of both strategic and collective distribution. Strategic distribution tends to suggest a top-down approach to leadership (Macbeath et al., 2004). Factor A members' responses indicate a preference to a top-down approach of leadership with the high rankings and responses pertaining to those items. For example, one Factor A administrator summarized her belief statement by stating,

> "For me, picking the first was really the essence of the belief system which I picked. 'Understand the relationship with educators hinges on the belief that leadership should be distributed.' Because, I think, in the field of special ed., there are so many nuances and aspects to it, no one entity can hold it, and no one administrative team. I think everyone has a role and a part to play in the process…Obviously, this notion of top-down leadership, what do we know, I think, about education, because it's hard for me to separate special ed.

> administration from education and teaching and learning, and where we want to affect change, I see there's a place for top-down at times, and then there's a place where you have to share it and own it to move something forward."

This statement shares the view of distributed leadership as also being *concertive action*. This form of distributed leadership is holistic where the sum is greater than the equal parts (Gronn, 2002). Factor A members' comments shared the understanding that in order to effectively complete the tasks most necessary to being an effective leader of special education, the leaderships tasks must be distributed.

In summary, the sorting patterns and comments of Factor A members indicate attributes of distributed leadership described in the literature that include: (a) the planned appointments of individuals based on competencies and skill levels (Leithwood, 2005); (b) the understanding that leadership tasks should be distributed (Bennet et al. 2003); and (c) accountability through the implementation of clear roles, responsibilities and goals (Macbeath et al., 2004). Clearly indicated in the sorting patterns and comments was the need for careful planning to accomplish the distributed leadership tasks that were ranked highly by Factor A members.

The Embedded Distribution Profile of Factor B Special Education Leaders

Members of Factor B favored items that pertained to attributes that are closely connected to cultural distribution. Macbeath et al. (2004) define cultural distribution as "practicing leadership as a reflection of the school's cultural, ethos and traditions." Further, cultural distribution is described as a community of people working together towards a common goal in which leadership is assumed, shared, and embedded in the culture of the organization (Macbeath et al.). As a result, the emphasis from leaders and leadership shifts to a professional learning community where leadership tasks are

accomplished by working collaboratively together. Members of Factor B highly ranked items that established a distributed leadership environment of collegiality and professionalism; one that supported communication, emphasized the needs of the students, and established strong organizational structures.

Members of Factor A referenced the words "top-down" when describing their perspectives of a well-functioning special education leadership team, while members of Factor B referenced the words *collegiality* and *communication*. Three of highest ranked items numbered 28, 27, and 26 for Factor B included the terms collegial and communication. Additionally, *item #32, Assist special educators on analyzing appropriate interventions*, and *item #*40, *Engage in specific discussions relative to closing the achievement gaps*, are two more items related to "encouraging data use" that were ranked high by Factor B members. These attributes are connected closely to cultural distribution. The practice of cultural distribution relies heavily on trust and competence which can only be accomplished in a truly collegial environment with high levels of communication that values everybody's opinion (MacBeath, 2005). Further, high levels of collegiality are visibly present in successful professional development efforts (Evans, 1991).

In addition, the comments of Factor B members indicate that the highly ranked items of #39 (emphasizing the need for mutual support, advice, and understanding to accomplish special education services) and #26 (routinely communicating informally to educators) were segregated by role, as special education administrators were the only Factor B members to comment on distributed item #39 and special education teacher leaders were the only Factor B members to comment on item #26. The comments

pertaining to the highest ranked item reveal that Factor B special education administrator members clearly feel that special education services cannot be accomplished without the mutual support, advice and understanding of other staff members. Research has indicated that issues of support had a determining influence on special education teachers to remain in the field of teaching as well as finding that support from administrators was influential on their career decisions (Prather-Jones, 2011). Further, special education teacher leaders were the only Factor B members to comment on item #26 that stressed the importance of routine informal communication with educators. Research indicates that teachers talk to each other on a daily basis (Zahorkik, 1987). Further, research supports that effective schools are characterized by teacher to teacher and teacher to principal collegiality (Evans, 1991). Special education teachers have reportedly referenced the necessity of having administrative and collegial support in their workplace (Prather-Jones).

Overall, the sorting patterns and comments of Factor B members indicate attributes of distributed leadership described in the literature that include: (a) collegiality (Zahorkik, 1987), (b) administrative support (Prather-Jones, 2011), and (c) high levels of open communication (MacBeath, 2005). In order for special education services to be accomplished, Factor B members' sorting patterns and comments indicated the necessity for high levels of support, collegiality, and communication.

The Distributed Leadership Continuum

Distributed leadership is a multi-actor practice in which people contribute to a group or organization through their *individual* actions (Bennett, Harvey, Wise, & Woods, 2003). Viewed as a product of interactions between school leaders, followers, contexts, and artifacts (Spillane, 2005), distributed leadership enables opportunity for *individuals*

to exercise leadership aligned with school goals through agential and structural dimensions of the organization (MacBeath et al., 2004; Garand, n.d.). This does not mean, however, that the practice of distributed leadership does not fall along a continuum of participation and engagement. Distributed leadership has the potential to range from collegial professional practices that involve others in a much broader and collective sense to practices that are much more hierarchical and authoritarian. Within collegial professional leadership practices school, district, and community representation contribute to decision-making, development of educational goals, and improvement of educational practice and outcomes (Sergiovanni, 1991). In this section, the possibility of a distributed leadership continuum will be explored along which the traits for each extreme will be identified.

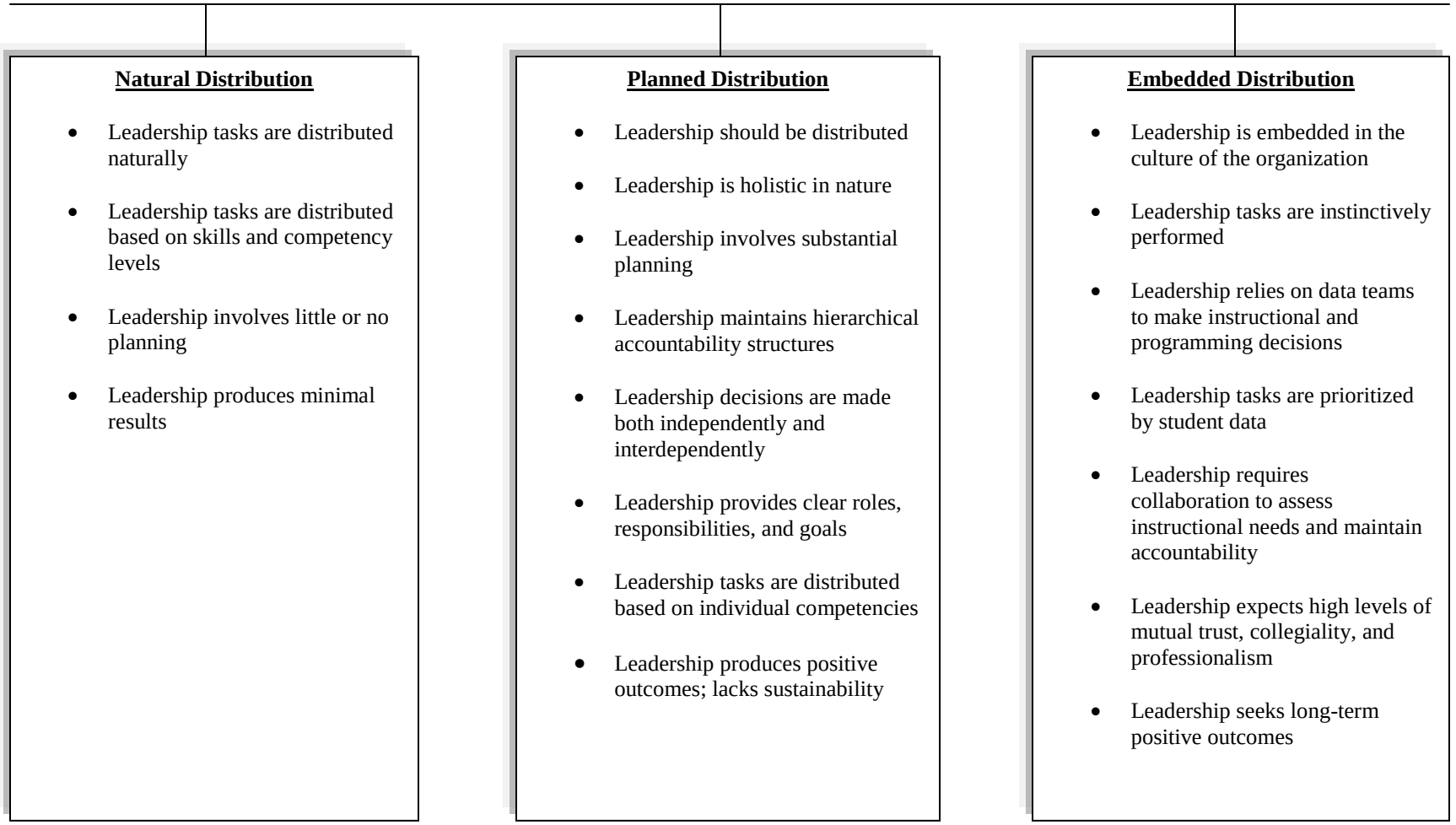
The distributed leadership continuum originated from the qualitative and quantitative data from this study, as well as from the works of: Gronn (2002; 2008); Bennet et al. (2003); Spillane et al. (2001; 2004); Leithwood et al. (2007); Mascall et al. (2008); and MacBeath et al. (2004). The majority of the research and models presented on distributed leadership is from the perspective of the instructional or school leader. The distributed leadership continuum considers leadership from an organizational perspective, such as a school district. The vast majority of special education administrators (14 of 15) that participated in this study were serving their position at the district level. As stated throughout this paper, special education leaders are responsible for high quality programming which does include the compliance of meeting the instructional needs of students with disabilities. Although the distributed leadership continuum encapsulates school leadership, it can also be applied to other areas of

educational leadership such as special education. The proposed distributed leadership continuum has three stages with two transitional periods, one in between each stage. The continuum (see figure 5.1) models the progression of distributed leadership as an organization increases its capacity to build leadership.

At one end of the distributed leadership continuum is *natural distribution*. As stated in the previous chapter, Factor B members assigned a low ranking to item #35 because their general feeling was the distribution and prioritization of leadership tasks should not be assigned, but take place naturally ("tasks prioritize themselves") within the special education leadership team. The distribution of leadership tasks in this stage takes place naturally. Similarly to the description of spontaneous alignment by Leithwood et al. (2007), natural distribution is a pattern of distributed leadership in which leadership tasks are assigned spontaneously with little to no planning while educators work collectively together. As a result of insignificant time dedicated to planning, natural distribution is often in response to an immediate need. Roles are assigned according to compatibility of skills and competencies needed to perform the leadership tasks. Similar to transactional leadership, this form of distributed leadership tends to be reactive at times as issues begin to arise, and produces minimal results.

In the middle of the distributed leadership continuum is *planned distribution*. Planned distribution follows the preferred distributed leadership pattern of Factor A members shared in the previous section. This form of distributed leadership is holistic in nature as leaders following planned distribution fundamentally believe that leadership tasks must be distributed in order for the organization to accomplish the many tasks

Figure 5.1
Continuum of Distributed Leadership



necessary to be effective. Accountability follows a hierarchical format in which progress monitoring typically takes place through formative and summative evaluations. Roles, responsibilities, and goals are clearly defined within the organization. Leaders and followers work collectively together; however, the emphasis of the collaborative work is on receiving feedback and participating in reflective conversations as it relates to improving instruction. Similar to natural distribution, leadership tasks are assigned based on individual competencies in this stage of the continuum. Decisions are made both independently and interdependently. Planned distribution generally produces positive outcomes, but has difficulties with sustainability because decisions are not consistently data driven. Leaders practicing planned distribution focus the collective work on the needs of the organization. Factor A members generally ranked items low that related to the use data. For instance, one Factor A teacher leader stated, "Personally data bores the hell out of me and I think too often we get caught in that minutia. It's like the kid you have in your class a lot of times the IEP is the individual and they don't need the data."

As distributed leadership transitions from natural distribution to planned distribution on the continuum, leaders begin to shift the focus of their collective work from spontaneous collaboration to the development of long-term goals through increased time dedicated towards planning and implementation. The distribution of leadership tasks starts to change from instant decisions to careful planning and sometimes meticulous thought based on individual competencies. Further, hierarchical structures begin to develop as roles, responsibilities, and goals are defined.

At the other end of the proposed continuum is *embedded distribution*. This form of distributed leadership is patterned after the distributed items ranked high by Factor B

members. Leadership in this stage is no longer assigned as it is embedded in the culture as members of the organization instinctively perform leadership tasks. Members work collectively and collegially using data teams to determine the instructional and programming needs of the students, as well as monitoring student progress. Members do not need to prioritize the tasks, as the tasks prioritize themselves with student data which is essential for maintaining accountability. Within this culture of the work are high levels of mutual trust, collegiality, and professionalism. Embedded distribution produces long-term positive outcomes as the research supports collective collegiality as an effective approach for achieving sustained organizational improvement (Woods & Weasmer, 2004).

As distributed leadership transitions along the continuum from planned distribution to embedded distribution, leadership becomes less bureaucratic and more collegial. The focus shifts from reflective conversations to data driven decisions. Leadership becomes embedded in the culture and is instinctive rather than leadership tasks being assigned based on competencies. Accountability shifts away from a hierarchical structure as mutual trust, collegiality, and professionalism increase throughout the organization. The careful planning continues, but the positive outcomes become sustainable for the long-term.

This study brings increased awareness the need for educational leadership preparation programs to devote more attention to special education leadership. In order for special education leaders to meet the demands of the position, it is necessary that they practice leadership that effectively and collaboratively distributes leadership tasks.

Limitations and Suggestions for Future Studies

Barata (2007) noted the Q-sort methodology has several limitations because of the force choice nature of sorting. The force choice limits participants from expressing other opinions that are not part of the choice (Bracken & Fischel, 2006; Cosman-Ross & Hiatt-Michael, 2005). For this investigation, the Q-sort's choice process forced special education teacher leaders and special education administrators to prioritize their rankings of distributed leadership attributes into cells in columns that ranged from most to least important to the job of a special education leader. In several instances, participants expressed a desire to include more leadership statements in the highest positive column.

Results from Q-methodology are not reflective of the general population, as is the case with this study (Barata, 2007). The 40 leadership statements used in this study only represented distributed leadership attributes. The findings from this study illustrated that 30 special education teacher leaders and special education administrators who voluntarily participated in the Q-sort activities showed a preference for particular leadership attributes associated with the 40 distributed leadership statements.

Only special education teacher leaders and special education administrators who responded to the researchers' emails and phone calls participated in the study. The results might have been different if participants were randomly selected. While the non-random selection of the participants in this study introduced diversity of thought, it cannot be used to estimate the number of people in the general population who hold each of the perspectives. If recruitment had been done randomly, it is likely that some or all of the perspectives expressed during the Q-sorting procedure would have been missed (Barata, 2007; Brown, 1980; Provost, Boscardin, & Wells, 2010). It is possible that more

factors might have emerged from the factor analysis if more participants holding a doctoral degree participated in the study and more minority participants had participated in the study. In addition, the participants in this study were limited to special educators. However, the perspectives of principals could have provided more depth to this research. Consequently, additional research is needed to explore perspectives of principals on effective leadership practices in special education.

The strength of this study rests in the fact that this study can be replicated in different environments and can accommodate the examination of the leadership attributes and thought processes supporting choices with regard to the distributed leadership style. Future research should be devoted to better understanding the relationship influence distributed leadership approaches has on an organization's culture, student programming, and student achievement in relationship to state accountability measures. It is essential to restate that participants were asked to sort the items from most important to least important. Participants could have perceived all statements as being necessary to the job of an effective leader of special education. As a result, more research is needed to draw any conclusions on based on the relationship between experience and leadership practices of special education leaders.

Conclusions

As stated earlier, members of Factor A were generally younger, more educated, and less experienced while Factor B members were generally older and more experienced. Factor A's rankings were consistent with research that beginning administrators are more bureaucratic and direct (Schmidt et al., 1998). Research indicates that older, more experience business executives demonstrated a greater desire to work

with others (Klein et al., 1996), and older, more experienced administrators have been perceived as being more effective (Ibukun, Oyewole, & Abe, 2011). As a result, it is not surprising that members of Factor B valued more the items related to improving instruction and programming as they were farther along in their careers and their leadership style is further developed.

Members of Factor A fell into the planned distribution stage on the continuum. Members of Factor A clearly favored statements that emphasized the importance of leadership tasks necessary with creating a well-functioning special education leadership team. Members of Factor A were generally more comfortable providing feedback to educators without first establishing a collegial environment that supports open communication focusing on the most important needs of the students. The responses from members of Factor A suggest that they value a top-down leadership practice that is goal oriented and assign leadership tasks based on individuals' competencies and potential to work collectively with other leaders. During the follow-up interviews with members of Factor A, four participants specifically referenced the word "collaboration", but defined it as having clear communication, providing support and meaningful feedback in a supervisory role.

Based on their responses, members of Factor B fall into the embedded distribution stage on the continuum. Members of Factor B clearly favored statements that emphasized the importance of establishing professional collegial partnerships in an effort to improve instruction and programming for students with special needs. Members of Factor B ranked statements high that pertained to open communication, closing the

achievement gaps, along with statements related to improving or analyzing programming, interventions, and instruction.

A continuum of distributed leadership was proposed based on the findings of this study. The majority of research and models presented in the literature on distributed leadership pertains to the instructional school leader. In addition, special education administrators, particularly in this study, serve their position at the district level. As a result, the proposed distributed leadership continuum in this study considers leadership from an organizational perspective.

As earlier described, there were both strengths and limitations associated with this study on special education leadership through the distributed lens. Overall strengths include: (a) size of the study; (b) the fact that this study can be replicated in different environments; (c) participant selection; and (d) data collection that allowed for both qualitative and quantitative analysis. Although the participants in this study were selected nonrandomly, all participants in this study met the Massachusetts state department of education qualifications of "highly qualified" in their field of work (self-reported). In addition, because the use of Q-methodology forces participants to prioritize their rankings of distributed leadership, participants were limited from expressing other opinions that were not part of the choice. In several instances, participants expressed a desire to include more leadership statements in the highest positive column. Further, this study is limited to the perspectives of special education leaders, although multiple stakeholders (i.e., principals, parents) have an impact on the programming of students with disabilities. Results are not reflective of the general population, as the findings illustrate that 30 special education leaders who voluntarily participated in the Q-sort

activities showed a preference for particular leadership attributes associated with the 40 distributed leadership statements.

In summary, this study demonstrates the importance of special education leaders developing an understanding of both the organization's purpose as well as the staff members' needs, personalities, strengths, and skill sets. The leadership practices transition from distributing leadership tasks from a top-down model to creating a truly collaborative environment embedded into the organization as special education leaders move along the continuum of distributed leadership. As expectations for student achievement continue to rise, special education leaders will need to employ a multitude of leadership styles/behaviors to meet the needs of students with disabilities, staff, families, and community stakeholders in the era of school accountability.

APPENDIX:
INSTRUMENTATION

Q-Sort Consent Form

The Distribution of Leadership Tasks of Leaders of Special Education

Thank you for agreeing to participate in this study. By participating in this study, you will be helping the researcher complete his dissertation. Your commentary and responses that you provide will assist with the documentation of the leadership qualities special education leaders value as most as well as least necessary to the job. Your participation will assist the researcher with developing a stronger understanding of the theories and practices associated with the profession of a special education leader.

What will happen during the study: During the study, the researcher will ask you to sort a set of distributed leadership statements developed from the works of Hulpia, Devos, and Rosseel (2009); and Militello & Janson (2007). This entire task should take between 50-60 minutes.

Who to go to with questions: If you have any questions or concerns about your participation in this study you should contact the Principal Investigator listed below. You may also ask questions during the sorting activity.

How participants' privacy is protected: At the end of this consent form, you will have the opportunity to choose whether or not you agree to participate in this study. By agreeing to participate in this study, you allow the researcher to quote you by complete anonymity (without using your name or title). In addition, we will make every effort to protect your privacy. We will not use your name in any publications. Furthermore, any information that lets us know who you are will be recorded with a code number. During the study the coding key that tells us which code number corresponds to your information will be secured. When the study is finished we will destroy the coding key that links information to you personally.

Risks and discomforts: Your participation in this study is voluntary and confidential to the maximum extent allowable under federal, state and local law. All the information gathered in this study will be kept confidential and secured.

Your rights: You should decide on your own whether or not you want to be in this study. You will not be treated any differently if you decide not to be in the study. If you do decide to be in the study, you have the right to withdraw from the study at any time without repercussions.

Your participation in this study will be contributing to the advancement of special education leadership and administration. Once again, thank you for your participation and time to make this study possible.

Sincerely,

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PLEASE READ THE FOLLOWING STATEMENT AND SIGN BELOW

When signing this form I am agreeing to voluntarily enter this study. I understand that, by signing this document, I do not waive any of my legal rights. I have had a chance to read this consent form, and it was explained to me in a language which I use and understand. I understand that I may be quoted anonymously (for example, "a district-level administrator"). I have had the opportunity to ask questions and have received satisfactory answers. A copy of this signed Informed Consent Form has been given to me.

I have read and understand this Consent Form and do hereby:

____AGREE ___DO NOT AGREE to participate in this study.

_____ _____

Signature Date

_____

Please print your name here

Distribution of Leadership Tasks between Administrators and Teacher Leaders of Special Education
Participant Background Information

Name:_____ Current Position:_____

1) Gender: ____M ____F

2) Year of Birth _____

3) Ethnicity:
_____African American or Black
_____Asian
_____Hispanic/Latino
_____Multi-race, Non-Hispanic
_____Native American
_____Native Hawaiian or Other Pacific Islander
_____ White
_____Other

4) Years you have been in your current position:____ Total years of experience in your position:____

If none, what was your previous position:_____

5) What is the student enrollment in your current district?_____

What is the per pupil expenditure cost?_____

6) What is the special education enrollment in your current district?_____

What is the per pupil special education cost?_____

7) The type of district you currently work can be characterized as:
_____Institutional School
_____County Agricultural
_____Independent Public
_____Independent Vocational
_____Local School
_____Regional Academic
_____Regional Vocational Tech

8) The type of school in which you currently work can be characterized as:
_____Elementary School
_____Middle School
_____High School
_____District-wide/Central Office
_____Other, Please Describe_____

9) Current Educational Level:
_____Bachelor
_____Master
_____Master +30
_____Doctorate

10) How many years of teaching experience did you have in general education at the following levels:
_____Pre-School
_____Elementary
_____Secondary
_____Postsecondary

11) How many years of teaching experience did you have in special education at the following levels:
_____Pre-School
_____Elementary
_____Secondary
_____Postsecondary

12) How many years of general education administrative experience did you have at the following levels:
_____Pre-School
_____Elementary
_____Secondary
_____Central Office/District
_____Postsecondary

13) How many years of special education administrative experience did you have at the following levels:
_____Pre-School
_____Elementary
_____Secondary
_____Central Office/District
_____Postsecondary

14) Which general education certificates/licenses and levels do you hold?
____Teacher (Level(s):_____)
____Principal (Level(s):_____)
____Superintendent
____Other_____

15) Which special education certificates/licenses and levels do you hold?
____Teacher (Level(s):_____)
____Principal (Level(s):_____)
____Special Education Director/Administrator
____Superintendent
____Other_____

16) Contractual Status:
____ Teacher Contract
____ Administrator Contract

***NAME:*_____**

Distribution of Leadership Tasks of Administrators and Teacher Leaders of Special Education
Participant Follow-up Questionnaire

1) Briefly describe what went into your choices of statements that are "most necessary to the job as an effective leader of special education?(+4's and +5).
Please list the one statement in the +5 column and your reasons for placing it there.

2) Briefly describe what went into your choices of statements that are "least necessary to the job as an effective leader of special education? (-4's and -5).
Please list statement in the -5 column and your reasons for placing it there.

3) If there were other specific statements that you had difficulty placing, *please list the number of the statements and describe your dilemma.*

4) What other issues/thoughts emerged for you while sorting the cards?

5) Describe how you arrived at your overall most important statements of the job as an effective leader of special education regarding the distribution of leadership tasks/responsibilities?

6) Describe how you arrived at your overall least important statements of the job as an effective leader of special education regarding the distribution of leadership tasks/responsibilities?

7) What factor(s), e.g., time, resources, your own knowledge, your skills, and/or your dispositions, contributed most to the sorting through the distributed leadership statements? *Please give specific examples for each if applicable*.

Distributed Leadership Statements

Sort statements from most necessary to the job as an effective leader of special education to least necessary to the job as an effective leader of special education…

Statements #1-23 generated from the ***Distributed Leadership Inventory*** **(DLI) by Hester Hulpia, Geert Devos, and Yves Rosseel (2009)**

DLI: Coherent Leadership Team #1-10

1) ensure there is a well-functioning leadership team
2) ensure the special education leadership team behaves professionally
3) ensure the leadership team supports the goals we like to attain
4) ensure all members of the leadership team work in the same strain on the core objectives
5) ensure the right person sits on the right place, taken the competencies into account
6) ensure members of the management team divide their time properly
7) ensure members of the leadership team have clear goals
8) ensure members of the leadership team know which tasks they have to perform
9) ensure the leadership team is willing to execute a good idea
10) ensure members of the leadership team have clear roles and responsibilities

DLI: Support #11-20

11) premise a long term vision
12) debate the school vision
13) compliment teachers
14) help teachers
15) explain reasons for constructive criticism to teachers
16) be available after school to help teachers when assistance is needed
17) look out for the personal welfare of teachers
18) encourage teachers to pursue their own goals for professional learning
19) encourage teachers to try new practices consistent with their own interests
20) provide organizational support for teacher interaction

DLI: Supervision #21-23

21) evaluate the performance of the staff
22) be involved in the summative evaluation of teachers
23) be involved in the formative evaluation of teachers

Statements #24-49 generated from ***Socially-focused, situationally-driven practice: A study of distributed leadership among school principals and counselors by Matthew Militello & Chris Janson (2007)***

24) ensure that teachers have time to address the most important needs of students (statement #2).
25) agree with fellow leaders of special education as to what are appropriate special education teacher responsibilities and tasks (statement #3).
26) allow the special education department to function autonomously (statement #7).
27) work together with teachers to develop programs (statement #10).
28) acknowledge the expertise of teachers (statement #12).
29) trust teachers enough to make decisions (statement #13).
30) provide insight to teachers (statement #13).
31) ensure roles within the special education department are clearly defined (statement #14).
32) allow some flexibility with responsibilities (statement #14).
33) support teacher(s) in developing a leadership role (statement #15).
34) routinely communicate informally to teachers (statement #16).
35) promote a professional collegial atmosphere (statement #18).
36) support open communication (statement #18).
37) collaborate with teachers on professional development (statement #19).
38) collaborate with teachers on assessing instructional needs (statement #19).
39) collect data on the ground to be shared collaboratively (statement #22).
40) assist special education teachers on analyzing appropriate interventions (statement #23).
41) consult with teachers (statement #25).
42) ensure that all staff understands the importance of confidentiality (statement #26).
43) consult with other district and/or school leaders on the teaching they observe (statement #27).
44) understand that the relationship with teachers hinges on the belief that leadership should be distributed (statement #29).
45) appreciate the work performed and the responsibilities involved with each staff member (statement #30).
46) understand that the relationship with teachers is one of interdependency (statement #37).
47) collaborate with teachers to develop home-school relations (statement #39).
48) understand that there are many facets involved with special education services that cannot be easily accomplished without the mutual support, advice, and understanding of other staff members (statement #41).
49) engage in specific discussions relative to closing the achievement gaps (statement #45).

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