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NETWORKINGS ROLE IN THE INFORMAL LEARNING OF ELEMENTARY
PRINCIPALS

A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirements for the Degree of

DOCTOR OF PHILOSOPHY
IN
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March 2019

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ABSTRACT

Formal learning is an important aspect for school principals in the era of federal and state accountability. These formal learning opportunities provide the conditions for leadership development and personal growth. Although formal learning has been a consistent focus of educational leadership research, informal learning has not. The purpose of this study was to use qualitative case study methodology to gain a better understanding of in depth Social Networking amongst school principals with varying levels of experience, as well as capturing the what and how of knowledge transfer amongst principals. This study found that a principal's informal learning opportunities are just as important as formal ones, and often occur more frequently. Informal learning allows principals to continually develop and refine their practices without the confines of formally set dates and times. Informal learning happens organically and is needs driven based on what knowledge a principal requires at a given point in time. The results and findings of this study provide the opportunity for future research related to networking and informal learning amongst school leaders.

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CHAPTER 1

INTRODUCTION

In the era of federal and state mandated accountability in public education, researchers have determined that leadership in schools matters. Schools with effective leaders have a greater chance of meeting accountability measures while continually improving and adapting the instruction students receive. Cotton (2003) found a positive correlation between the school principal and student achievement. School leadership also has been found to account for a fourth of the total school level effect on student learning (Nettles & Herrington, 2007). Leadership in schools is a primary component to whether or not the school will be successful. Ultimately, leadership matters, and school principals are at the heart of effective schools (Sanzo, 2016). It is important to understand how leaders learn and how they leverage their learning when categorizing leaders as effective or ineffective.

One of the focuses in research associated with educational leadership has been on the formal learning of school leaders. Formal learning for school leaders focuses on preparation programs, district mandated professional development, and other formal professional learning opportunities (i.e. national and regional conferences). These professional learning opportunities can provide school leaders with the opportunity to network and form professional relationships with other leaders. Researchers have found that these learning opportunities are important for professional growth, however these opportunities do not occur frequently. Informal learning happens more frequently than formal learning, but its relationship to school leadership has not been a focus in educational leadership research (Veelen et al., 2017).

Informal networks as a vehicle to learning in the field of educational leadership is the focus of this study. Leadership preparation programs and formal professional learning

opportunities are important; however, they happen less frequently than informal interactions with peers. The lack of research related to informal learning amongst school leaders is a problem because the opportunity for informal learning occurs each day, rather than during the set dates and times of formal professional learning. The purpose of this study is to determine whether or not learning through informal networks takes place amongst school leaders, and what that learning looks like. The researcher hopes to gain a better understanding of the relationship between peer networks and the acquisition of job related knowledge and skills. Three research questions will guide the study:

1. What role does networking play amongst school administrators learning from each other?
2. To the extent that networking is a vehicle to informal learning, how is knowledge acquired, what knowledge is passed, and under what circumstances or conditions?
3. How and to what extent do principals use networking as a vehicle to informal learning?

Statement of the Problem

The role of school leaders is extremely dynamic and ever changing. Principals have access to a wide range of formal learning opportunities that have the potential to influence and improve their leadership practices within the building. Although a great deal of research has been conducted focused on formal learning and educational leadership, there is a clear lack of research on informal learning amongst school leaders (Veelen et al., 2017). This hole in the educational leadership literature is problematic because many fields outside of education have determined that informal learning is a crucial aspect of professional growth and organizational improvement. Without a better understanding of informal learnings' effect on school leaders, it is difficult to identify practices that separate average principals from their exemplary peers. This

research has the potential to provide an improved understanding of if and how school leaders leverage their informal Social Networks for the betterment of instruction.

Statement of Significance

The significance of this study is tied to the lack of knowledge on informal networking and knowledge transfer amongst school administrators. Informal networking amongst administrators has not received a great deal, if any attention in educational research (Veelen et al., 2017). This studies purpose is to understand the relationship between peer networks and the acquisition of job related knowledge and skills. Individual and follow-up interviews of practicing principals will be used to find out what peer networks of principals look like and what, if any, impact they have on school leadership. Interview transcripts and coding will provide the data for the study (Bogdan & Biklen, 1997). The literature review will highlight what is already known about school leaders' learning, while also highlighting research on Social Networks, Social Capital, informal knowledge transfer, and structural holes between organizations.

Definitions

For the purpose of this study, the following terms are defined:

1. *Social Network Theory*- focuses on the interdependent aspects of individuals within an organization and the connections they make. It is defined as the study of knowledge creation, diffusion, and utilization (Dunn, 1983). The theory that individuals build and nurture networked relationships to build pathways for knowledge and resources (Hite, Hite, Jacob, Rew, Mugimu, & Nsubuga, 2006)
2. *Social Capital Theory*- defined as an individual's ability to secure a resource or knowledge from membership in social networks or other social structures (Lin, 1999;

Inkpen & Tsang, 2005). Social capital acts as a “currency” amongst individuals within a Social Network. The exchange of knowledge and ideas within Social Networks is only possible whenever both individuals feel as though their knowledge is reciprocated.

3. *Locus of Knowledge Acquisition*- related to any place or opportunity for an individual learn or gain knowledge. For the purpose of this study the Locus of Knowledge Acquisition will focus on where and how school leaders learn. Leadership preparation programs, professional development, and self-initiated learning are all formal aspects in which school leaders learn. This study will discuss these aspects, but focus more on the informal Locus of Knowledge.
4. *Informal Networks*- networks that are informal amongst school leaders. This area has not been a focus in educational leadership research as noted by Veelen, Slegers, & Endedijk (2017). The notion that informal networks are useful amongst school leaders was noted by Hess and Kelly (2007) when they found that amongst practicing school administrators, 96% found that they learned more from interactions with colleagues on the job than they did from formal training.
5. *Knowledge Transfer*- an informal way for individuals within an organization to learn from one another. Knowledge transfer is the process through which one network member is affected by the experiences of another, and takes place in a wider variety of settings when compared to formal education and training (Eraut, 2004; Inkpen & Tsang, 2005). Focuses on the exchange of ideas amongst individuals in a Social Network.
6. *Structural Holes*- a term used heavily in the business and sociology literature. Structural Holes focuses on the infusion of new ideas and knowledge from individuals outside of the organization (Inkpen & Tsang, 2005). Cross organizational relationships provide

individuals with alternative ways of thinking, which provides more options to select from and synthesize when making organizational decisions (Burt, 2004).

CHAPTER 2

LITERATURE REVIEW

This chapter will explore formal and informal learning in the literature. The research on formal learning will be from the field of education, while the information on informal learning will be from the fields of Sociology and Business. It is important to understand the current research on how school leaders learn, while also gaining an understanding of informal learning and knowledge transfer from fields outside of education. Social Network and Social Capital Theories will be used as a theoretical framework to help better understand the formation of networks and the informal flow of information amongst participants of the network. First, the literature review will cover the importance of leadership in the field of education. Second, the theoretical framework featuring Social Network Theory, Social Capital Theory, and Informal Learning will be introduced. Third, school leaders' locus of knowledge acquisition will be discussed, focused on formal learning structures in the field of educational leadership. Fourth, informal knowledge acquisition, focusing on knowledge transfer and structural holes, will be reviewed. Finally, a recent study focused on informal learning in educational leadership will be highlighted.

Importance of Leadership

School leadership and its importance have been a research focus in the field of education. Researchers have determined school leadership is second only to instruction among all school related factors that contribute to improved student learning (Leithwood & Riehl, 2003; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Leithwood, Harris, & Hopkins, 2008). Leadership in schools is the catalyst for school improvement and increased student achievement (Leithwood et al., 2004). Leithwood et al. (2008) found there are no documented cases of a school successfully improving student achievement in the absence of talented leadership. These

findings reinforce the idea of a positive relationship between the school principal and student academic achievement (Cotton, 2003). Research has shown principal leadership accounts for a fourth of the total school level effect on student learning (Nettles & Herrington, 2007). Principal leadership matters and makes a difference in improving student learning outcomes (Leithwood et al., 2004; Rice, 2010). A better understanding of what successful principals do is needed to fully grasp the importance of school leadership and why it matters. Successful leaders create a mission and vision for the school, share leadership, and build instructional improvement capacity within schools.

School leaders are responsible for creating the mission and vision for the school. Leaders create a mission and vision to set the direction of the school moving forward (Leithwood et al., 2008). All school leaders create a mission and vision for their school, however they must also be able to articulate the schools mission and vision to stakeholders (Rice, 2010). Effective leaders have an ability to create a learning focused vision that is shared by others (Hallinger, 2011). The difference between successful leaders and unsuccessful leaders is in their ability to create the conditions for the mission and vision to be accepted by stakeholders. Through creating a purpose, leaders allow individuals within organizations to move towards increased student achievement (Murphy, Goldring, Cravens, Elliott, & Porter, 2007). Mission and vision building is the most consistent way in which school leaders influence student achievement (Hallinger & Heck, 1999). Schools will struggle to improve student learning outcomes if stakeholders do not share the vision and mission of the leader. The ability to share leadership is another aspect of school leadership that matters.

School leaders are directly linked to increased student achievement, however school leadership has a greater impact on student learning whenever it is widely distributed (Leithwood

et al., 2008). Shared leadership requires relationship building with the goal of creating a learning organization (Murphy et al., 2007; Seashore Louis, Dretzke, & Wahlstrom, 2010). Principals build leadership capacity in others in order to facilitate improved student outcomes. Leadership can be shared with multiple actors while relying on a complex organic interrelationship amongst leaders, helpers, and followers (Murphy et al., 2007). Shared leadership allows the principal to empower others within the building to assist with the work of moving the school forward (Hallinger, 2011). School leaders must build relationships with the individuals they supervise to draw on their strengths while improving their weaknesses. Through shared leadership principals are able to build instructional improvement capacity within the school.

Leaders are responsible for building the schools capacity for improvement (Hallinger, 2011). The capacity for improvement require structures that facilitate communication and collaboration amongst members of the school community (Hallinger & Heck, 1999). Communication and collaboration are two of the key ways in which school leaders can increase improvement capacity. Leaders also monitor school goals, set high expectations for student progress, and provide relevant and ongoing professional development in order to improve the school's capacity for improvement (Leithwood & Riehl, 2003; Nettles & Herrington, 2007). All of these aspects are the responsibility of the principal.

Leadership in schools is an important part of improving student learning outcomes. Leadership matters and the importance of the principal's job cannot be understated (Leithwood et al., 2004; Rice, 2010). Schools struggle to improve student outcomes whenever leadership is ineffective. Research suggests that leaders are one of the primary determining factors of whether or not a school is successful. Principals can increase the likelihood of success in their buildings through the creation of a shared mission and vision, the implementation of shared leadership, and

capacity building. There are a large number of variables to consider when analyzing school effectiveness, however the effectiveness of the principal is clearly a variable that matters and is widely considered one of the most important. As Sanzo (2016) stated, highly effective principals are at the heart of successful schools. It is important to understand what effective principals do, however it is also important to understand how these leaders learn both formally and informally. The purpose of this study is to better understand informal networking, but these networks can often be developed through formalized structures. This literature review will present a review of both formal and informal structures to knowledge acquisition, using a theoretical framework that combines Social Network Theory and Social Capital Theory.

Theoretical Framework

Social Network Theory

Social Network Theory is the first part of the theoretical framework for the study. This section will provide an overview of key research related to Social Network Theory and its application to the study. The theory has been used in mathematical graph theory as well as the social and psychological sciences to investigate human social interaction (Krause, Croft, & James, 2007)). Liu, Sidhu, Beacom, & Valente (2017) categorized Social Network Theory into three traditions; Sociometric (mathematic graphing), interpersonal, and anthropological. This study will focus on the interpersonal tradition. Social network theory looks to gain a better understanding of the supports and constraints of “social infrastructure” on individuals and the systems they are a part of (Borgatti & Ofem, 2010; Moolenaar & Daly, 2012). This study will utilize Social Network Theory as a lens to view if and how intrapersonal relationships amongst administrators lead to learning.

Individuals are the focus of Social Network Theory, however the theory hones in on the interdependent aspect of individuals, rather than independence. One of the major aspects of Social Network Theory is the study of knowledge creation, diffusion, and utilization (Dunn, 1983). The relationships that lead to knowledge can be both formal and informal (Liu et al., 2017). This study will focus primarily on informal knowledge acquisition with Social Network Theory acting as a conduit for learning. Individuals build and nurture networked relationships to build pathways for knowledge and resources (Hite et al., 2006). Knowledge transactions take place within Social Network Theory and must be sought out by individuals attempting to learn. The number of transactions and quality of knowledge depends on the level of interdependency amongst individuals that make up the network (Mohrman & Tenkasi, 2003).

Social Network Theory allows researchers to identify patterns of social relationships and provides a framework to analyze whether or to what degree collaboration is taking place (Moolenaar, 2012). The social and relational aspects of Social Network theory and collaboration can often be overlooked when evaluating an individual's or organization's learning. Analysis of Social Networks and the learning that takes place proves that relationships matter. Resources and information are exchanged amongst individuals who have relationships with one another (Moolenaar, 2012). This exchange of information can be in the form of asking for advice, collaborating, or helping (Borgatti & Ofem, 2010). Social relationships connect individuals while providing an opportunity for learning through collaboration, however lack of interconnectedness to an individual's social network can be detrimental.

Social network relationships have the potential to be conduits of resource acquisition and knowledge exchange (Hite et al., 2006). An individual's social ties are considered a way for the individual to gain knowledge, advice, and social support (Moolenaar & Daly, 2012). All

individuals within an organization are considered interdependent because they are embedded in social structures, however if an individual is not active within their social network the lack of connection can create a lack of learning (Moolenaar, 2012). Social Network Theory examines the relationships amongst individuals and whether or not the network is used for knowledge acquisition. Individuals who are not active within their social structures may struggle to learn and improve. Social Capital Theory helps examine how and why individuals use their social networks to gain new knowledge (Moolenaar, 2012). A lack of social capital diminishes the required interconnection aspect of Social Network Theory.

Social Capital Theory

Social Capital Theory is the second part of the theoretical framework that will be used for this study. This section will focus on identifying key concepts related to Social Capital Theory and its application to the proposed study. Social Capital represents an individual's ability to secure a resource or knowledge from membership in a social network or other social structure (Lin, 1999; Inkpen & Tsang, 2005). When forming relationships and social networks with peers, Social Capital acts as the "currency" in which makes these relationships possible. Social capital is an abstract idea rather than a tangible phenomenon linked to physical capital (Bhandari & Yasunobu, 2009; Coleman, 1988). The fact that Social Capital is not tangible means that it focuses on social interactions between individuals within networks, rather than on the exchange of physical capital or goods.

Social Capital is required for ideas and resources to flow amongst individuals (Tsai & Ghoshal, 1998). Without Social Capital, Social Networks would not be possible. An individual's associates and peers are an important asset that can be called upon whenever the individual is in need (Woolcock & Narayan, 2000). Individual's that build Social Capital

amongst their peers are able to rely on these peers whenever they face a challenge. Social Capital amongst individuals accumulates through the sharing of knowledge and information, which creates the need for other members of the individual's social network to reciprocate previously shared knowledge (Watson & Papamarcos, 2002). When one individual shares information, the other person will feel the need to return new information at some point to create a balance of knowledge sharing.

Relationships built on Social Capital should mutually benefit both parties. Social capital is maintained and reinforced as long as both parties continue to invest in the relationship (Bhandari & Yasunobu, 2009). Investments are made by individuals in the form of Social Capital with the expectation of a return on the investment (Lin, 1999). If the return on the investment of Social Capital is not seen, it is possible that the relationship will erode and lead to instability (Inkpen & Tsang, 2005). Social Capital requires inputs as well as outputs from an individual within a Social Network. When individuals do not return knowledge or information they lose capital and strain the relationships within their network.

Social Capital will be used in this study to better understand knowledge transfer amongst principals. The Social Capital Theory lens will help create a clear picture of peer relationships and the knowledge that is acquired from these relationships. The purpose of combining Social Network and Social Capital Theories as a theoretical framework is to create a lens for how relationships amongst principals form through the exchange of Social Capital, and once formed, how the principals utilize their Social Networks to gain knowledge. Without an investment in Social Capital, individuals will not have access to the knowledge sharing and learning that takes place within Social Networks. Knowledge transfer is an important aspect of the proposed study and will be discussed in a later section of this literature review.

Informal Learning

Informal learning is in contrast to formal learning or training in that informal learning provides greater flexibility and freedom to an individual who seeks knowledge (Eraut, 2004). Cross (2011) compared formal learning to riding a bus with a pre-planned route and destination, while informal learning was more like riding a bike in that the individual is able to determine the route, pace, and destination. Informal learning is unstructured, experimental, and non-institutional, taking the form of self-directed learning, networking, coaching, and mentoring (Berg & Chyung, 2008; Marsick & Watkins, 2001). Individuals take part in informal learning while living and working in a given context. It is self-directed and often based on need. Informal learning has specific characteristics that differentiate it from formal learning.

Eraut (2004) found that informal learning can be taken for granted or not recognized as real learning, and determined that study participants were often not aware of their informal learning. Informal learning takes place in daily social interactions amongst co-workers who are tasked with addressing challenging tasks (Berg & Chyung, 2008). These social interactions result in the development of professional knowledge and skills (Lohman, 2000). Informal learning is under-researched and can bring new perspectives to learning due to the un-structured characteristics of learning in the context of the workplace (Eraut, 2004). Lohman (2000) found that informal learning can be planned or unplanned and structured or unstructured. Informal learning is not bound by constraints of time or place, and happens when an individual needs information or new knowledge to help address a situation or problem.

Through his research, Eraut (2004) developed a typology of informal learning that described the three primary types of informal learning that could happen. The three types of learning were implicit, reactive, and deliberative. Implicit learning is the acquisition of

knowledge without a conscious attempt to learn (Eraut, 2004). This type of learning is related to learning through experience. The second type of informal learning is reactive learning. Reactive learning is intentional, however it happens in the middle of the action whenever a need for knowledge is immediately present (Eraut, 2004). The third, and final, type of informal learning is deliberative learning. Deliberative informal learning is whenever a defined learning goal is present and an individual makes a deliberate plan to problem solve and seek out new knowledge to solve a problem (Eraut, 2004). Informal learning takes place in three possible ways; through an individual's own personal experiences, an unforeseen need that quickly arises, or through planning for problem solving and personal improvement.

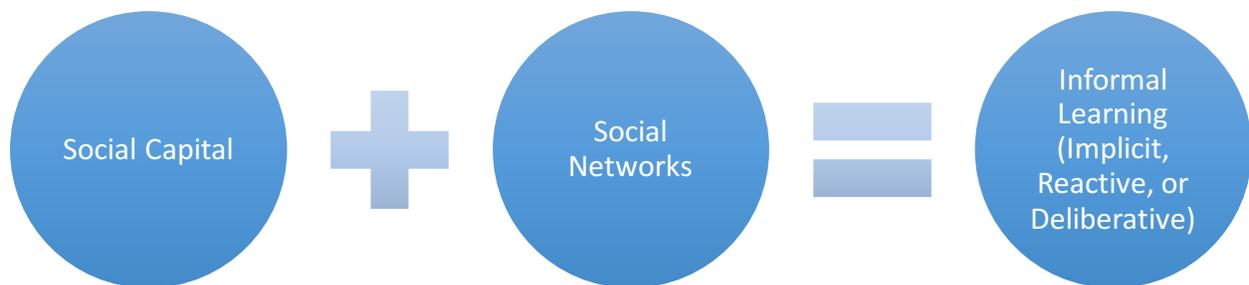


Figure 1. Theoretical framework

Locus of Knowledge Acquisition

This section of the literature review will focus on the locus of knowledge acquisition in relation to school principals. Locus of knowledge acquisition will be defined for this study as any place in which a school principal gains knowledge or learns. Formal and informal structures for principal learning will be highlighted in this section. It is important to note the discrepancy in available research on informal principal learning. Leadership preparation programs, professional development, and self-initiated learning will be the formal aspects this review highlights, while the informal learning will focus on research from other fields. The formal aspect of the review will be specific to education and the informal section will be guided by fields outside of education. While it is important to understand the formal locus of knowledge acquisition, this study will focus on emergent findings in the informal locus.

Formal Structures

School principals receive formal training primarily through their leadership preparation program and participation in professional developments (Mitgang, 2012). These formal structures account for a great deal of learning and knowledge acquisition related to the activities and skills required of the principal's position. This section will focus on what principals learn in their leadership preparation programs, as well as their continuation of learning through formal professional development. Leadership preparation programs and professional developments account for a large amount of knowledge on the many roles of the principalship (Mitgang, 2012). Gaining a better understanding of formal knowledge acquisition will allow for the identification of ways in which informal knowledge can be acquired in leadership areas not addressed by formal structures.

Leadership Preparation Programs

Leadership preparation programs are the main way in which teachers become principals. Teachers often attend a formal credentialing program that provides them with the prerequisite skills to become an assistant principal, or in some cases straight to the role of principal (Sanzo, 2016). Preparation programs are tasked with creating instructional leaders who can build teams, shape a vision of success for all students, cultivate leadership in others, help teachers improve instruction, and use data to drive improvement (Mendels & Mitgang, 2013). These are not the only aspects preparation programs focus on, however guidance is offered to preparation programs through curriculum guides such as the ISSLC standards. This section will focus on the content taught in preparation programs, as well as the opportunity for networking these programs can provide.

Content

Leadership preparation programs have begun to partner with local school districts in an attempt to better align their curriculum to the needs of the districts they serve. University partnerships allow districts to raise the quality of instruction their potential leaders receive, while also increasing the university's ability to train leaders that meet district needs (Darling-Hammond, LaPointe, Meyerson, & Orr, 2007; Gill, 2012; Reames, 2010; Sanzo, 2016). Through district level feedback and guidance from leadership standards, university programs have begun to redefine their curricular focus in two specific ways. First, university programs have focused on improving the applicability of theories taught in leadership programs (Darling-Hammond et al., 2007; Sanzo, 2016). Second, university programs have begun to focus on preparing leaders to assume the role of instructional leader, rather than building manager

(Darling-Hammond et al., 2007; Mitgang, 2012). These two areas provide the majority of content potential principals are exposed to in leadership preparation programs.

A current priority for leadership preparation programs is creating the ability for potential principals to combine theory and practice to their work within schools. This need for change was brought about in response to national concerns about how school leaders are prepared (Sanzo, 2016). Programs have found they must expose potential principals to problems and experiences they will actually face whenever they assume a leadership role (Reames, 2010). Program graduates in the past struggled to find practical application for a great deal of the information they had learned within their programs. Preparation programs now place a great deal of emphasis on the design of administrative internships that require potential principals to apply knowledge from their coursework in practice under the guidance of seasoned veteran leaders (Darling-Hammond et al., 2007). These internships provide potential principals with the opportunity to combine coursework with practice while working through their program. Applying theory to practice is the first major content focus for potential principals in preparation programs. The second focus is on creating potential principals who can act as instructional leaders, rather than building managers.

The role of the principalship has shifted from building manager to instructional leader. Potential principals need pre-service training that prepares them to lead instructional improvement and school change, not just manage buildings (Mitgang, 2012). Hess and Kelly (2007) identified seven key responsibilities that aspiring principals required training in from their preparation programs. The seven areas were management for improved student results, management of teachers, technical knowledge, external leadership, values, managing classroom instruction, and school culture (Hess & Kelly, 2007). All of these aspects relate to the role of the

principal as instructional leader with the goal of improved student outcomes. These aspects also provide evidence to the fact that school reform requires the training of principals who are ready to change schools and improve instruction by shaping a vision of academic success for all students (Mitgang, 2012). The shift of focus in regards to leadership preparation has begun to provide potential principals with a more applicable knowledge base for the task of school leadership.

Effective leadership preparation must focus on the content provided to aspiring principals. Effective programs require significant resources to support learning in embedded practices (Darling-Hammond et al., 2007). Leadership preparation programs have met the call for improvement in the preparation of future school leaders by retooling their approach to instructing their students. Potential and current school leaders must be provided with meaningful, engaging, and relevant learning opportunities to promote effective schools and districts (Sanzo, 2016). By improving the application of theory to real world leadership situations and molding aspiring principals to fit the role of instructional leader, preparation programs have improved the knowledge aspiring principals bring to their leadership roles. Learning takes place during formal leadership preparation, but the networking within these preparation programs offers another way for potential principals to gain knowledge.

Initial Networking

Leadership preparation programs provide aspiring principals with networking opportunities, as well as the traditional focus on content. Some university programs take a collective approach to capacity building that invests on social capital, while putting an emphasis on interpersonal exchanges through networked relationships (Day, 2001). These networked relationships are supported by mutual trust and respect (Dalakoura, 2010). Networking and the

relationships that are formed have the potential to influence an aspiring principal's learning and knowledge acquisition during and after completion of their program. Leadership preparation programs can promote networking and knowledge transfer in two ways. First, networking takes place amongst individuals who participate in a leadership program, namely in the cohort format (Barnett, Basom, Yerkes, & Norris, 2000; Darling-Hammond et al., 2007; Greenlee & Karanxha, 2010; Scribner & Donaldson, 2001). Second, networks connections can be formed by university sponsored mentorship programs while students are completing their course work (Darling-Hammond, 2007; Sanzo, 2016).

Educational leadership cohorts have become a popular way for aspiring principals to work through their education leadership program. The cohort format exposes participants to collaborative leadership practices (Norris & Barnett, 1994). Cohort participants report that their cohort experience instilled a sense of community amongst participants, increased social capital, and promoted professional collaboration (Hill, 1995; Tareilo, 2007; Whitaker, King, & Vogel, 2004). These learning cohorts can also provide aspiring principals with ongoing deep learning opportunities, as well as support networks for on the job challenges (Sanzo, 2016). Once these bonds have been formed, students gain professional colleagues for life and attain professional contacts that open a variety of doors that otherwise would not be available to graduates of traditional, non-cohort programs (Barnett et al., 2000). These networks, if leveraged correctly, can lead to ongoing learning and knowledge transfer after graduates have left their program. Mentoring offers another way for aspiring principals to enhance their Social Network while in leadership preparation programs.

Mentoring provides aspiring principals another opportunity to learn outside of their mandatory coursework. Sherman and Crum (2008) found that aspiring leaders gain a great deal

of leadership knowledge and skills through working with seasoned mentors. Mentors are able to assist their mentees in learning how to acclimate to their newly acquired roles, responsibilities, and expectations (Clayton, Sanzo, & Myran, 2013). These relationships improve the collective learning of the individuals that take part in them (Greenlee & Karanxha, 2010). Cohorts and mentoring are two ways Social Networks begin to form amongst potential principals. Social capital is exchanged and social networks are created amongst participants which ultimately has an effect on knowledge transfer and learning.

Professional Development

Formal professional development has been researched as another way school leaders learn, especially after they have left their formal training programs. Often, after an aspiring principal secured a leadership position, professional development and the learning associated with it became the domain of the principal's school district (Sanzo, 2016). This section of the literature review will focus on district based professional development and two other ways in which school leaders receive professional development. The three ways that will be highlighted are district based, professional organizations, and self-initiated professional learning. These three forums offer another opportunity, separate from preparation programs, in which school leaders acquire knowledge and learn. Professional development is also an opportunity for school leaders to network amongst colleagues and peers. Peterson (2002) found that effective professional development should enhance and deepen the learning from quality preparation programs.

District Based

District based professional development is provided to new and experienced leaders. Carefully designed district based professional development is just as important as participating in

a high quality leadership preparation program (Peterson, 2002). Although district based professional development is offered to all leaders, it is especially important for leaders relatively new to their position (Mitgang, 2012). Districts use professional development to induct new leaders into their roles, while also moving the overarching mission and vision of the district forward through professional development for all leaders. District based professional development focuses on the districts mission, vision, culture, curriculum, and instructional approaches (Peterson, 2002). Peterson (2002) also identified that successful district based professional development requires insightfully designed and value-driven cultural elements. District based professional development is an important way in which school leaders gain new knowledge and learn, however it is often based on district level initiatives and procedures. Administrators often learn about universal topics in education from organizations outside of their actual district.

Professional Organizations

Professional organizations offer school leaders another way to learn and gain knowledge through professional development. Associations like the National Association of Secondary School Principals (NASSP), National Association of Elementary School Principals (NAESP), and Association for Supervision and Curriculum Development (ASCD) provide school leaders with a variety of professional learning and development opportunities (Sanzo, 2016). Government based education agencies and universities also offer professional development to practicing school leaders (Peterson, 2002). All of these organizations provide school leaders with learning opportunities outside of their school district, often focused on topics relevant to education as a whole, rather than germane to the district level.

Principal academies have also become a way professional organizations are developing principals. Harvard's Principal Institute, Vanderbilt's International Principal Institute, and Principal Academies in cities like New York are other ways in which professional organizations are looking to provide quality professional learning to school leaders (Peterson, 2002). Some of these organizations partner with local school districts in an attempt to provide ongoing and relevant training and development. A focus of many of these programs is on building capacity for change and enhancing student learning (Houle, 2006; Peterson, 2002). Capacity building and enhanced learning outcomes is a shift in focus from professional development that merely delivers content (Webster-Wright, 2009). Professional organizations offer another way in which school leaders can gain new knowledge separate from the traditional district based professional learning many are accustomed to. Self-initiated professional learning is another way in which school leaders can add to their knowledge base.

Self-Directed Professional Learning

Self-directed professional learning is another form of knowledge acquisition for school leaders. This form of learning goes against the idea that adult learning is only possible from a fully accredited and certified teacher trained in instructional design (Brookfield, 1984). The definition of self-directed learning is the process in which a learner manages his or her own learning process from beginning to end (Boyer, Edmondson, Artis, & Fleming, 2014). Self-directed learning adheres to the idea that an adult's motivation to learn and learning orientation are multifaceted and complex, while also changing over time (Roulston, 2010). Learning does not have to be from formal institutions or organizations, individuals can take responsibility for and regulate their own learning. Self-directed learning requires an individual have an

understanding of what needs to be learned, as well as a willingness to adjust to the ever-changing needs of organizations.

As organizations change, so do the learning needs of the individuals who lead them. The idea of organizational change can be connected to the concept of lifelong learning. Lifelong learning links to leadership in that leaders need to acquire a variety of process skills that enable them to address their organization's constantly changing needs (Conti & Kolody, 1998). Self-directed learners are better prepared to anticipate organizational needs, tailor their learning to meet their own unique learning styles, and acquire the necessary knowledge, skills, and abilities to influence positive change on the organization (Boyer et al., 2014). The relationship between lifelong learning and self-directed learning highlights why leaders must identify the needs of their organization, while also being equipped to learn new strategies and practices that improve the organization as a whole. Self-directed learning can help individuals address problems of practice, however self-directed learning is a process requiring continual effort at identifying what needs to be learned.

Leaders must have an idea of what they want to learn before taking part in self-directed learning. Self-directed learning is an intentional pursuit of clearly specified learning goals that allows the learner to exercise control over the content and methods (Brookfield, 1984). Houle (1988) identified three motivational patterns for self-directed learning; goal oriented, activity oriented, and learning oriented. Goal oriented learners seek knowledge for specific ends, activity oriented take part in learning activities for social reasons, and learning oriented individuals seek knowledge for the sake of better understanding the world around them (Houle, 1988). Self-directed learners have various reasons for seeking new knowledge, however the main appeal of self-directed learning is in the ownership it provides the learner.

Self-directed learners take part in what Boyer et al (2014) described as the internal locus of control. The internal locus of control is linked to Transformational Learning Theory because adult learners who are given greater levels of control over the what, how, and when of learning are more likely to take part in self-directed learning (Boyer et al., 2014). Once leaders have identified an area in which they would like to improve it is up to them to take ownership of the learning required to influence change. Self-directed learning requires the learner to have an internal locus of control, motivation, support, and self-efficacy (Boyer et al., 2014). These dispositions allow leaders to take ownership of their own learning while providing a forum for knowledge acquisition outside of formal professional learning opportunities. Self-directed learning is the first step towards informal knowledge acquisition for the betterment of a leader's organization.

Informal Networks as a Vehicle to Learning

Formal learning opportunities for school leaders have been the primary focus of the literature review thus far. It is important to understand how leaders formally learn when analyzing whether or not informal learning takes place. This section of the literature review will focus on informal learning and its importance for practicing professionals. There is a hole in educational leadership research on the topic of informal learning and knowledge transfer amongst school leaders. This hole in the literature is interesting because Hess and Kelly (2007) found in a survey of currently practicing principals that all but 4% believe that on the job experiences and guidance from colleagues have been more beneficial in preparing them for their roles, when compared to their formal graduate programs and training. This section will focus on informal learning, types of knowledge, knowledge transfer, structural holes, and a quantitative study conducted by Veelen, Slegers, and Endedijk (2017) focused on informal learning amongst

school administrators. The 2017 study will be used to highlight the distinct hole in research regarding the informal learning of school leaders. Most of the research in this section of the literature review comes from fields outside of education, namely the fields of business and sociology.

Types of Knowledge

Defining knowledge can prove to be difficult, because information that is useful to one person may not be useful to another (Pritchard, 2018). Although it is hard to define knowledge, it can be characterized as a collection of information that can prove to be useful to an individual or organization (Bellinger, Castro, & Mills, 2004). Eraut (2012) took this a step further by labeling knowledge in the workplace as codified, skills, resources, understanding, and decision making/judgement. These five types of knowledge help to better understand and classify what someone has learned or what kind of knowledge they are seeking.

Eraut's first type of knowledge was codified knowledge. Codified knowledge can be gained in formal training or through workplace connections, and deals with procedures and systems (Eraut, 2012). The second type of knowledge is skills related knowledge. Skills related knowledge focuses on four areas; technical, thinking, learning, and interpersonal (Eraut, 2012). This type of skill based knowledge is gained through practice and feedback. The third type of knowledge Eraut identified was resources. Resources can be literature, materials, online or through a network of coworkers (Eraut, 2012). The fourth type of knowledge is understanding. Eraut (2012) describes understanding as being able to grasp situations and contexts while applying a theoretical perspective to addressing the situation within a given context. The final type of knowledge was decision making and judgement. These are typically "on the fly"

decisions that leave little time for analysis or consultation (Eraut, 2012). These decisions require a quick response when decisions must be made quickly.

Eraut's types of knowledge are not all encompassing to what an individual may have access to in their day to day work, however they help differentiate between whether or not something is merely information or knowledge to be learned. The differentiation between information and knowledge is important when analyzing knowledge transfer within networks of co-workers. Knowledge transfer should lead to new learning that is applicable to the individual's job responsibilities.

Knowledge Transfer

Knowledge transfer is an informal way for individuals within an organization to learn from other individuals. Individuals looking to gain knowledge must look for, identify, and evaluate the knowledge offered by others (Hansen, Mors, & Lovas, 2005). Knowledge transfer is the process through which one network member is affected by the experiences of another, and takes place in a wider variety of settings than formal education or training (Eraut, 2004; Inkpen & Tsang, 2005). Examples of informal knowledge transfer are conversations and the exchange of ideas at the coffee pot, phone calls, lunches, dinners, and commuting to work (Taminiau, Smit, & De Lange, 2009). The key aspect of knowledge transfer is that it happens outside of the formal constraints of meetings, trainings, or formal education. Sharing of ideas and knowledge transfer can happen at any time and through a variety of pathways. This section will delve deeper into knowledge transfer by looking at relationships, the informal nature of knowledge transfer, knowledge transfers effect on innovation, and its ties to Social Network and Social Capital Theories.

Informal knowledge transfer is based upon relationships of individuals within a given profession. Individuals in the business sector who interact regularly tend to assimilate one another's knowledge (Hansen et al., 2005). These relationships amongst colleagues help to create a shared communication frame for knowledge to transfer between two people with the strength of relationship affecting the ease of which knowledge is shared (Hansen et al., 2005; Naif Marouf, 2007). Trust also plays a key role in the ease of knowledge sharing amongst colleagues (Inkpen & Tsang, 2005). Relationships are important for acquiring information, and the ability to effectively transfer knowledge is critical to a wide range of organizational processes including the transfer of best practices (Levin & Cross, 2004; Reagans & McEvily, 2003). Without relationships, knowledge transfer and the sharing of ideas would not be possible. These relationships are often informal in nature, however the learning that takes place can effect formal aspects of organizational practice.

Knowledge transfer within organizations is often informal, taking place outside of traditional learning opportunities. Informal learning is implicit, unintended, opportunistic, and unstructured (Eraut, 2004). Informal knowledge transfer exists alongside institutionalized forms of knowledge sharing and can be defined as reactive learning because it is unintentional, often occurring in the middle of the action (Eraut, 2004; Taminiau et al., 2009). Knowledge sharing occurs in the middle of the action to address problems that arise while work is taking place. In Li and Zhu's (2009) study, networks of hotel managers in Australia used knowledge transfer to gain a better understanding of market conditions while learning from each other's experiences. This is one example of how individual leaders can use the informal nature of knowledge transfer to apply their learning for organizational improvement. While informal, knowledge transfer

ultimately helps leaders find innovative approaches to address problems of practice, regardless of the organizations focus.

Individuals who take part in informal knowledge transfer are able to look for innovative ways to address problems of practice. Organizations the focus on learning promote knowledge transfer amongst leaders to create more innovative products and improved performance (Naif Marouf, 2007). Leaders that continually learn and adapt to their changing environments are better equipped to address problems and lead innovative organizations (Taminiau et al., 2009). Li and Zhu (2009) regard knowledge acquisition and transfer as prerequisites for learning and innovation. Organizational leaders that make full use of the collective expertise and knowledge within their organizations are likely to lead groups that are more innovative, efficient, and effective. Without the presence of knowledge transfer amongst leaders, innovation and organizational improvement are not possible. It is up to organizations to foster the conditions in which informal knowledge transfer becomes the norm. Informal knowledge transfer is directly linked to Social Network and Social Capital theories that make up the framework for this study.

Social Network Theory deals with the interactions of individuals and how they share knowledge. As noted earlier in the literature review, one of the major aspects of Social Network Theory is the study of knowledge creation, diffusion, and utilization (Dunn, 1983). (Naif Marouf, 2007) found that one of the main goals of Social Networks is the sharing of knowledge. A conceptualization of organizations as social communities in which knowledge is structured, coordinated, and shared is a central concept behind informal knowledge transfer (Naif Marouf, 2007). Networks create access to knowledge within the organization through social interactions of the individuals within the organization (Inkpen & Tsang, 2005). Social Networks create a framework for informal knowledge transfer amongst individuals, however individuals must

invest in Social Capital to make the relationships within Social Networks beneficial. Without the exchange of Social Capital amongst actors, Social Networks will be weak and not render quality knowledge and ideas.

Social Capital is the “currency” that allows individuals within a Social Network to share knowledge and ideas. Both individuals within a social network relationship must invest Social Capital in the relationship to learn from one another (Bhandari & Yasunobu, 2009). The new sources of information and ideas provided to individuals are the primary benefits of Social Capital (Inkpen & Tsang, 2005). Social Capital literature suggests that mutual engagement amongst individuals through informal networks is an essential activity for the sharing of knowledge and ideas (Li & Zhu, 2009). Informal knowledge transfer represents a cost to the source of knowledge, in terms of time and effort spent helping others to understand the knowledge being shared (Reagans & McEvily, 2003). If the individual who shares knowledge, and expends Social Capital, does not feel that there was a return on the “investment”, he or she may be hesitant to take part in knowledge transfer in the future. Social Capital plays a pivotal role in the creation of Social Networks focused on knowledge transfer. A lack of Social Capital, or sharing of ideas and information results in a limited amount of knowledge sharing within a Social Network. This section focused on informal knowledge transfer and its connection to Social Network and Social Capital Theories. If an individual cannot find the knowledge they are looking for within their organization, they may go outside of the organization by taking advantage of Structural Holes.

Structural Holes

Structural Holes is another concept that is applied heavily in the fields of business and sociology. This theory has not been applied to educational leadership, however this study will

look to determine if connections to leadership practices in the field are present. Structural Holes in the business field deals with the idea that new knowledge, especially knowledge from outside of the organization, can be an important stimulus for organizational improvement (Inkpen & Tsang, 2005). Researchers have also found that ties outside of one's organization provide access to non-redundant information (Levin & Cross, 2004). The focus of Structural Holes in this study will be on the potential access to outside information a leader would otherwise not have in their own organization. This section will provide a description of Structural Holes and how the work, as well as the connection between Structural Holes and Social Capital Theory.

A key idea associated with Structural Holes is that individuals who are connected across organizations are more familiar with alternative ways of thinking, which provides the individual more options to select from and synthesize when making organizational decisions (Burt, 2004). Individuals who stay within their own organization are often exposed to in-group bias that hinders organizational growth because leaders tend to under value the ideas of outsiders (Hansen et al., 2005). Structural Holes provide leaders with a vision of organization operation that would otherwise be unseen (Burt, 2004). Individuals within an organization who "stand near the holes" and branch out to individuals in other organizations have a higher likelihood of using innovative solutions to address problems (Burt, 2004). Leaders who refrain from falling into group think and embracing only internal ideas have a better chance of learning and improving their organizations through innovative approaches.

Individuals who utilize Structural Holes between organizations gain access to new knowledge and ideas (Reagans & McEvily, 2003). Structural holes provide an opportunity for information and ideas to travel more quickly and effectively (Allen, James, & Gamlen, 2007). Reagans and McEvily (2003) found that scientists who bridge the gap between Structural Holes

are able to access and share diverse knowledge, resulting in higher levels of creativity and innovation, as well as improving overall productivity. Managers in the business field utilizing Structural Holes have been found to monitor the flow of information more effectively and apply new knowledge faster than peers who do not (Allen et al., 2007). Structural Holes clearly have a beneficial impact on the transfer of knowledge and ideas. Individuals who step outside of their organizational constraints for information are exposed to a more diverse knowledge pool than those who do not. Increased levels of knowledge provide leaders with more options when addressing a task or problem. Structural holes require the individuals who use them to have Social Capital with peers outside of their organization.

Structural Holes require Social Capital if they are to benefit both parties involved in the transfer of knowledge and ideas. In business, managers bring more to their jobs than the skills they have acquired through their formal education and training; They also bring the assets and knowledge they can procure through their Social Networks (Allen et al., 2007). Goyal and Vega-Redondo (2007) found that individuals form links with each other, which involves a trade-off between the benefits of accessing other individuals and the cost involved in forming links. This idea links directly to Social Capital in that interactions are considered transactions and both sides should feel they can gain from the relationship. Structural Holes and the sharing of quality ideas and knowledge are directly linked to the give and you shall receive aspects of Social Capital (Burt, 2004). Individuals use Social Capital to increase their number of connections within a Social Network. These social connections often involve within organizations relationships, however when the connections span across organizations (Structural Holes) the opportunity for acquiring unique knowledge and ideas is increased drastically.

Learning Among School Leaders: Impact of Personal and Work Context Factors

In a recent study, Veelen, Slegers, and Endedijk (2017) focused on how school leaders learn to develop and sustain effective leadership in their day to day work. They highlighted the fact that on the job learning has proven to be highly transferable to daily practice, however empirical evidence of the on the job learning for school leaders was scarce (Veelen, Slegers, & Endedijk, 2017). A connection was made to workplace learning in the broader field. It has been found in fields outside of education that on the job learning keeps professional knowledge and skills up to date, while stimulating the creation of new knowledge (Lipponen & Hakkarainen, 2004). This section of the literature review will focus on key aspects of this study, which is the only study currently published that focuses on informal learning amongst school administrators. The study being reviewed was a quantitative study that looked at similar concepts and ideas related to knowledge transfer amongst educational leaders.

Veelen et al., (2017) stated that school leaders are in a position to initiate change, deal with external policy pressures, and set an example for all learning in schools. They believed it was quite remarkable how little the field knew about school leaders' learning in the workplace, and the factors that stimulated learning for school leaders (Veelen et al., 2017). A focus on providing insight in school leaders' workplace learning would provide a valuable addition to current educational leadership literature on leadership training, assessment, and practice (Veelen et al., 2017). Leaders who learn in the workplace set an example for collaboration and workplace learning for teachers and other staff members. If leaders are not continually learning, it becomes hard for the individuals they lead to continually learn.

The study found that many school leaders do learn from peers. Veelen et al., categorized the learning they discovered as social learning and defined it as learning that is carried out

together with other colleagues. Social learning was separate from the mandated formal learning school leaders take part in (Veelen, et al., 2017). Veelen et al., found that school leaders take part in professional learning and that their learning is embedded within the school environment and driven by personal motivation. Veelen's study helps clarify the theoretical framework of Social Network and Social Capital theories by identifying that on the job learning has social characteristics and varies depending on the leader's personal connections to others. More research related to this topic is needed to provide insight into how environmental and personal factors affect the informal learning of school leaders (Veelen et al., 2017).

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Chapter three will identify the research design and methodology of this study. The problem, purpose, research questions, research design, participant selection, data collection, data analysis, limitations, and research bias are discussed within this chapter. The chapter will conclude with a summary of the main points and key ideas. This chapter will take into consideration the studies focus on informal administrator learning, while being guided by the theoretical framework of Social Network and Social Capital theories. A tangible outline and understanding of the study should be evident by the end of the chapter. The problem will be the first area discussed in chapter three.

Problem

Social Networks and the Social Capital required to form relationships within a network are a conduit through which resources, knowledge, and ideas flow (Hite et al., 2006). These concepts are researched extensively in Business, Sociology, and Psychology literature. Although these concepts are common to researchers in other fields, they have not been the focus of research in educational leadership. Veelan et al., (2017) noted that collaboration and learning amongst students and teachers have been researched in education, however the focus has never shifted to school leaders and their learning. Formal learning of school administrators has also been a topic researched by educational researchers, however informal learning has not. It is important to understand how school leaders learn both formally and informally. There is a clear gap in educational research pertaining to the informal learning of school-based administrators. This hole in the literature is a problem because administrators are under increased scrutiny each year related to the pressures to increase standardized test scores and ensure the school is

accredited. With these increased demands, it is paramount that leaders learn both formally and informally to improve their practice.

Purpose

The purpose of the study was to use qualitative case study methodology to gain a better understanding of in depth social networking amongst school principals with varying levels of experience, as well as capturing the what and how of knowledge transfer amongst principals. The study focused on administrators at the school level and whether or not they form informal networks with peers (other principals), as well as whether or not those relationships remain within school district boundaries. The researcher wanted to determine if administrator learning takes place outside of the formal setting (graduate program, professional development, etc.) in education. Identifying key components and gaining an improved understanding of informal knowledge transfer amongst school administrators was the goal. Research into informal knowledge transfer and learning amongst school administrators is new and has not received a great deal of attention in the educational leadership literature. The only educational leadership study related to informal learning amongst administrators was Veelen et al's (2017) quantitative study mentioned in the literature review, however this study was loosely linked to this study.

Research Questions

The design of the case studies looked to address questions related to the role of informal knowledge transfer and learning amongst school based administrators. The following questions guided the study:

1. What role does networking play amongst school administrators learning from each other?

2. To the extent that networking is a vehicle to informal learning, how is knowledge acquired, what knowledge is passed, and under what circumstances or conditions?
3. How and to what extent do principals use networking as a vehicle to informal learning?

These questions focused on gaining an improved understanding of the role of informal knowledge transfer, if any, amongst school administrators, as well as if knowledge transfer takes place through the utilization of structural holes across school district boundaries.

Research Design

This study was qualitative in nature informed by the phenomenological tradition. A phenomenological case study design was selected because the phenomenon being studied was unknown and had not previously been the focus of educational leadership research. A multiple case study design was used to gain a better understanding of the unknown phenomenon of informal knowledge transfer amongst school administrators (Merriam, 1998). The case study design was used to identify the impact, if any, of informal learning amongst principals. Six individual case studies were conducted with the goal of conducting a cross case analysis. Cross case analysis provides the opportunity for each individual's experiences to be compared, while also improving the reliability and generalizability of the findings (Merriam, 1998). The researcher wanted to understand the meaning of events and interactions of ordinary people in a particular situation (Bodgan & Bilken, 1997). The ordinary people were school principals and the situation was informal knowledge transfer and learning.

The case study used a two-part qualitative design with in-depth initial interviews as well as weekly check-in interviews over a ten-week period of time. The data collected over the ten-week period were descriptive in nature due to the data being words rather than numbers (Bodgan & Bilken, 1997). The six individual case studies provided both an in-depth understanding of an

unknown phenomenon and the participants involved (Stake, 2010). The study was approached with an open mind due to the lack of knowledge on informal knowledge transfer and its role amongst practicing principals. This interpretive design of the case study allowed the researcher to understand the meaning of the process and experience from a theory generating mode of inquiry (Merriam, 1998). Stake (2010) described case studies as a means of investigating complex social units consisting of multiple variables. The researcher hoped the case study would provide a descriptive narrative of both setting and situation in regards to informal learning and the principalship.

Participant Selection

This study required the researcher to interview six elementary principals individually on ten separate occasions. The participants were from the southeastern part of Virginia and were selected based on the recommendation of university faculty members. Administrators with a range of experience levels made up the interview pool. The six school leaders participated in an initial interview first, which lasted anywhere from forty-five to sixty minutes. Each principal participated in nine weekly check-in interviews after the initial interview. These weekly check-ins' lasted ten to fifteen minutes each week.

Three of the principals were Caucasian and three were African American. The principals ranged in experience level from first year to eight years as an elementary school principal. All of the participants were female ranging in age from thirty-four to forty-seven. Two male participants were asked to participate and both declined. After both male principals declined, two more females were added, bringing the total number of participants from four to six. All six principals participated in the case study from the initial interview through week nine of the weekly check-ins.

Table 1

Case Study Participant Overview

Name	Years of Experience	Race	Gender	School District
Principal Laura	Three	Caucasian	Female	SD1
Principal Leah	One	African American	Female	SD2
Principal Beth	Two	Caucasian	Female	SD1
Principal Katie	Three	Caucasian	Female	SD1
Principal Patti	Eight	African American	Female	SD1
Principal Kim	Seven	African American	Female	SD3

Data Collection

Data was collected using one initial interview and nine weekly check-ins for each of the six participants. The interviews were recorded and later transcribed as suggested by (Bogdan & Bilken, 1997). The initial interviews lasted forty-five to sixty minutes and the weekly check-ins lasted ten to fifteen minutes. Research questions were not directly provided to the interviewees, however a short description highlighting the focus of the study was provided. Nine standard questions were used to help better understand informal administrative learning. These questions allowed for the interviewees to explain and provide details about their own learning and networking. The nine standard questions also contained potential follow-ups that would aid in the researchers understanding of the phenomenon. Reference Appendix A for a complete list of the standard questions used in the initial interviews.

Nine standard questions were used in each of the six initial interviews. Probing and follow up questions were asked as needed in an attempt to better address the research questions. Questions such as “what does informal learning look like?” and “could you further explain how

you have formed these informal networks?” offered further clarification. The knowledge gained and themes identified during the individual interviews helped to drive the interview protocol for the weekly follow ups as well as the levels of coding for the weekly check-ins. Reference Appendix B for a complete list of the weekly check-in interview protocol.

The initial interviews with each of the six participants took place over two separate days in March, 2018. The principals were interviewed in their school offices. The weekly check-in interviews began on March 26, 2018, and concluded on June 1, 2018. The weekly check-ins spanned ten weeks, rather than nine, due to a spring break that took place in each of the principals’ school district. The principals worked in three different school districts. School district 1 (SD1) had four participants, school district 2 (SD2) had one participant, and school district 3 (SD3) had one participant. SD1 and 2 would be considered urban districts serving a predominantly at risk population, while SD3 was considered a suburban school district.

Data Analysis

Data was collected from each principal through the first initial interview and nine check-in interviews that took place weekly. All interviews were recorded and later transcribed. The initial interviews were transcribed prior to the start of the weekly check-in interviews. Initial interviews were used to provide background and identify the perceptions of the six participants. Questions for the weekly check-in interviews were adjusted after all initial interviews were completed and transcribed. The themes and main ideas identified in the initial interviews drove the questioning for the weekly check-ins. Initial and weekly check-in interviews utilized follow up questions to gain further understanding of what informal learning looks like amongst school administrators.

The data analysis used Grounded Theory to focus on identifying common threads between if and how administrators form informal networks and what they share and learn from these relationships. Interviewing practicing administrators individually and checking in weekly helped the researcher better understand informal learning as a phenomenon taking place amongst school leaders. The coding of data and reflection of observations notes from the interviews helped gain a better understanding in relation to the research questions of the study.

Once the interviews were transcribed data analysis began, first with the initial interviews, followed by the weekly check-ins. The initial interviews were not coded. They were used to gain a better understanding of the principals' background, as well as their initial thoughts on informal learning. The initial interviews were also used to guide the weekly check-in interviews. The weekly check-in interviews were then coded to gain a clearer understanding of informal learning amongst school administrators. Six levels of coding were used for each individual interview. Fifty-four interviews were transcribed then coded.

The interviews were broken into sentences and phrases. This allowed for easier coding and analysis. Once all of the weekly check-in interviews were broken up coding began. The goal of the coding was to analyze the data in a way highlighting trends and similarities across the experiences of the interviewees (Strauss and Corbin, 1990). Each interview fragment was broken down for key phrases and ideas. These phrases and ideas were then added to an excel spreadsheet. The key phrases and ideas went through 6 levels of coding to narrow down and categorize focus areas.

1. Was the experience informal or formal learning?
2. If informal, was the participant a knowledge seeker, or a knowledge holder?
3. How was the relationship formed with this individual?

4. What type of knowledge was learned or shared?
5. What was the forum for communication?
6. Was the individual from within or outside of the school district?

Each of these levels of coding were used to gain a better understanding of who the participants were talking to, where they sharing or gaining knowledge informally, and if so, what types of learning were taking place?

Following the coding, themes were identified for each individual case. These themes were then used to provide a clear picture of the case and the principals informal learning tendencies. Once the individual data analysis was completed, the cross case analysis begun. The cross case analysis focused on the themes identified within the individual cases. When multiple case studies are conducted, it allows for a cross case analysis to take place (Merriam, 1998; Stake, 2010) Shared themes across multiple case studies were then identified. The researcher will present the individual themes, followed by cross case themes, in later chapters.

Primary and Secondary Network Contacts

Primary and secondary were the terms used to describe the two types of contacts in the participants' networks. During the case studies, the participants talked to a variety of leaders in their school district. Although the participants had a variety of contacts, they each had a primary group of individuals they talked to weekly, and often daily. This primary network consisted of two to three individuals the participant trusted and had worked with prior to assuming the role of principal. The primary network members were the "go to" people for the participants whenever the participants needed information, knowledge, or guidance.

The secondary network members were individuals the participants reached out to whenever they could not find answers or new knowledge from their primary network. Secondary network members were still valued, however they were not reached out to as frequently as primary members were. The participants used primary contacts first and only used secondary members whenever the answers or knowledge was not readily available from primary network members.

Time of Year

The case studies were conducted simultaneously during the 3rd and 4th nine-weeks of the 2017-18 school year. Interviews were conducted to determine if principals were learning from one another and what types of knowledge they shared. There were a variety of topics in each of the six cases; however, data analysis and state testing were primary areas of focus for all six participants. State testing and accreditation are always a focus of the principal; however, this focus becomes laser-like in the spring whenever state testing begins. Each of the case study participants had an increased focus on testing due to the time of year.

The participants also had conversations around other topics that were specific to the time of year. The topics of focus were student retention, summer school, end of year teacher evaluations, and planning for staff development for the 2018-19 school year. The types of knowledge the participants were seeking was related to the time of year in which the study was conducted. If the study was conducted at the beginning of the school year, it could be assumed that principals would be seeking knowledge related to beginning of the year tasks, procedures, and knowledge.

Limitations

This study sought to gain a better understanding of the role informal knowledge transfer has amongst school administrators. One of the limitations of the study was its size. Six study participants is an important starting point for a topic that has not received much attention, however if the study was larger in size it would be easier to make generalizations about entire populations of school principals. The second limitation of the study was the lack of male participants. Male participation was solicited, however none of the potential participants could commit to participating in the study. The fourth limitation of the study was its sole focus on elementary principals. Although this is considered a limitation, it can also be attributed to the fact that research in informal administrator learning is new. Another limitation of the study was its confinement to three mostly urban school districts in the southeastern portion of Virginia. The final limitation of the study was its length. Although a nine-week period is a good start, it really only covers $\frac{1}{4}$ of the school year. It would be interesting to gather data for an entire school year to see if or how the types of information and ideas being shared amongst administrators changes and fluctuates depending on the time of year. The study did have limitations, however many of the limitations were a result of the “uncharted” territory the study sought to understand.

Research Bias

The research was conducted by a 29-year old (at the time of the study) doctoral candidate in the Educational Leadership and Foundations Department at Old Dominion University. I have worked in the field of education for six years as a teacher and one as an assistant principal. My first six years were served with Hampton City Schools in Hampton, Virginia as a teacher. I have currently been an assistant principal with Virginia Beach City Public Schools in Virginia Beach,

Virginia for one year. All of my time in education has been at the elementary level. My current role as an assistant principal and my perceptions of the role learning plays must not inhibit my ability to conduct the study.

Conclusion

The purpose of this study was to gain a better understanding of the relationships within peer networks and the acquisition of job related knowledge and skills. This is a topic that has not been a focus area of educational leadership literature to this point. The study used semi-structured initial interviews and weekly check-in interviews. The main goal was to determine whether or not informal networking is taking place amongst school administrators, what types of information is shared, whether or not informal networks span across district boundaries, and what the process looks like. The data analysis of each individual case and the cross-case provided information that allowed for conclusions to be drawn in relation to the research questions. As mentioned previously, the number of participants in this study and its small geographical focus area will not allow for these findings to be generalized across the entire field of educational leadership.

The design of this study provided evidence of informal learning taking place amongst school administrators. Colleagues in a variety of fields gain job related knowledge through informal networking, however little research has been done focusing on this phenomenon related to school level administrators in education. Although this study was relatively small in scale, it could provide a framework for larger scale studies to offer more generalizable findings. A larger scale study could provide clarification and determine in greater detail what types of knowledge are transferred, and how knowledge is applied by leaders in the education setting.

CHAPTER FOUR

Chapter four will be broken into two parts focusing on the case of Principal Laura. The first section will provide an in depth overview of Principal Laura, highlighting background information. In the second section of the chapter will share themes pulled from the coding and analysis of interviews. The background information section will focus on Principal Laura's leadership journey, educational experience, and her perceptions of formal and informal learning. The chapter will then shift focus from the participant's background, to the themes that were identified through the in depth interview process. The background information combined with the themes of informal learning from the interviews will be used to present a comprehensive illustration of the case as it relates to informal learning, networking, social capital, and the research questions.

CASE ONE OVERVIEW

Principal Laura was a Caucasian third year elementary principal in School District One (SD1). She was at the same school for all three years of her principalship. Prior to becoming a principal, Laura had served as an assistant principal for three years at two different elementary schools. Principal Laura was a middle school social studies teacher for five years prior to becoming an assistant principal. She had only worked in the school district she was currently employed in. When Principal Laura was asked when she knew she wanted to become an educator she stated that she always knew:

You know that's like a classic question that everyone gets asked...and I can tell you I always just knew. There was never like a defining moment that I was like now I want to be a teacher. I knew in 3rd grade that I wanted to be a teacher and like there's a home video of a talent show I was in and they ask you this question and I was like I want to be

a teacher. So, I like to talk so maybe that's part of it, but I just always knew. Just always did.

Principal Laura attended a two-year traditional brick and mortar preparation program. There were no online classes and the program was not accelerated. She completed her course work independently and was not a part of a cohort of aspiring administrators. Principal Laura completed internships as a part of her program that took place during summer school at the elementary level. She was a summer school intern, summer school site coordinator, and the coordinator of the entire summer school program for her school district in consecutive years.

When Principal Laura became a principal she stated there was no formal training provided by her school district. When asked what formal learning was provided to her as a new principal she stated:

So that is a good question. Let me tell you this, I walked in in the summer and I said to myself, well what do I do in the summer because I'll be honest, no one told me what to do. It was like what's that movie where she gets a new job and she opens Google, and she is like what does a fashion journalist do? It was almost a little bit like what does the principal do in the summer?

Principal Laura also stated that she had received training as a new assistant principal in the school district, however:

Because when I became a principal I really didn't go through this new admin training. I did that as an assistant principal. That new admin training didn't tell you what to do in the summer as the principal. That training taught you how to not go to jail over finances or special education and that kind of thing. Every department was like shotgun thirty

minute presentations, here is the finance, here is records and printing, here is special education, you know transportation.

Principal Laura mentioned that the school district had leadership academies in the summer for all administration that focused on a book study. The most recent initiative focused on providing timely feedback to teachers and providing two action steps for each observation. The participant mentioned that these learning opportunities were formal, and the school district was doing a better job of following up with initiatives that were started in the summer. In previous years, initiatives would be started in the summer, however there was a lack of follow through. The follow-up to the summer trainings were often the focal point of the monthly principal meetings held during the school year.

When asked about formal learning opportunities outside of the school district, Principal Laura believed that her district provided funding and the opportunity to seek out formal learning opportunities that were relevant to the needs of her individual school. She stated that when selecting formal learning opportunities outside of the district she focuses on areas in which her school can improve. When asked what kind of focus she has had recently she stated:

Yea, for me learning I have tried to branch out on my own for is based on what does my school need here? So like the military connection, I'm a military school, so I have tried to align myself and work with the military liaison, and go to trainings. I went to a military... child you know training, and that was really big.

Principal Laura also shared some frustration with her schools lack of Title 1 designation, and her ability to receive school district funding to attend formal learning opportunities externally:

I will tell you that's been a little bit frustrating being a non-Title 1 school, and I am not saying the district has to pay for all of my training, but they could help. Like if they are Title 1 it is almost no questions asked. If I submit you know, I want to go to this, they are going places all the time. We had principals go to Philadelphia for the National Principals conference and it's kind of like I want to go.

Principal Laura was a third year principal that had a wide range of formal learning experiences. Between her formal schooling and ongoing professional development, she was able to gain valuable knowledge about her role as a principal, even if that knowledge did not come immediately upon her being hired for the position. The interview shifted focus from formal learning opportunities related to the principalship to more informal examples. This conversation began with the discussion that when Principal Laura was hired she really wasn't given direction as to what her role looked like in the summer months in preparation for the coming school year.

Principal Laura stated that when she began her first year as a principal in the summer there really was not a clear set of guidelines or trainings that helped her prepare for her first year. She was assigned a mentor however the mentor's original guidance was "here is my number if you need something call me." The participant mentioned that although she was assigned the mentor, she felt more comfortable reaching out to other people she had known from previous experiences:

My mentor was kind of good, but there were things that I kind of felt more comfortable self-selecting some people. You sit down in a principals meeting who sits with you and who talks to you, that kind of thing, but honestly it was kind of like figure it out on your own and we will go from there.

A follow up question then asked if these people at the principal meetings were people she had known from previous experiences:

Exactly, that's how it started, and then you gain more people. Yea definitely, one of my other principals you know, she was a principal I worked under her and I gravitated towards her table and you can look around the principals' room and you can see cliques. It is what it is, you have a comfort level. I could walk to any table and conversate with any of them, middle and high maybe not so much, but that's a whole different ball game, but elementary yes, It is a really informal kind of thing.

The participant discussed how she has a group of three to four principals that she has formed relationships with, either as a principal or prior to becoming a principal. She reaches out to this network whenever she approaches something she has not done before in her role. All of these interactions are informal and take place over the phone, via text, email, or through an instant messaging service called Google Chat. Professional Development Plans (PDP's) for teachers and long term suspension for students were two examples mentioned as things Principal Laura had no formal training on from within or outside of the school district. She gave an example to how these interactions take place:

I had to ask some colleagues. They sent me example packets, it's all about like sharing. It's so... sometimes we laugh that we, I can't believe we haven't formally been taught this, because they are such big deals.

Principal Laura mentioned another principal in her network who was a first year principal. This first year principal was on speed dial with Principal Laura and often reached out for guidance on

a variety of topics. Principal Laura had known this principal prior to assuming the principalship and described an informal interaction she had with her:

Exactly, and we call each other and it works both ways. A principal I know, last year was her first year, so we were on speed dial with each other. She would be like what about this, and what about this, what about this? And she would actually verbalize that this is crazy that they never actually told me this. She was like I can't believe they never told me this. She was like how did you know, and I said I was doing the same thing you are doing and I asked someone.

These informal networks worked both ways for Principal Laura. She was considered a knowledge holder by more inexperienced principals, while also being a knowledge seeker when speaking to principals with more experience. When discussing a principal within her network who had more experience she said:

For her, I could pick up the phone and vent to her, never knowing her beforehand but completely trusting her with anything, just to be my sounding board, you know what do you think? You know everybody needs someone to roleplay tough situations with. The worst thing you can do is go in guns a blazing so I pick one of them. Take my deep breath because there is always something going on.

The experience of Principal Laura showed signs of not only informal learning taking place, but also that this learning was taking place within networks formed by principals. This networked learning was informal and required Principal Laura to be a knowledge holder as well as a knowledge seeker, often times dependent upon years of experience or whether or not she had experience with a particular situation. Principal Laura used social capital to form networks

with peers, which allowed her to learn and share valuable information about many important aspects of the principalship.

Principal Laura articulated what topics were covered in her formal training as a principal, however she was also clear to pinpoint areas in which no formal training was offered. She believed that her informal learning was often driven by areas in which she did not have experience in. When asked whether she thought the majority of her learning as a principal came formally or informally, she stated:

Definitely informal now that you're asking me this, I bet I have a text, or a chat, or an email daily, 90% of the time, from another principal like hey what would you do about this? This is coming up how did you do this? And me also asking them questions, either way.

A follow up question then asked her to define informal learning in her role as a principal:

I mean for me when I think about the informal learning that I have done, it has come from when a need has arisen, or I know I have to do something. Whether it is immediate or you know you have something to plan out and I am just making phone calls and emails.

This showed that Principal Laura considered her informal learning to be need driven. Whenever she did not know how to do something, or did not have experience with a certain situation she would reach out to her network to learn the steps she needed to take to complete a task. This phenomenon was based on either years of experience or the type of experiences a particular principal has had. Knowledge holders within principal one's network were individuals with more years of experience, or diverse experiences she had not yet had. Multiple themes were present during the interviews with Principal Laura.

Informal Learning Themes

This section will focus on identifying themes from Principal Laura's interviews in relation to informal learning, Social Networks, and Social Capital. Principal Laura's interviews showed clear signs that she informally learned from other principals, but the second goal was to determine how often she reached out or was reached out to, and what types of information was being shared. Each of Principal Laura's contacts were assigned a pseudo name to protect their identities. She kept track of her list of contacts to avoid confusion amongst her network of principals. Each of the interviews were coded for analysis and theme identification. The levels of coding were:

1. Formal or informal learning
2. Knowledge holder or knowledge seeker
3. How was the relationship formed
4. Type of knowledge shared or sought (PSEL standards)
5. Forum for communication
6. Within or outside district

Principal Laura was interviewed during the third and fourth nine weeks of the 2017/18 school year. A semi-structured approach was used for all interviews using pre-planned questions with the opportunity for follow up and clarification questions (Appendix A and B). The goal of the interviews was to get to know the participant and to find out how the participant was prepared for their role as an elementary principal and in what ways they learned about the many different aspects of the principalship. The interviews also sought out information on the participant's outlook and utilization of informal learning in their current role. This section is divided into themes that were gained from interviewing Principal Laura. Four themes were

identified in the case through the interviewing process. The section concludes by identifying the primary Professional Standards for Educational Leaders (PSEL) that Principal Laura discussed with her peers and an overview of Principal Laura's case. The first theme in Principal Laura's case was the presence of a network of other principals that she had frequent informal communication with.

Clear Formation of Principal Network

Principal Laura had an established network of principals that she sought and shared knowledge with informally. The main individuals that made up her social network were Mrs. Smith, Mrs. Johnson, Mrs. Dann, Mrs. Greble, and Dr. Young. All five of these individuals were elementary principals within Principal Laura's school district. Principal Laura met Mrs. Smith in grade school and the other four principals through work as a teacher and assistant principal in her school district. Her professional relationships with these individuals had spanned at least six years. Principal Laura also had two district level administrators within her network, however these individuals were only reached out to once each over the nine-week period. The building level administrators were the primary members of Principal Laura's social network and were reached out to weekly.

Principal Laura formed her relationships with her social network through the use of social capital. The capital was knowledge she had gained over her three years in the principalship. The basis of social capital is reciprocity, and in the case of Principal Laura each member of her network sought knowledge as well as shared it. These transactions of knowledge align with the definition of social capital. Through her experiences in the role she was able to acquire knowledge that was unique to her. This proved beneficial because the unique knowledge she gained could prove helpful to other principals who were faced with similar challenges. Each

principal in her network was also exposed to unique experiences and could be consider knowledge holders in situations or on certain topics. Examples of these experiences were teacher professional development plans, students threatening self-harm, and special education. As Principal Laura gained more experiences she began holding more social capital within her network. This shifted her from being primarily a knowledge seeker to a knowledge holder and seeker.

Table 2

Principal Laura Network Breakdown

Primary Network		Secondary Network	
Title	Number of Weeks with Contact (9 Week Period)	Title	Number of Weeks with Contact (9 Week Period)
Principal 1 (Mrs. Smith)	8	Executive Director of Elementary (Boss)	1
Principal 2 (Mrs. Johnson)	5	Director of Title 1	1
Principal 3 (Mrs. Greble)	5		
Principal 4 (Dr. Young)	4		
Principal 5 (Mrs. Dann)	2		

Knowledge Seeker, Holder, or Collaborative

Within social networks the diffusion of knowledge is the primary focus. Through the use of knowledge as social capital, individuals build their network based on learning from the experiences of others and the sharing out of their own experiences. In the case of Principal Laura, she was still relatively new to the principalship. During her weekly check-ins a trend developed within her social network of principals in which Principal Laura was primarily viewed as a knowledge holder by Mrs. Smith and Mrs. Johnson who both had less years as a principal.

Mrs. Dann, Mrs. Greble, and Dr. Young had more years of experience as a principal and were often seen as knowledge holders by Principal Laura, making her the knowledge seeker in these interactions.

At the start of the study, the label of knowledge seeker and knowledge holder were hypothesized as the primary designations for knowledge transactions within a social network. One individual holds knowledge and another seeks out knowledge. In Principal Laura's case, these transactions often transpired following this framework, however there was a third style of knowledge transaction that was identified early on in the study. Some of Principal Laura's interactions within her network were collaborative in nature. These interactions took place when neither principal knew the answer and resorted to brainstorming with one another to determine a course of action. An example of this was when Principal Laura collaborated with Mrs. Smith, Mrs. Johnson, Mrs. Greble, and Dr. Young on school data presentation and state accreditation projections. This situation showed that all five of the principals bounced ideas around to one another in preparation for individual presentations for each of their schools. These presentations would later go on to be individually presented to the district leadership team. No one person held all of the knowledge and the result was a collaborative informal correspondence focused on identifying what the presentations should highlight. As mentioned previously, the designation of knowledge holder and knowledge seeker often depended on years of experience as a principal.

Years of Experience vs. Types of Experience

As mentioned in the previous section, Principal Laura's interactions with her social network were influenced by years of experience as a principal. She assumed the role of knowledge holder in the eyes of her less experienced network members, and the role of knowledge seeker to those in her network with more experience. Although this was a trend, it should also be noted

that there were instances where Principal Laura would reach out to Mrs. Smith or Mrs. Johnson, as well as times when Mrs. Dann, Mrs. Greble, and Dr. Young would reach out to Principal Laura. Ultimately, years of experience mattered, however they were not a definitive indicator of what principals were knowledge holders and which were knowledge seekers.

The status as a knowledge seeker or holder often relied on years of experience, however the roles could be reversed whenever a principal held unique knowledge in a specific area, or in regards to a specific task or situation. In Principal Laura's case, she reached out to principals with less experience whenever she knew that the particular principal had direct experience with a unique situation or challenge. One example was Principal Laura reaching out to Mrs. Smith about a student who was threatening self-harm. Principal Laura knew that Mrs. Smith had experience with this type of situation and immediately reached out to her for ideas and outside agency contacts for support for the student. Another example was when Principal Laura reached out to Mrs. Johnson when she suspected a staff member had shown up to school intoxicated. Mrs. Johnson had less years' experience, however she had experience in a matter similar to Principal Laura's.

During situations like the two mentioned in the previous paragraph, Principal Laura noted that she had also reached out to district level supervisors, however she wanted to hear from members within her network who had similar experiences. In both cases she wanted "boots on the ground" information that she did not feel she received from district level administrators. In these situations, she was seeking knowledge informally and felt the two principals within her network shared more applicable knowledge than the district level administrators. She stated that the principals helped her come up with action plans in both cases. In both of these examples administrators would rightfully turn to departments within their school district to advise them on

how to proceed, however Principal Laura found the support she required within her network of principals.

Text Messaging and Google Chat

Principal Laura spoke with her five primary network members in a variety of ways, however she did have preferred methods that were used more frequently. She spoke with network members over the phone, via text message, in person, through email, and by using Gchat. Although she used all of these methods at one time or another, her preferred way for communication was text message and Gchat. These options allowed for Principal Laura to communicate with other principals throughout the day without having to make a phone call. Both communication methods allowed for Principal Laura to ask or answer questions in a quick and easy manner. Principal Laura mentioned that at any point in the day she either has her cell phone or computer with her. Using Google Chat and text messaging allowed for her to multi-task and communicate with her social network at all times. Ease of communication was important for Principal Laura, especially in the cases of Mrs. Smith and Mrs. Dann, who she spoke to daily.

Case One Analysis

Principal Laura was a Caucasian female in her third year as a principal. Prior to becoming a principal she served as an assistant principal for three years and a middle school social studies teacher for five. She had only worked in one school district, the one in which she was currently employed. Principal Laura attended a two-year principal preparation program and attended professional learning opportunities inside and outside of the division sporadically. She

spoke of the relationships she formed with other principals in her school district as her primary means of learning about the multi-faceted role of principal.

Principal Laura spoke to seven people over the course of the study. Five were principals and two were school district level administrators. All but one administrator was within her own school district. Her primary contacts were Mrs. Smith, Mrs. Johnson, Mrs. Dann, Mrs. Greble, and Dr. Young who were all elementary principals within her district. She had met all of these individuals while working in the school district with the exception of Mrs. Smith, who she had met as a childhood friend. Principal Laura shared that she relied on her network of other principals whenever needs arose within her building. This informal knowledge transfer transpired daily with Principal Laura assuming the role of both knowledge holder and seeker within her network.

The informal knowledge transfer in Principal Laura's network was mutual between her and her five primary contacts. She used her knowledge as a principal as Social Capital to contribute to her network of principals. Although trends developed in which Principal Laura was often the knowledge seeker when contacting more experienced principals and knowledge holder when being contacted by less experienced principals, the trend of knowledge transfer was not exclusive. There were times in which more experienced principals sought knowledge from Principal Laura and she sought knowledge from less experienced principals. Each principal had varying unique experiences that made them well versed in dealing with certain situations. Years of experience, as well as types of experiences, determined who was the knowledge holder and seeker in Principal Laura's case.

CHAPTER FIVE

Principal Leah was the second participant of the study and her case will be the focus of chapter five. This chapter is broken into two sections. Section one will provide an overview of Principal Leah focusing on her background information. The second section will share the specific themes of this case, focusing on informal learning. These themes were identified through the coding and analysis of the multiple in-depth interviews. The chapter will conclude with an analysis of Principal Leah's case that provides a comprehensive illustration of her case as it relates to informal learning, networking, social capital, and the research questions.

Case Two Overview

Principal Leah was an African-American first year elementary principal in School District Two (SD2). She had served in SD2 for her entire career. Prior to becoming principal, Principal Leah was an assistant principal for five years, a literacy coach for five years, and a classroom teacher for five years. All of these experiences were at the elementary school level in Title 1 schools. Principal Leah had always known she wanted to work with kids, however she did not plan on being a teacher. She stated:

I knew growing up I always wanted to work with kids. First, I thought maybe medicine, because I was always in the doctor's office for something, and it was not always a good experience for me. I just couldn't see myself doing that to children. You know I just couldn't. So I was in 11th grade my wet and dry field biology teacher was like, you'd be a great teacher, and I was like what? I don't think that ever came out until I was in 11th grade.

Principal Leah received her education specialist degree from a traditional university preparation program. She then proceeded to enter the Ph.D. program at the same university. She credited her academic advisor early on in her studies with pushing her towards working on her Ph.D. At the time of the study Principal Leah had graduated with a Ph.D. in Educational Leadership and Management. She had completed internship hours at every K-12 level and also completed a dissertation during her preparation coursework.

When asked about the training and professional development opportunities provided to principals in her current school district, Principal Leah said:

We have, first of all we have principal meetings every month. When I was assistant principal we had meetings every month. Meetings now, our big thing is with Focus Schools which is a company that is giving us professional development. So, it is always professional development on latest trends and stuff and research that is going on in the field of education.

Principal Leah also mentioned that the school district had improved the fidelity in which professional development was provided. She stated that:

In the previous years I think it was just too many types of PD, and (principals felt) let's stick to one thing and finish it. Let's just stick to one solid thing and finish it, because it became too much for the administrators, because you start this then something else comes along. You never fully implement something, so it became a cycle of dysfunction.

The school district had improved on this, and Principal Leah felt that the company providing professional development on Focus Schools had been providing support for the past two years. This level of focus allowed for principals in the district to create focused areas of improvement,

while allowing principals to take what they learned from the Focus Schools professional development and tailor it to fit the specific needs of their individual school.

When asked about formal learning opportunities outside of the school district, Principal Leah stated that there were a variety of opportunities and guest speakers within the area that she attended. Her personal focus as a first year principal was on meeting the needs of students in an urban setting, as well as teacher retention in an urban setting. She said that with these external learning opportunities came the challenge of fidelity she mentioned with the internal professional learning she was provided. Principal Leah implemented a strategy of taking bits and pieces of professional learning opportunities and implementing them at her school. She enjoyed attending external professional development, but did admit that it was difficult to find the time to regularly attend these events.

Principal Leah also learned about her new role as a building principal informally. She discussed one other principal that was someone she reached out to on a daily basis. She also mentioned that many principals within the district were extremely kind in sharing a wide range of ideas and deadlines whenever she first transitioned into the principalship during the summer. When discussing her most frequent contact person, Principal Leah said:

Well the one I am closest too, we were assistant principals together, and he became, this is my first year and I think this is his third year as principal. But even, when I was in the assistant principal role, we still communicated. It's any given, I am like Mr. Benson, I need this, and he emails me stuff all the time. I email him stuff. He says, here is a retention letter, and I am like, oh my gosh Mr. Benson, I totally forgot you needed a retention letter. So I just change the name on it and put it out. I mean literally his school is right next door.

Principal Leah's relationship with Mr. Benson was one in which they both learned from one another informally about a variety of challenges they faced. She said that he was a wealth of knowledge and helped her to expand her network of principals that she now relies on for information when she has questions. She continues to add individuals to her network that she could potentially share or receive knowledge from.

When asked to further elaborate about the informal learning she took part in, Principal Leah mentioned that all of the relationships she formed were based on give and take. The people in her network shared information with her and she shared information back. Principal Leah believed that relationship building was the most important part of learning from other principals:

It has to be relationship building, someone you can vent, you are going to have to have someone you can vent to. Somebody this is what happened, what did you do when that happened?

The ideas Principal Leah shared align with the Social Capital and Social network aspects of this studies framework. She used knowledge as currency to not only share ideas, but to receive guidance in return. This led to the formation of a network of principals she could learn from and share her own knowledge with. As a first year elementary school principal, Principal Leah was able to use her knowledge to form networks that provided her with new knowledge that she did not previously have. The next section will review themes that were identified in Principal Leah's case.

Informal Learning Themes

Principal Leah spoke with twelve different administrators, all within her school division, during the study. This section will highlight the themes that were present during the ten-week

case study of Principal Leah. The themes identified are specific to Principal Leah and her first year as an elementary school principal. Informal learning, Social Networks, and Social Capital were the focus of the themes. Principal Leah’s networking and relationship building through the use of Social Capital created the conditions for knowledge transfer to take place. The first theme was that Principal Leah had a clear Social Network of other principals that she relied on to gain knowledge. These principals also came to her seeking knowledge. These knowledge transactions were made within a Social Network with Social Capital as the currency exchanged.

Clear Formation of Principal Network

Of the twelve administrators that either reached out to or were reached out to by Principal Leah, two made up her primary network. Nine of these individuals were principals, two were assistant principals, and one was an executive director whose role was principal supervisor. Her two primary network members were Mr. Benson and Mrs. Olson. These two individuals were also elementary principals with Mr. Benson being in his third year and Mrs. Olson being in her first. Principal Leah spoke with these two principals’ multiple times each week. Their relationships were formed prior to being principals, however they interacted with one another to share knowledge pertinent to the principalship.

Table 3

Principal Leah Network Breakdown

Primary Network		Secondary Network	
Title	Number of Weeks with Contact (9 Week Period)	Title	Number of Weeks with Contact (9 Week Period)
Principal 1 (Mrs. Olson)	8	Principal 3	1
Principal 2 (Mr. Benson)	5	Principal 4	1
		Principal 5	1
		Principal 6	1

		Principal 7	1
		Principal 8	1
		Principal 9	1
		Assistant Principal 1	1
		Assistant Principal 2	1
		Executive Director of Elementary (Boss)	1

Collaboration for Professional Learning

Principal Leah, Mr. Benson, and Mrs. Olson worked throughout the case study on preparing professional development to assistant principals in the school district and the teachers within their respective schools. They shared knowledge back and forth on best practices as well as research behind the presentations they were planning. These professional learning opportunities sought to prepare assistant principals for the principalship. Although all three individuals were relatively new to their roles as principals, they were considered experts in the assistant principal realm and making the transition to principal, having all just left the ranks of assistant principals. These learning opportunities required them to share knowledge amongst themselves, as well as with aspiring principals who were currently assistant principals. Principal Leah also collaborated with Mr. Benson and Mrs. Olson on her own professional learning.

Mr. Benson and Mrs. Olson were reached out to by Principal Leah on multiple occasions to address upcoming professional learning opportunities for principals. Principal Leah reached out to Mr. Benson and Mrs. Olson to schedule sessions that would help them address challenges within their schools. These professional learning opportunities happened within the district and at local universities. The knowledge sharing that took place was important because many of the discussions revolved around challenges Principal Leah spoke with Mr. Benson and Mrs. Olson about on a weekly basis. Although professional development is formal learning, the

conversations that the three principals had outside of these learning opportunities would be considered informal. The informal aspects focused on implementation and tailoring what was learned to fit specific needs within the buildings. Principal Leah learned from Mr. Benson and Mrs. Olson about how they were applying their formal learning.

School Budget

Another theme that arose from Principal Leah's interactions in her informal network was school budget. As a first year principal, she admitted that she did not receive adequate formal training in the area of school budget from her school district. Principal Leah relied on Mr. Benson and Mrs. Olson to work through the challenges of budgeting and reporting her school based budget to central office. She spoke with both principals in her network on multiple occasions throughout the case study with questions in regards to the budget. She assumed the role of knowledge seeker, while Mr. Benson and Mrs. Olson were knowledge holders in these conversations.

Principal Leah felt that she had gained a considerable amount of knowledge in regards to school budgeting during her first year. The knowledge that she had gained during her first year was not from the central office or formal learning opportunities, but from other principals with a better understanding of school budgets. Although Principal Leah was the knowledge seeker in her network for matters relating to the budget, she was the knowledge holder for other areas. Mr. Benson and Mrs. Olson reached out to Principal Leah as frequently as she reached out to them. This mutual knowledge sharing created a Social Network amongst the three principals.

Teacher Evaluation

Principal Leah spoke routinely with her Social Network about teacher evaluation topics. She was the knowledge seeker for the majority of interactions, however there were two instances

in which she was the knowledge holder. Mr. Benson and Mrs. Olson were her primary contacts in regards to teacher evaluation, however she did speak to other principals on occasion. The bulk of her interactions on this topic were with Mr. Benson or Mrs. Olson. The primary topics she discussed with her Social Network were teacher professional development plans and leveraging the teacher evaluation for instructional improvement through feedback.

The first area in which Principal Leah frequently had conversations with her network was in teacher professional development plans. These plans were created for teachers whose students were not showing acceptable growth on division mandated assessments. She sought out ways to create plans that ultimately led to improved instruction being delivered by the teacher. During her conversations with her network she was able to brainstorm strategies for writing plans that led to the desired improvement. She was new to writing professional development plans having never written them as an assistant principal. The second area Principal Leah discussed frequently with her network was providing feedback to teachers on the teacher evaluation instrument.

Principal Leah collaborated with her network and assumed the role of knowledge holder and seeker in regards to feedback for teachers. Although most of these conversations regarding teacher feedback were held on the phone or via email, she also invited Mr. Benson to come to her school and complete walkthroughs. The walkthroughs allowed for Principal Leah and Mr. Benson to calibrate feedback to teachers, while also aligning feedback to school district look fors and non-negotiables. She used the knowledge Mr. Benson had gained from his three years as a principal to improve upon the feedback and action steps she was providing. All of these interactions were informal learning opportunities for Principal Leah to gain knowledge and improve her practice.

Case Two Analysis

Case two focused on Principal Leah who was an African American principal in her first year in the principalship. She had previously served as an assistant principal for five years, a reading interventionist for five years, and a classroom teacher for five years. These positions were all in the same district that she was a principal in. Principal Leah did not feel that she received “new principal” training whenever she was hired for the position. Her division level professional development came from district-wide principal meetings that were delivered to principals with varying levels of experience. Principal Leah also sought out professional learning opportunities outside of the school division, but admitted that with her schedule it was very hard to attend these events with fidelity. She relied on a network of other principals, namely Mr. Benson and Mrs. Olson, to learn about her position.

Principal Leah spoke with twelve different administrators during the study. She spoke with nine other principals, two assistant principals, and one executive director. All of these administrators were within her school division. Her primary contacts were Mr. Benson and Mrs. Olson, both of which were also principals. Principal Leah spoke with these individuals at least twice a week, often times by phone or through email. She also met in person with each of them at least once during the study. When communicating with these principals, Principal Leah was taking part in informal knowledge transfer focused on supporting school personnel through observations, operations and management, and school improvement.

The conversations Principal Leah had can be considered knowledge sharing. She was often seeking knowledge with Mr. Benson, while seeking and sharing knowledge with Mrs. Olson. This is because Mr. Benson had more years of experience than both Principal Leah and Mrs. Olson. When Principal Leah spoke with Mrs. Olson, the knowledge seeker and holder

designation depended on the topic and which of the two principals had more experience in that particular area. Principal Leah did not have frequent communication with the two assistant principals in her network, however she was always the knowledge holder in those interactions. She had just left the role of assistant principal, so current assistant principals viewed her as a knowledge holder and expert in the requirements of that position. This is a trend that continued across multiple cases of brand new, or recently hired principals (2-3 years in the position).

CHAPTER SIX

Chapter six will focus on Principal Beth, who was the third participant in the study. This chapter will be broken up into two parts. Section one will highlight Principal Beth's formal training and background information, as well as her perceptions of formal and informal learning as a principal. The second section will highlight themes and common threads identified in the coding and analysis of the interviews. The section concludes with an overall analysis of the case. The case will provide an illustration of Principal Beth's informal learning, networking, and use of Social Capital.

Case Three Overview

Principal Beth was a Caucasian second year principal in School District One (SD1). She had been the principal of the same school for two years. Her first year at the school was served as interim principal. Prior to becoming principal she served as an assistant principal at a different school in SD1 for two years. Her teaching experience came in first and third grades having taught two years in first and six in third. All of her teaching experience and administrative experience took place in SD1. Principal Beth knew she wanted to be an educator at a young age. She stated:

I knew I wanted to be a teacher while I was in school, actually when I was in second grade, I still have the paper, when I grow up I want to be a teacher.

Principal Beth took part in a leadership cohort offered through SD1 and a local university. She took classes with a group of aspiring administrators that also worked in SD1. The program that Principal Beth took part in allowed her to take classes from adjunct professors that were senior level staff members in SD1. She attributed these relationships to her

administrative journey to the principalship within her school district. Principal Beth had the opportunity to collaborate with other aspiring administrators as well as senior staff members throughout her two-year program. These collaborative relationships led to the gain of a high level of knowledge in a short amount of time pertaining to the tasks and duties of a school administrator.

Principal Beth could not recall whether she received formal administrative training in SD1 as a new assistant principal, or when she became principal. When asked what type of training was provided as a whole, she discussed the current focus of her school district. These trainings and professional development opportunities focused on teacher evaluation and feedback. This focus had taken place over both of her years as a principal and Principal Beth commented that the school district had really focused on providing the training, as well as following up in regards to teacher evaluation at each monthly principals' meeting. These meetings allowed Principal Beth to form relationships with other principals in SD1, while also getting to talk and work through the challenges of implementing a new teacher evaluation system. The collaboration with other principals carried over to learning outside of the formal setting.

When asked about informal learning with other principals, Principal Beth stated:

I would say I probably reach out to another principal at least once a day. I mean Mrs. Jones and I are on chat (Google), almost constantly. Like if there is something, whether it's culture stuff. Like she is the one that gave me the positive office referral stuff I do, so I might like chat her and be like, so I am having this issue, what sort of things are you doing around it? And she has kind of been my unofficial person, but you know her and I grew up together. So we have a different type of relationship, but she is always willing,

like yesterday I sent her a chat and said I need you and she responded give me a call in ten minutes. So it is like that sort of thing.

Principal Beth also mentioned Mrs. Barone and Dr. Martin as “go to” principals that she informally reached out to frequently. Both of these principals had more experience than Principal Beth. Most of her informal conversations with these individuals focused on the teacher evaluation system, however the evaluation tools were not the only thing they discussed.

Principal Beth had said that the relationship was usually one of the three principals sharing information with her, and not the other way around due to Principal Beth’s lack of experience:

I don’t know if I reach out to them with anything (to share), but what ends up happening naturally in conversation, like if I contact Mrs. Jones and I am like hey I am having trouble with something like my breakfast line. I don’t know, and we start talking about you know and she is like I am having this issue, well this is what we do and it works really well. I think it happens more probably subconsciously, or organically just through conversations. I have a problem, or it’s like hey I am doing this great thing.

Principal Beth’s description of her informal learning from principals as “organic” shows that she was reaching out as a need in her building arose. Often times the principals she was reaching out to had more years of experience and could offer her guidance in regards to whatever challenge she was facing in her building. Principal Beth’s learning was not only informal, but needs driven.

Principal Beth was also asked to describe how she learned best as a principal. She felt that the majority of her learning tied directly to the relationships she had with other principals. A variety of trainings were always offered through her school district, however she felt that the one

to two hours dedicated to those trainings were not adequate once the work of implementation at the school level began. Once implementation began, Principal Beth relied on informally learning from her “group of people.” She stated that she talked to at least one other principal once a day, and often times, more than one principal. Principal Beth formed these relationships through her time as a teacher and her participation in SD1’s leadership cohort.

Informal Learning Themes

The second section of this chapter focuses on the informal learning themes present in the interviews with Principal Beth. The coding and themes of the interviews focused on informal learning, Social Networks, and Social Capital. Principal Beth reached out to other principals often, while also speaking to an assistant principal frequently. She kept track of her contacts throughout the case study and provided pseudo names to protect their identities.

The interviews for the case study took place during the third and fourth nine weeks of the 2017/18 school year. Interview questions focused on gaining a clear understanding of how Principal Beth was prepared for the principalship, as well as how she learned about the many tasks she was responsible for as the leader of her building. The following sections are divided into themes that were identified through the coding of multiple interviews. The three themes were clear formation of a principal network, knowledge seeker or holder, and text messaging and Google chat. These three themes were specific to the interviewing of Principal Beth; however, she did share common themes with the other participants. The first theme from interviewing was a clear formation of a principal network.

Clear Formation of Principal Network

Over the course of ten interviews during the case study, Principal Beth had a clear formation of a Principal Network. She spoke weekly or bi-weekly with Mrs. Jones, Mrs. Barone,

Dr. Martin, and Mrs. Thibeault. Mrs. Thibeault was the only individual who was not a principal, she was an assistant principal in Principal Beth’s school district. She had known all of these individuals for a minimum of five years, and all four worked in SD1 with Principal Beth. Principal Beth did have one district level administrator contact during the case study, however she only reached out to this individual one time during the entire case. Social Capital was used by Principal Beth to form her relationships with her network and she reached out and learned from these individuals often.

Principal Beth’s network consisted of three principals and one assistant principal. Within her network, she shared knowledge and also sought knowledge from these individuals. She was a second year principal and found herself reaching out for knowledge more frequently than sharing knowledge. This could be attributed to her lack of experience when compared to the other principals in her network. She wasn’t just a knowledge seeker, however the majority of her interactions with her principal network were her as knowledge seeker and the other principal as the knowledge holder. The interactions that she had with other principals and the learning she took part in focused on state and district level assessments, student discipline, and teacher evaluation.

Table 4

Principal Beth Network Breakdown

Primary Network		Secondary Network	
Title	Number of Weeks with Contact (9 Week Period)	Title	Number of Weeks with Contact (9 Week Period)
Principal 1 (Mrs. Jones)	9	Assistant Principal 1 (Mrs. Thibeault)	2
Principal 2 (Mrs. Barone)	4	Executive Director of Elementary (Boss)	1
Principal 3 (Dr. Martin)	5		

Knowledge Seeker or Knowledge Holder

Throughout the case study, Principal Beth predominantly assumed the role of knowledge seeker within her principal network. The only exception to this was whenever Mrs. Thibeault, an assistant principal in SD1, reached out to Principal Beth for ideas and feedback. This is important because it shows that although Principal Beth was considered new to the principalship, she was considered a knowledge holder and expert at the assistant principal role. Having just come from the assistant principal role, Principal Beth had a great deal of knowledge of the assistant principalship and the tasks assigned to it. Mrs. Thibeault reached out frequently about ideas on discipline and student support.

When Principal Beth was seeking knowledge, she sought ideas and knowledge from the three principals in her network. Conversations with the three principals happened each week, and often times daily. Principal Beth used this network of three principals to learn about the tasks related to her job. The focus of the conversations were on state testing, accreditation, data tracking, student discipline, and teacher evaluation. Principal Beth was the knowledge seeker when speaking with individuals with more experience in the principalship, and a knowledge holder whenever she spoke with individuals with less experience. The focus of knowledge transfer directly related to the time of year the case study was conducted.

Text Messaging and Google Chat

Principal Beth had opportunities to interact with her principal network in person, however this was primarily done once a month at district-wide principal meetings. The majority of her conversations and interactions took place through text messages and Google chat. She had shared that phone calls were often difficult due to her and her networks busy schedules and ongoing need for multitasking. Text messaging and Google chat gave her the opportunity to

reach out to her network while conducting observations, facilitating meetings, or monitoring testing. These two communication methods allowed her to keep up with the day to day tasks in her building while also learning from and sharing with her network.

These conversations also spanned outside of regular school hours. Principal Beth shared that she communicated after hours through text message frequently. Her conversations with her network also took place on weekends. Many of these conversations revolved around student discipline and support, but also included testing and accreditation. The testing and accreditation focus can be attributed to the time of year, but Principal Beth noted that the student discipline and support was an ongoing focus throughout the year. The ease of use for text messaging and Google chat made it the preferred communication method for Principal Beth

Case Three Analysis

Principal Beth was a Caucasian female in her second year as a principal. She had been an assistant principal for two years prior to becoming a principal and had taught for eight years in both first and third grades. Principal Beth participated in a leadership cohort to attain her master's degree in school administration and leadership. She participated in professional development both internally and externally, however did note that these opportunities were not as frequent as she would like. Principal Beth was relatively new to the principalship and found herself relying on a network of principals within her school division whenever she had questions. This network provided a conduit for her learning about her new role.

The principal network that Principal Beth formed was made up of three other principals and an assistant principal. All of these administrators were within her school district. The principals that made up the network all had more experience than Principal Beth. She relied

heavily on these individuals as she became accustomed to the multi-faceted role of principal and instructional leader. Most of her learning interactions with these individuals placed her in the role of knowledge seeker. She sought out ideas and information from her more senior counterparts. Principal Beth assumed the role of knowledge holder when she interacted with Mrs. Thibeault, who was a new assistant principal in Principal Beth's school district at another school. These interactions and knowledge transfer were directly linked to years of experience. The only time that Principal Beth was a knowledge holder when speaking with one of the three principals was whenever she had knowledge about specific situations that she had faced, while the other principals had no experience in the given situation. Principal Beth assumed knowledge holder status with the principals twice during the case study.

CHAPTER SEVEN

Chapter seven focuses on Principal Katie. She was the fourth participant in the study. This chapter is broken up into two sections that will focus on the case of Principal Katie. Section one addresses Principal Katie's formal training and leadership journey, as well as her perceptions on learning as a principal. The second section identifies themes and common threads found through the coding and analysis of interview data. This chapter will provide a better understanding of Principal Katie's informal learning, networking, and use of Social Capital in her role as a principal.

Case Four Overview

Principal Katie was a Caucasian principal in her fourteenth year in education and third as a principal. She had been a first and third grade teacher, as well as an assistant principal, prior to becoming a principal. She worked in School District One (SD1), and had not worked in any other school district. When asked how she got into education, Principal Katie shared:

I've always known I have wanted to work with children, it is the cliché answer, you know you want to impact the world. I have always known I have wanted to work with children, but I more so wanted to see that bigger picture. I have always seen that bigger picture. I always was the person people went to for you know anything, that leadership potential. I always wanted to step up and be there. I never was a person to kind of sit down and watch things, so I knew I had that desire and that passion.

She attended a traditional two-year leadership preparation program. Principal Katie did not take part in online classes and was not in a cohort of prospective administrators. She took part in internships at the elementary, middle, and high school levels during her master's program.

After completing her program, she was an assistant principal for three years' prior to becoming a principal. She had been a principal for three years at the time of this case study.

Principal Katie discussed the fact that she feels that she learns every day in her role as a principal. When asked how she learned best about leadership, she stated:

You know I learn so much about what other people are doing. Again, we are all on the same page and we all want what's best for kids. So I learn by doing, I learn by watching, and I learn by hearing what works. So from other places, then I kind of make it my own, but I like to see things in action, you know observe them, see how it might fit, and tailor it to what the needs are in my own school and then just go from there.

She also shared that when she was originally hired as an administrator, she received short trainings about the many different aspects of administration. These trainings covered finance, special education, teacher evaluation, as well as the managerial aspects of running a school. Principal Katie mentioned that the trainings were very brief and most provided a folder that contained important information and forms. She felt that this was not comprehensive and did not prepare her for the day to day challenges faced by administrators. Principal Katie learned informally about the day to day tasks required of the principalship.

Principal Katie leveraged her principal network to learn about the many challenges and tasks she faced as a principal. When asked whether or not she reached out to other principals, Principal Katie said:

I still reach out. I mean like I have my principal friends. Mrs. Cooper is one of them. I mean we text each other all the time, like hey I got this. You know, so within my principal group, or my PLN of principals, I have people I will call. Student services, let

me call them. Because if I am thinking of a decision and I am not sure, like I think I remember this, I am not afraid to pick up the phone and ask somebody, hey is this right? And if it is great, you just verify what I thought, but if it's not, ok, great, I am glad I called. And that is the great thing about School District One, you know who it is that you can just pick up the phone and ask. I would rather be right than be wrong for anything.

Most of the time Principal Katie felt that she was contacting other principals to verify task due dates or procedures for certain situations. She also discussed that her PLN of principals would often share what was or was not working in their schools. These conversations often revolved around student support, instructional feedback, and student academic interventions. Principal Katie leveraged her network to make better informed instructional decisions for her school. In doing this she was using social capital to both share and gain knowledge from other principals.

In the case of Principal Katie, her network was not limited to principals. She also frequently reached out to department heads in language arts and math, as well as the director of human resources and student services. These conversations revolved around similar needs as to those discussed in her principal network, however her principal network was still her main point of contact throughout the duration of the case study. Principal Katie was both a knowledge holder and seeker when interacting with her principal network, however when interacting with directors of various departments, she was primarily a knowledge seeker.

In Principal Katie's case, like the three previous cases, she used and leveraged a small network of principals to further her knowledge of instructional leadership practices, as well as other managerial related tasks of the principalship. Her reason for reaching out or being reached out to was often need based and allowed her to leverage Social Capital as a means to learning.

Her network was consistent throughout the study and was comprised of eleven administrators total (both principals and directors) and four primary principals. The four principals were in contact with Principal Katie daily.

Informal Learning Themes

Principal Katie spoke with eleven different administrative contacts during the case study. Six of these participants were building level principals and five were district level administrators. Her primary contacts were Mrs. Cooper, Mrs. Boswell, Mrs. Kimidy, and Mrs. Gravely. These four individuals were all principals in Principal Katie's district. The purpose of this section is to highlight the five themes that were present during the case study of Principal Katie. Although these themes were specific to Principal Katie's case, there was overlap between Principal Katie's case and the other principals within the larger study. Her first theme was a clear formation of a network of principals.

Clear Formation of Principal Network

Principal Katie spoke to fifteen different administrators during her study, however four principals and one assistant principal made up her primary network. Principal Katie spoke to these individuals weekly, and often times daily. Mrs. Cooper, Mrs. Boswell, and Mrs. Kimidy all had more experience as a principal than Principal Katie, while Mrs. Gravely had one less year. Principal Katie assumed the role of knowledge seeker and holder with each of her four primary contacts. Whether or not she was a knowledge seeker or holder often depended upon the situation.

The participant used knowledge she had gained over her three years in the principalship as Social Capital throughout the study. She formed her network of principals through the seeking and sharing of knowledge (Social Capital). Whenever she needed support, ideas, or

guidance she reached out to one of the four primary members of her network, and when they needed support they reached out to her. This continual transfer of knowledge amongst principals allowed all of the network members to address problems and lead their schools in the most effective way possible. Through their combined knowledge, the members of Principal Katie's network learned on the job to lead their schools. Principal Katie's ongoing collaboration with her network often led her to not only seek out advice in guidance, but to also confirm what she had discussed with one principal, to the other members of her network.

Table 5

Principal Katie Network Breakdown

Primary Network		Secondary Network	
Title	Number of Weeks with Contact (9 Week Period)	Title	Number of Weeks with Contact (9 Week Period)
Principal 1 (Mrs. Cooper)	8	Assistant Principal 2	1
Principal 2 (Mrs. Boswell)	8	Assistant Principal 3	1
Assistant Principal 1	8	Principal 5	1
Principal 3 (Mrs. Kimidy)	8	Executive Director of Elementary (Boss)	3
Principal 4 (Mrs. Gravely)	8	Director of Student Services	2
		Director of Research, Planning, and Evaluation	2
		Director of Human Resources	2
		Director of Climate and Culture	2
		Director of Title 1	2
		Human Resource Specialist	2

Confirmation of Information

Throughout the case study, Principal Katie communicated with her network often. She shared and sought answers for a wide range of questions; however, she also confirmed information with other members of her network. An example of this is whenever Principal Katie phoned Mrs. Boswell about an upcoming data presentation for the superintendent. Principal Katie needed clarification on what information and data points were required to be in the presentation. Once she got off the phone with Mrs. Boswell, she called Mrs. Cooper to confirm and double check the information she had just gotten. Principal Katie considered this a “checks and balances” type system that allowed her to aggregate information.

Principal Katie was clear in the fact that she did not double check information due to lack of trust in her network, but rather her own personal need to confirm information. She shared that this had proven to be helpful in situations because when she was seeking information from her primary network, each person she talked to shared something the previous individual had not. This allowed her to build her knowledge on a given subject and make the most informed decisions. The information confirmation was not contained to principals in Principal Katie’s network; it also was applicable to district level administrators and directors.

Phone Conversations

Principal Katie was the first participant in the study who preferred phone conversations rather than email, Google Chat, and text messaging. She felt that she was “weird” in the sense that she would rather talk to someone over the phone to walk through problems or questions she had. This was not the norm for the participants in the study, because most preferred the quick ability to send a text message or Google Chat. Principal Katie was an auditory learner, and felt

that she would rather call someone directly than wait for a response to a message that was sent. She valued the ability to talk through situations as well as being able to ask clarifying questions. Although Principal Katie's preferred communication method was not the norm for her network, she did not have any trouble with reaching network members as a knowledge seeker.

Planning for Next Year

Mrs. Kimidy and Principal Katie collaborated often. They completed book studies together with their staffs, arranged learning walks between teachers in their schools, and purposefully planned for the next school year. One of the primary topics of conversation between the two principals was teacher non-renewals. The non-renewals were teachers who would not receive a contract for the next school year due to performance concerns. Mrs. Kimidy and Principal Katie also discussed teacher grade-level moves within their own building for the next school year.

Two other focus areas for the next school year between Principal Katie and Mrs. Kimidy were the selection of books for a book study and the implementation of vertical learning teams in each of their buildings. The plan for the book study was that Principal Katie would get a specific book and Mrs. Kimidy would get a different book that would be the focus of the book studies. Once they had completed the book study in their school with their staff, they would trade the sets of books to each other. This would allow them to partake in a second book study focused on a different topic, while only having to spend money on one book set. The vertical teaming was something both principals wanted to start in their buildings, with a focus on building collaborative teams amongst various grade levels. These teams would focus on identifying essential knowledge across grade levels to develop a school wide focus.

Student Support

Throughout the case study, Principal Katie focused a lot of her time and learning on best practices related to supporting students in crisis. She had a large number of students in her building that needed intensive behavioral support. She collaborated with her principal network, as well as directors at the administrative building. One of the focuses for Principal Katie was on restorative justice practices. This led to the creation of a “cool down room” in her building for students in need of support and guidance. Although the room’s creation was not a part of any district level initiative, many other administrators in the school district took interest in it. By the end of the case study, seven different administrators had visited the cool down room at Principal Katie’s school. The organic nature of the room’s creation meant that improving and adjusting the room was an ongoing process, which required Principal Katie to collaborate with her network frequently.

Case Four Analysis

Case four focused on Principal Katie. Principal Katie was a Caucasian female in her third year as a school principal. She had been at the same elementary school for all three years as a principal. She had been an educator for fourteen years total. Principal Katie attended a traditional two-year principal preparation program that was “brick and mortar.” She felt that her school district provided professional learning opportunities, as well as the funding to attend out of district learning opportunities; however, she still did the majority of her learning on the job, day to day.

Principal Katie took part in an informal network of administrators within School District One. This network was not exclusive to building level leaders, spanning leaders in various departments at the district level. Although she had many contacts during the case study, her

primary contacts were four other principals within her school district. These individuals were spoken to daily. Throughout the case study, Principal Katie assumed the role of knowledge seeker and holder. She leveraged her knowledge as Social Capital to maintain her network of principals. When Principal Katie assumed the role of knowledge holder, it was often because she had experience with something one of her network members did not. On the opposite end, when Principal Katie assumed the role of knowledge seeker, it was because she was not familiar with a situation or task. When Principal Katie was a knowledge seeker, she often called multiple network members with the same question. She did this to verify and double check the information she was receiving. Throughout the case, Principal Katie was leveraging her principal network to learn about principal tasks she was not familiar with or that she felt uncomfortable with.

CHAPTER EIGHT

This chapter will focus on the case of Principal Patti. Principal Patti was the fifth participant in the study. This chapter is broken into two parts, an overview of Principal Patti and her learning followed by themes of the case. The chapter will conclude with an analysis of Principal Patti's case. The goal of the chapter is to highlight Principal Patti's learning during her time as an administrator, both formally and informally.

Case Five Overview

Principal Patti was an African American in her eighth year as a principal in School District One (SD1). She had been the principal of her current school for her entire eight years as a principal. Prior to assuming the role of principal, she was an assistant principal at the middle and elementary school level. She had been in education for twenty-three years and had taught at all levels K-12, as well as a GED program for adult education. Principal Patti was originally a career switcher and began her time as an educator as a teaching assistant.

The case study participant began her administrative journey when she was encouraged to apply for a leadership cohort offered through her school district and a nearby university. When asked about how she got started she shared:

I was reluctant, and I had an executive director that really thought more of me than I thought of myself. She came to visit my classroom one day and she says, "what are you doing? Why didn't you apply? I am waiting, hurry up." So that is what actually motivated me to go ahead and apply for the cohort program.

While taking part in the leadership cohort, Principal Patti had the opportunity to learn from senior level administrators in her school district. She was able to work and collaborate with other aspiring administrators in her school district with the goal of becoming an assistant

principal. Principal Patti also had the opportunity to gain internship hours in external agencies outside of the traditional school district.

Principal Patti felt that she was trained by her school district as a new principal; however, these trainings were broken up throughout the school year at monthly principal meetings. Each month covered a different topic pertinent to the principalship. Principal Patti did not receive an induction into her role and did not receive any training targeted for new administrators. The professional development she did receive was provided to all principals in SD1, not just those who were new to the principalship. Principal Patti felt that although the formal trainings provided by the school district were helpful, they were not always applicable on a day-to-day basis in her school.

Formal learning was a part of Principal Patti's administrative experience; however, it was not the primary way she learned. When Principal Patti needed information, she did not hesitate in reaching out to others:

I am just that type, I am not afraid. I am going to find out who I need to find out information from, simply because I don't think that should be a barrier to an answer. I don't have to know you, I just have to know what you know. That is something that I need to know, so, just having that ability to pick the phone up, or send an email, and say hey I need a little bit more information in regards too, and just list that information out. Then having somebody respond can save you three hours. Picking up the phone can save you an hour of time that you can't get back, that you could be using to effectively be the instructional leader in your building. Look at what's going on to address a discipline concern. You can save so much of your time, just by asking for help.

Each day brought the potential for a specific need in Principal Patti's building, and if she did not have the information she needed, she would reach out to her network for assistance. She also shared that her network was not exclusive to school personnel. She collaborated and sought ideas from clinical psychologists as well as business leaders. Principal Patti felt that other fields had practices and information that were applicable and beneficial to the field of education.

Principal Patti formed many of her relationships during her twenty-three years in education. She had formed relationships with colleagues in SD1, in graduate school, at professional learning conferences, and through contacts prior to her career in education. She felt that the bulk of her learning came informally, however most of the time other principals were seeking her out with questions. Principal Patti felt that she was sought out frequently and this related to her number of years as a principal. She also shared that most, but not all of her informal interactions were principals seeking information from her. Principal Patti still had instances where she needed to reach out for information or learning.

Informal Learning Themes

This section will focus on the informal learning themes that were identified in the case of Principal Patti. The focus of the data coding was on informal learning, Social Capital, and Social Networks. Principal Patti mentioned that she often reaches out to professionals outside the realm of education, however during the course of the study she only talked to other principals. The participant kept track of her contacts and provided initials rather than their full names. These themes were identified over a ten-week period in the spring of 2018.

Interviews for this case study ran concurrent with the other six study participants during the third and fourth nine weeks of the 2017/18 school year. The focus of the interviews was on gaining a better understanding of whether or not Principal Patti was leveraging Social Capital to

learn within a Social Network of peers. The interviews were coded and themes identified. The goal was to make a connection between Social Networks and informal learning. Principal Patti shared many similar themes to that of the other participants, while also having themes specific to her own experiences. Her first theme, like that of all six participants, was a clear formation of a principal network.

Clear Formation of Principal Network

Principal Patti had a network of other principals within her school district that she frequently spoke to about a variety of topics. These individuals were often reaching out to her with questions due to her number of years in the principalship, however during the course of the case study she was both a knowledge seeker and holder. Principal Beth had known her network members for a minimum of five years, and knew two of the individuals for more than twenty. Throughout the case study, Principal Patti leveraged Social Capital within her network to gain knowledge as well as share it.

Within Principal Patti's network were seven other principals. These principals were all within SD1 and all seven had less years' experience as a principal when compared to Principal Patti. At no time during the case study did Principal Patti speak with district level administration. She was the only principal in the study without contact to district level leaders during the case studies. Her two primary contacts were Dr. Stewart and Mrs. Durkin. These two individuals were also the principals she had known the longest. Principal Patti assumed the role of knowledge holder more frequently than knowledge seeker, however when she did seek knowledge, she usually spoke with Dr. Stewart or Mrs. Durkin. The main topics of discussion within Principal Patti's network were teacher observation/feedback, state and division level testing, student transfers, and procedures/deadlines for the end of the school year.

Table 6

Principal Patti Network Breakdown

Primary Network		Secondary Network	
Title	Number of Weeks with Contact (9 Week Period)	Title	Number of Weeks with Contact (9 Week Period)
Principal 1 (Dr. Stewart)	6	Principal 3	1
Principal 2 (Mrs. Durkin)	8	Principal 4	2
		Principal 5	1
		Principal 6	1
		Principal 7	1
		Principal 8	2

Transient Student Population

On several occasions during the study, Principal Patti’s communication with other principals was related to gaining information on students who transferred either into or out of her school. During these interactions, she was both a knowledge seeker and holder depending on whether or not the student was transferring into or out of her building. Principal Patti attributed this to the fact that she served a high poverty community with many students who lacked permanent housing. Her conversations revolved around both supporting the student as well as the family of the student. Principal Patti also discussed the students’ academic needs in relation to the state testing that was about to begin. The students were still required to take the state tests even as transfer students, so remediation and student data was a focus. Principal Patti had many of these discussions, as well as discussions on other topics, over the phone.

Phone Conversations

Principal Patti, like Principal Beth, preferred to discuss information with her principal network over the phone. She attributed this to wanting to keep matters discussed confidential in

regards to students and staff. The majority of her knowledge transfers took place over the phone with the seven principals in her network. Phone conversations were the only forum used for the majority of conversations Principal Patti had with her network, however as state mandated testing began, she shifted her communication methods.

Once state testing began, Principal Patti saw a sharp decline in phone conversations and an increase in Google chat messages. This was attributed to the busy nature of the testing schedule amongst her and her network members. Phone conversations became inconvenient and nearly impossible due to the number of tasks that needed completed to close out the school year. Principal Patti was still able to stay in contact with her principal network; it just required a different form of communication.

Reaching out to other Fields

Principal Patti was the only participant of the study that mentioned individuals outside of education as being a part of her principal network. She mentioned clinical psychologists, business leaders, and sociologists as people she was in contact with frequently. Principal Patti felt that individuals from these fields offered unique perspectives into education. She felt she was closest to clinical psychologists due to the growing level of mental health needs amongst her student population. She would often reach out to them for support and guidance, while also coordinating with social works to ensure students were receiving the necessary support. Although Principal Patti discussed talking with these non-education network members frequently, she did not have any communication with these individuals during the ten week case study.

Case Five Analysis

Principal Patti was an African American female in her eighth year as a school principal. She had been in education for more than twenty years and had served students at all levels, including adult education. Principal Patti completed her leadership preparation through a leadership cohort organized by her school district and a local university. She had not originally planned to enter the cohort, until she was encouraged by an executive director. Principal Patti had a strong network of principals that she spoke with frequently. Of the seven principals she spoke with during the study, Dr. Stewart and Mrs. Durkin were her primary contacts. She spoke with these individuals at least weekly throughout the ten-week study.

All of the individuals in Principal Patti's network were within her school district. She was the only participant throughout the six case studies that did not speak with district level administrators or her direct supervisor during the ten-week case study. Principal Patti was predominately the knowledge holder in her interactions with the other principals. She attributed this to her number of years as a principal. When Principal Patti was a knowledge seeker, she tended to seek knowledge from principals with a similar level of experience. Principal Patti's conversations revolved around transfer students, state testing, data, teacher feedback, and end of year close out procedures. This can be attributed to the time of year the study was conducted. Principal Patti was a mentor to less experienced principals in her network, due to her number of years as a principal.

CHAPTER NINE

Chapter nine focuses on the sixth and final principal in the study. Principal Kim was in her seventh year as a principal in School District 3 (SD3). The chapter is broken up into two sections. Section one will focus on Principal Kim's leadership journey and the formal training she was exposed to. Section two will highlight themes identified specific to Principal Kim's case study. The goal of this chapter is to provide a better understanding of Principal Kim's informal learning, networking, and use of Social Capital.

Case Six Overview

Principal Kim was an African American principal in her seventh year. Prior to becoming a principal, she served as a middle school English teacher for three years, a high school data coach for one year, an assistant principal at the middle school level for a year, a middle school principal for three years, and an elementary school principal for four. Principal Kim was in her twelfth year in education. When asked how she decided on education she shared:

So my mom was an educator, almost 40 years under her belt, and had you asked me going into college if education was going to be my route, I would have laughed at you and told you no. In hindsight to look back on everything that has happened, it makes complete sense. I mean my activities back in school, I mean we had the days where you were like shadow the principal, or be the principal, I was always that kid. So looking back at it, it makes complete sense, but I went into school as an economics major.

Although she was an economics major, Principal Kim decided to change majors after taking English classes during the second semester of her freshman year. Principal Kim felt that the principal of the middle school she taught at saw leadership potential in her, while also providing

teacher leadership experiences throughout her three years there. After teaching for three years at the middle school, she decided to complete her masters in educational leadership full time.

Principal Kim labeled herself as a “true lifelong learner.” When asked about her outlook on her personal learning, Principal Kim said:

If somebody would allow me to take classes the rest of my life I would. I mean when I was teaching I would just take a summer course to just have something to do. I was teaching summer school, but then in the evenings I was going to the local college and just taking a random course. So, I love the prospect and the idea of being able to learn. I love twitter simply because the information you can get there.

She also shared that much of her learning within her school district takes place at bi-weekly principal meetings within the school division. One meeting a month focuses on teaching and instruction, while the second monthly meeting focuses on school management aspects of the principalship. Principal Kim felt that she learned a great deal through these development opportunities, which was especially important during her transition from secondary to elementary school leader. She also learned informally about her role as a principal.

Formal learning opportunities were an important aspect of Principal Kim’s learning in the principalship, however she also learned informally from a network of other leaders. She was asked if she learned from other leaders she knew:

It depends on what it is, but sometimes it is a matter of contacting another colleague, so another principal I may be close with. It may be having a conversation with my AP and talking through what steps do we want to take. It could be the assistant superintendent, it may be one of the specialists in the building, or even the coordinators for the division,

and then if it's one where I feel like it is a touchy issue or really a personal decision that I have to make that call, I may contact one of my mentors.

Her willingness to reach out for support and suggestions was evident during the case study. Principal Kim reached out to twelve different school leaders/personnel during the case study. Of these twelve individuals, only three were principals. The other individuals she spoke with consisted of an assistant superintendent, various mentors, and a number of directors in a variety of departments at the district level. Each of these members within the network were contacted at least once a week during the ten-week long case study.

Principal Kim valued both her formal and informal learning as a school leader, however she did have a preference towards the informal conversations she had with peers. She also felt that she learned by doing and getting to “learn on the fly.” She shared this about her learning preference:

I recently read something that said, you can't learn to play the piano without playing it. I can read up all I want on learning how to read notes, I can get the best information about who plays the piano, how they play the piano, what the style is, the different types of pianos, you know when you hit the pedal what's it supposed to sound like, but it is something completely different to sit in front of it and be able to actually play at it. And the practice that you get with it is how you get better at it.

She felt that what she was learning from her network could be immediately implemented, because if she was seeking information, it was pertinent to her immediate needs. Principal Kim used conversations with her network to leverage positive change in her building.

Principal Kim, like the previous five cases, relied on learning and sharing information within a Social Network of school leaders within and outside of her school district. She

leveraged Social Capital, which was the knowledge she had, to form her network relationships. Once these relationships were formed she was able to share information to those who needed it, as well as ask for information from those who held it. Within her Social Network, she was both a knowledge seeker and holder, depending on the situation. She was in contact with members of her network daily, and themes developed during the case study through those interactions.

Informal Learning Themes

During the course of the case study, Principal Kim spoke with twelve different leaders within and outside of her school district. Her network only had three other principals in it. Her main points of contact were the assistant superintendent and two mentors, however she spoke with all of her twelve contacts at least once a week. The assistant superintendent was her immediate supervisor and the mentors were both from outside of her school district. This section will highlight four themes that were identified in Principal Kim's case over the ten-week long case study. Some of these themes were common amongst all six participants, while others were only applicable to Principal Kim's case. The first theme in case six, which was a theme for all six participants, was a clear formation of a Principal Network.

Clear Formation of Principal Network

During the course of the case study Principal Kim had twelve different members of her Social Network. Although these contacts were not all principals, they were all leaders within or outside of her school district. Principal Kim had contact with each member in her network weekly, and sometimes daily during the course of the case study. The main topics of discussion and knowledge transfer related to school effectiveness program evaluations, teacher evaluations, discipline, and support for students (namely students receiving special education services). She also had conversations with the members of her network who were also principals about

planning for summer school, student retentions, and the 2018-19 school year. She was a knowledge seeker and holder throughout the case study.

Principal Kim used her knowledge of the principalship as Social Capital within her network. When assuming the role of knowledge holder, it was often related to a topic or situation that she had first-hand experience with. She assumed the role of knowledge seeker whenever she did not have specific experiences aligned with a particular need in her building. This give and take relationship within her Social Network shows that Principal Kim used her Social Capital to learn from and teach members from within her established network. The “push and pull” within the network proved mutually beneficial to both Principal Kim and her network members. For the Social Network to exist and continue, both parties must benefit from the relationship.

Table 7

Principal Kim Network Breakdown

Primary Network		Secondary Network	
Title	Number of Weeks with Contact (9 Week Period)	Title	Number of Weeks with Contact (9 Week Period)
Mentor 1	4	Director of Diversity	2
Mentor 2	5	Discipline Hearing Officer	1
Principal 1	4	Director of Student Affairs	1
Principal 2	4	Special Education Coordinator	1
Principal 3	4	Special Education Instructional Specialist	2
Assistant Superintendent (Boss)	5	Director of Human Resources	1

Out of District Mentors

Principal Kim's case was unique in the fact that she had three out of district mentors during the case study. Two of the three mentors were spoken to weekly during the ten weeks of the case study. The third was only reached out to once during the ten-week time frame. Principal Kim spoke with these individuals and sought their opinions on a variety of topics related to her school and district. She felt that these individuals could provide guidance on situations she may be hesitant in bringing up to network members that were within her own district.

All three of these individuals were former school administrators who had either retired or moved to roles at the university level. Principal Kim had met them through her school district and work in her Ph.D. program. The majority of conversations held with these mentors related to things that were going on in her specific school, namely a school effectiveness study that was taking place during the 2017-18 school year. There were also conversations about matters within her district that Principal Kim sought guidance on from her external mentors. The mentors were always available to her for guidance and feedback on any matter she felt she needed external advice on.

Instructional Improvement and Student Support

Instructional improvement and student support was another theme for Principal Kim. Throughout the ten-week study, these two topics were always at the forefront of her work and conversations with other network members. During the study Principal Kim's school was in the midst of a program evaluation focused on school effectiveness. She was working closely with the assistant superintendent of the district, who was also her direct supervisor. The goal of this

effectiveness study was on instructional improvement efforts within the building. Principal Kim also focused on instructional feedback and classroom observations during the program evaluation. She was involved with conversations around the effectiveness study with each of her network members at one point or another during the ten-week case study.

Student support was another area of focus for Principal Kim. She collaborated with network members who were administrators in the special education department about supporting students receiving special education services. Many of these concerns related to students with emotional disabilities and helping to support them in the educational setting. Principal Kim also worked with other members of her network in supporting students who were homeless or living in shared housing. The focus on student support and instructional improvement for students showed that Principal Kim's primary focus within her network was on improving outcomes for all students within her building.

Planning for Summer and Beyond

Given the time of year, Principal Kim had many conversations in her network about summer school and planning for the 2018-19 school year. These areas showed that she was not only concerned about the present, but also looked to the future and ways in which she could improve her school. The state testing that took place during the study required a great deal of time and focus, however Principal Kim was still able to focus on the summer months and the next school year. A lot of her conversations related to summer school also tied into English Language Learners and student retention candidates. She mainly collaborated with other principals within her district when discussing summer school and the 2018-19 school year.

Case Six Analysis

Principal Kim was an African American female in her seventh year as a principal. She had served as a middle school and elementary school principal, and was an elementary school principal during the time of the study. Principal Kim attended a two-year administrative program at a local university and took classes full time. Her school district provided professional learning opportunities twice a month focusing on instruction and management. She maintained a network of administrators who she learned from and shared information from during the entire ten-week case study.

During the time of the case study, Principal Kim interacted with and learned from twelve different administrators within and outside of her school district. Her network consisted of an assistant superintendent, other principals, special education administrators, student hearing officers, a diversity and student opportunity administrator, and three mentors. All of these individuals except the three mentors were also employees of her school district. Principal Kim was both a knowledge seeker and holder within her network. She often assumed the role of knowledge holder when interacting with principals who had less years' experience. This was a trend that was present throughout all six of the case studies. Like the five participants before her, Principal Kim leveraged a network of school leaders to learn from and share knowledge related to school leadership.

CHAPTER 10

Chapter Ten will provide a cross case analysis of all six of the individual case studies. This cross case analysis will focus directly on shared themes identified amongst the cases of each principal. When multiple case studies are conducted, it allows for a cross case analysis to take place (Merriam, 1998; Stake, 2010). Each participant had wide-ranging experiences and needs for their specific school; however, trends developed amongst many of the individual cases. Analyzing multiple cases is a common strategy that allows for an enhancement of the external validity or generalizability of a study's findings (Merriam, 1998).

The purpose of the case studies and cross case analysis was to determine the role informal knowledge transfer has amongst school administrators. The conceptual framework focused on Social Capital as a means of creating and maintaining Social Networks. Social Capital was gained through knowledge, while the Social Networks were maintained through the act of informal knowledge transfer amongst network members. The case studies were used to identify whether or not informal knowledge transfer took place amongst administrators, what types of information was shared, if these networks spanned across school district boundaries, and what the process looked like. First, this chapter will focus on the common themes identified through the cross case analysis. Second, connections will be made from the cross case to the theoretical framework, as well as a section focused on the types of knowledge principals were sharing with one another.

Cross Case Analysis

The cross case analysis took place after the coding and completion of all six participant interview cycles. The interviews took place simultaneously over a ten-week period in the spring of 2018. After the identification and write up of individual themes, cross case themes were then

identified. For the purposes of this study, a theme was considered cross-case if it was apparent in at least four of the six participants. Some of the themes were identified across all six of the participants. The first cross-case theme was the idea of multiple perspectives of knowledge.

Multiple Perspectives of Knowledge

Each of the six participants during the case studies took part in gathering multiple perspectives of knowledge. Multiple perspectives of knowledge is related to the fact that all six participants took part in asking the same question to multiple individuals within their network. This phenomenon put the participants in the role of knowledge seeker. They gathered multiple perspectives to the knowledge they were seeking. One participant described this phenomenon as being a “checks and balances” of the information she was receiving.

The situations within the cases studies that required multiple perspectives of knowledge were typically associated with student discipline, Positive Behavior Interventions and Support (PBIS), and district/state testing data and analysis. In terms of student discipline, the principals were first reaching out to multiple principals for their input and knowledge, followed by reaching out to their school district’s office of student leadership. These conversations tended to focus on determining consequences and or interventions for students who were struggling with behavior or in crisis. The participants often found that their network of principals offered the exact same guidance they had received from the district’s student leadership office. This allowed for the principals to bypass the call downtown and receive the same information from members of their network who they had a closer, more trusting relationship with.

Another example of the participants gaining multiple perspectives of knowledge was related to PBIS. All of the principals within the study were serving schools that had fully

implemented PBIS. They reached out to multiple members of their network to determine incentives and work on problem areas within their own building. An example of this was when Principal Beth was having issues with her cafeteria behavior and incentivizing positive cafeteria behavior. She reached out to two separate network members with the same question, “how does your cafeteria work and what does arrival and dismissal of the cafeteria look like?” After gaining the information from principals within her network who were having success in their cafeterias, Principal Beth scheduled a visit to a neighboring school to observe first-hand how they were having success. She ultimately used knowledge she had gained from both individuals in devising a plan for her own cafeteria. She used multiple perspectives of knowledge and then implemented what she had learned to meet the specific needs in her building.

The final area in which all of the participants looked to gain multiple perspectives on knowledge was state and district level testing. The case studies took place during the third and fourth nine weeks which meant that district and state level testing was beginning to be the primary focus of all six administrators. Each of the participants focused a great deal of their time on district wide testing followed by state level testing. They used the data they gathered from district wide testing to drive their interventions and support leading up to the state testing. Many of the conversations that required the participants to gain multiple perspectives of knowledge were related to state testing and new accreditation standards within the state of Virginia. Being that the accreditation standards were new to the entire state, all six of the participants found themselves reaching out to multiple network members with the same question. They then used this knowledge to make the best decisions with multiple perspectives on the same topic.

All six of the participants took part in the act of gaining multiple perspectives of knowledge. This phenomenon was related to the fact that each participant wanted to gather as

much information as possible regarding situations or dilemmas that arose within their school.

The principals trusted the members of their network to provide quality knowledge, however each of the participants felt it was better to gain multiple perspectives prior to moving forward with a decision that best fit the needs of their building. Whenever the participants could not find the knowledge or answer they were looking for within their primary network, they tended to reach outside of their normal group of peers.

Branching Outside of the Primary Network

Each of the case study participants had a primary network of other principals made up of three to four other school leaders. These individuals accounted for the majority of the knowledge sharing and seeking that took place throughout the study, however there were instances whenever the participants could not find the information they sought within their primary network. When situations like this arose, the participants relied on a secondary network of principals that they did not contact as frequently. Situations in which answers were not immediately available to the participants required them to reach outside of their primary network. These situations often led the participants to seek knowledge from other principals within their network who were not spoken to as frequently. If the answers could not be found within this secondary network of principals, the participants would then reach out to individuals from the district's administrative office and support departments.

The secondary networks of each participant were still principals in which they trusted and sought knowledge from, however they were not spoken to as frequently as the primary network principals. It should also be noted that the principals sought out information from principals first. The primary and secondary networks were the main groups that knowledge transfer took place. The participants only sought knowledge from downtown based administrators when they

had exhausted the knowledge base of both their primary and secondary networks that were made up exclusively of other principals. Three of the six participants also sought knowledge outside of the field of education. These examples were often participant interactions with leaders in fields outside of K-12 education. All six of the participants appeared to be comfortable with branching out of their primary and secondary networks in search of answers to better serve their schools. Whether or not a participant took the role of knowledge seeker or holder often depended upon the number of years they had served as a principal or the unique experiences they had during their time in school leadership.

Years of Experience or Unique Experiences

The participants of this study assumed one of two roles within their Social Networks. The principals were either knowledge holders or knowledge seekers. The knowledge that each participant held was considered Social Capital in the fact that knowledge was used as currency. Knowledge transfer was the exchange of currency in the form of Social Capital. All of the Social Networks the participants had formed relied upon knowledge as currency. Knowledge was gained by the principals in one of two ways. First, principals with many years of experience had a great deal of knowledge to share based on their experiences. Secondly, principals who were relatively new to the principalship had knowledge of varying unique situations that were not germane to the everyday tasks and procedures of a principal.

The more tenured principals often assumed the role of knowledge holder due to the fact that they had been in the principalship for more than five years. New principals who had served for less than five years often had many tenured principals as contacts within their Social Networks. Principal who had served less than five years in the position did, at times, assume the role of knowledge holder. Throughout each of the six cases, new principals were considered

knowledge holders whenever they held diverse experiences that were not common occurrences for principals. Although, principals with more than five years were often the knowledge holders, there were many examples of newer principals also holding knowledge.

One example of a new principal assuming the role of knowledge holder was in Principal Leah's case. Prior to becoming a principal and assistant principal, Principal Leah had served as a language arts instructional coach, as well as an instructional leader at the district level. Her unique knowledge as a literacy leader both at the school and district level made her a knowledge holder to more tenured principals who did not have a background in literacy. Principal Leah had two different, more tenured, principals within her network who assumed the role of knowledge seeker in regard to literacy based information. She provided these individuals with look-fors and instructional strategies to help maximize literacy instruction in their own buildings. Although some of her network members had more experience in the principalship, they still looked to Principal Leah, who was a first year principal, for specific knowledge due to her previous experiences.

Within the Social Networks the six principals formed during the case studies, each assumed the roles of knowledge holder and seeker. Through the use of knowledge as Social Capital, these individuals cultivated and maintained relationships with other principals based on learning about job-embedded tasks that were associated with the principalship. These networks served as a conduit for knowledge transfer amongst practicing principals. Although many new principals often had to seek knowledge more so than they shared, knowledge seeker was not exclusive to their new roles. New principals could also share knowledge in areas they were considered "experts" within their networks, or in areas where the new principals had unique experiences that more tenured principals did not. Social Networks require the collaboration and

sharing of information from both parties to ensure ongoing learning, even if years of experience dictate how much one seeks or shares knowledge. Although new principals received more than they shared, there was an interesting phenomenon that took place regarding principals with less than three years of experience serving primarily as knowledge holders.

New Principals as Primary Knowledge Holders

In the previous section, it was shared that new principals were often knowledge seekers within their Social Network of principals. Instances where new principals were knowledge holders for more experienced principals were related to unique experiences new principals had and were not as frequent. New principals with less than three years served were not primary knowledge holders in their principal networks, however they were primarily knowledge holders to another group of leaders within their school districts. New principals were often reached out to as knowledge holders from newly hired assisted principals within their school districts.

Four of the six case study participants were considered new to the position. These principals each had Social Networks of other principals they relied on. Of the four new principals (three years or less in the role), three of these individuals reported sharing knowledge with new assistant principals on multiple occasions. Each of these three principals had previously served as assistant principals. This phenomenon is related to the fact that to be promoted to the principalship requires the individual to often serve as an assistant principal and be successful with all aspects of that role. This meant that new principals were actually the primary knowledge holders for individuals who were new to the assistant principalship, a role each of the three case study participants had left within the last three years. The new principals were considered the knowledge holders in a role they no longer held. This was directly related to the amount of assistant principal experiences each of the three new principals had.

Assigned Mentors and Previous Connections

The six participants each shared that they had either been assigned a mentor or had been assigned a mentee for the 2017-18 school year. Whether they were a mentor or a mentee depended upon their years of service. Two participants were mentors and four were mentees. Although each participant either had a mentor or mentee, these individuals did not make up the primary networks of any of the six participants. Each participant spoke to their mentor or mentee over the ten-week case study, however these interactions were merely a check-in and the discussions did not last long or lead to knowledge transfer. There was one exception to the mentor communication in the case of Principal Kim. The individuals making up the participants primary and secondary networks were people the participants had formed relationships with prior to becoming a principal.

Mentors are often assigned to new teachers as well as new administrators. This was a common practice in all six of the participants' cases, however the participants did not rely on these mentors for knowledge transfer. In the cases where the tenured principals were mentees, the same lack of knowledge transfer was apparent. All six participants gained and shared knowledge with other principals, however all of these other principals had formed relationships with the participants prior to becoming administrators. These connections were formed in one of two ways. The first way participants formed connections with principals was through teaching with the principals prior to their administrative journeys. The second way in which the participants gained network members was through completion of their graduate school work. Although mentors and mentees were assigned, each of the six participants preferred forming and maintaining Social Networks with individuals they had met prior to the principalship. The six participants sought and shared knowledge with individuals they trusted and had known for many

years. The six participants did not take part in knowledge transfer with assigned mentors or mentees that were principals, however one participant relied on two mentors who were not principals.

Principal Kim took part in knowledge transfer with two mentors who were not assigned by her school district. Neither of these mentors were currently principals and they were not employed in principal Kim's school district. One mentor was an outside educational consultant and one was a professor at a local university. Principal Kim reached out to these mentors weekly with questions and for advice. She shared that she often relied on these two mentors to provide her with advice she would not typically seek within her network of peers employed within the school district. The conversations ranged from personal matters to staff issues within her building, as well as ideas for student support. Principal Kim credited her two mentors with a great deal of her growth professionally. She was the only participant out of six to have consistent interaction with mentors, however neither were principals.

Within or Outside of the School District

One of the focuses of this study was to determine whether informal knowledge transfer was taking place amongst school administrators. Another question this study looked to answer was if informal knowledge transfer was taking place, did the learning and conversations go across school district boundaries? Each of the six study participants had a vast web of principals within their Social Networks that provided many opportunities for informal knowledge transfer, but these networks rarely crossed school district boundaries. Participants did not utilize structural holes to benefit and expand upon their knowledge growth as leaders. Much of the informal learning the six participants took place in was from within their own school district.

The six participants worked in three separate school districts with four in School District One and one participant each in School Districts Two and Three. The majority of informal knowledge transfer that took place each week was between principals within the same school district. There were a few occasions (five in total) across all six participants where the individuals reached outside of their school district. These conversations outside of the school district revolved around questions about generic education information. When asked about their lack of outside information, the six participants shared that each school district has a certain way of doing things. The common procedures and policies made it more effective to reach out within one's school district rather than reaching outside. Each of the participants felt that they should reach outside of the school district more often, however they rarely actually did reach out for knowledge. This lack of external knowledge can be attributed to the level of trust and familiarity formed by administrators who were working within the same school district, and who often times shared the same supervisor and support personnel at the district level.

Organic Learning Situations

Throughout the study each of the six participants took part in informal knowledge transfers as either knowledge seekers, or knowledge holders. These interactions happened at least weekly, and daily for most participants. All of the participants had received a "crash course" of trainings shortly after being hired as principals. The participants also reported attending monthly professional learning opportunities within their school districts focused on principal tasks, however each of the six participants shared that these formal opportunities paled in comparison to the informal learning they took part in daily. They credited their learning networks of principals in helping them become accustomed to their roles as well as their overall growth and development as leaders of their buildings. When asked what led to their informal

learning, the primary reason was organic learning situations that come up each day within their schools.

Organic learning situations were the primary reasons that the participants collaborated with and knowledge shared with other principals. As situations arose for the participants, they quickly turned to their networks to solve problems or share advice. The parallels between principal and teacher collaboration is clear. Hargreaves (1994) and Little (1990) found that collaboration cannot be forced and teacher learning should be organic and teacher centered, or in the case of this research the need for organic learning transitions to the principalship. The knowledge transfers the participants took part in stemmed out of necessity. The topics of student support, grading, data, state testing, teacher evaluation, and special education were aspects that the principals worked on daily. The participants embraced collaboration and did not operate within “silos” that were independent of one another. Information traveled through principal networks quickly. There were organic situations which required the participants to seek knowledge from network members, and their network members shared information they had received from other principals. This second hand knowledge often proved to be beneficial, but also required the participants to verify the knowledge that had been shared. The principal networks acted as pipelines for knowledge transfer amongst a wide range of principals. Although the participants relied on a primary network of principals, the information they received often came from a wide range of individuals that had shared information to various network members.

Social Capital, Social Networks, and Informal Learning

Social capital is an individual’s ability to secure resource or knowledge from membership in a Social Network (Lin, 1999; Inkpen & Tsang, 2005). A Social Network is a group of

individuals who build and nurture relationships that lead to the sharing of resources and knowledge (Hite et al., 2006). Individuals gain access to Social Networks of peers by having Social Capital to offer. Social Capital is knowledge about a subject or topic that acts as a currency. This currency allows for membership in a Social Network focused on growth and development (Dunn, 1983).

Each of the six participants were members of Social Networks. These networks consisted of other principals and leaders within their school districts. They leveraged their knowledge as Social Capital to gain access to new learning that took place within a Social Network of principals. Social Capital and Social Network membership led to informal learning. The six participants took part in three distinct types of learning.

Eraut (2012) identified three distinct types of learning on the job. The three types of learning are implicit, reactive, and deliberate. Implicit learning deals with learning through experiences. The learner often does not realize he or she has learned something until later (Eraut, 2012). Reactive learning deals with addressing immediate needs as they arise. This type of learning takes place “on the fly” or in the “hot action” of the moment and happens out of necessity (Eraut, 2012; Scribner, 1999). The final type of learning is deliberate learning. Deliberate learning often stems from reflection and takes place whenever an individual knows an area in which he or she wants to improve (Eraut, 2012). These three types of learning help to better understand the informal learning of the six participants.

Each of the six participants took part in implicit learning. As principals are exposed to experiences over time, their knowledge base increases. The experiences the participants were taking part in, ultimately led to the learning of transferrable knowledge (Eraut, 2012). An example of this is whenever Principal Katie implicitly learned about alternative discipline

approaches for the students of her building. Principal Katie did not suspend students, and instead provided alternative consequences. This was something that took place over months, however at the end of that time; she had learned what worked and what did not. The implicit learning of Principal Katie created transferable knowledge she could use as social capital while sharing her learning with members of her Social Network.

Reactive learning was the most common form of learning for all six participants. This type of learning focuses on addressing immediate needs as they present themselves (Eraut, 2012). Reactive learning takes place in the “hot action” of the day and must be handled quickly (Scribner, 1999). The six participants were experts in reactive learning and it was the most common way the participants informally learned. An example of reactive learning is whenever Principal Laura had a fifth grade student who had threatened self-harm and had a clear plan of how to carry out the act. She had never dealt with a self-harming situation at the elementary level and did not feel trained in what steps to take. Principal Laura relied on her Social Network of principals to learn “on the fly” about how to support the student in his time of need. Her peers within her Social Network were able to provide her with valuable knowledge and guidance on what steps she needed to take. She used reactive learning to ensure the student received proper support both at home and in school.

The final type of learning seen in the cross case analysis was deliberate learning. Deliberate learning is planned learning that takes place through reflection and the identification of areas in need of refinement (Eraut, 2012). The participants sought out other principals who they felt could further their own knowledge. Knowledge transfer took place amongst the principals daily, with some of the transfer being information rather than knowledge to be learned. An example of deliberate learning was whenever first year Principal Leah was struggling with

her schools budget and bookkeeping. Principal Leah realized that this was an area in need of improvement and made deliberate plans about how to improve her knowledge base. She worked with members of her Social Network to learn the necessary knowledge needed to effectively run her schools budget.

All six cases showed a clear pathway to informal learning using Social Capital and Social Networks. The types of informal learning that took place were implicit, reactive, and deliberate. The primary type of learning that the participants did was reactive. Through the identification of how the participants learned, the researcher was then able to categorize the types of knowledge shared.

Types of Knowledge

The cross case analysis determined that principals were leveraging Social Capital to informally learn from their Social Networks. The next step in analysis was to determine what types of knowledge are shared in these informal learning networks. Eraut's typology of knowledge allowed for the knowledge shared within Social Networks to be classified. The five types of knowledge are codified, skill based, resources, understanding, and decision making/judgement (Eraut, 2004).

Codified knowledge deals with procedures and systems (Eraut, 2004). The participants shared and gained codified knowledge about teacher evaluations, end of year close-out procedures, and school budgeting/bookkeeping. The next type of knowledge was skill based. Skill based knowledge deals with areas in which people must gain feedback and practice (Eraut, 2004). The aspects of skill-based knowledge are important to school leaders, and the participants were constantly seeking feedback from their Social Networks related to skills development. The

third type of knowledge was resources. Knowledge resources are tied to materials, websites, and people that facilitate learning (Eraut, 2004). The fourth type of knowledge understands. Understanding knowledge deals with individuals seeking out multiple perspectives and suggestions (Eraut, 2004). The participants took part in understanding knowledge frequently. They rarely took new knowledge as fact, until verification with other network members. The fifth and final type of knowledge was decision making. Decision-making is tied to the “hot action” of reactive learning, and this type of knowledge is often gained rapidly with little time for multiple perspectives or feedback.

The primary types of knowledge gained by the six participants were codified knowledge and decision-making knowledge. The two types of knowledge were linked to the reactive nature of the participants’ informal learning. The participants were constantly adapting and much of the learning they did was “on the fly” whenever a situation arose. They attempted to be reflective and coordinated about their learning needs; however, the urgency of now made it where they had to be reactive, rather than deliberate with their learning.

CHAPTER ELEVEN

This chapter will present the overarching findings, interpretations, and recommendations based on the six case studies and the cross case analysis. The chapter will also include answers to the three research questions and the conclusion. The conceptual framework of Social Capital and Social Network theories creating the necessary conditions for informal learning to take place will serve as the lens for interpreting and presenting the findings. Eraut's (2004; 2012) types of learning and knowledge were also used in answering the research questions. First, an overview of the study will be presented. Second, the statement of the problem as well as the findings will be presented. Third, the interpretation of the findings, including recommendations will be highlighted. Finally, the recommendations for future research and conclusion will be discussed.

Findings, Interpretations, and Recommendations

Overview

As discussed in chapter one, research across the field of educational leadership has determined that leadership in our K-12 schools matters in the effectiveness of teachers and the success of students (Cotton, 2003; Nettles & Herrington, 2007). The era of federal and state mandated accountability has only magnified the importance of effective leadership in schools. When looking at effective schools compared to ineffective schools; leadership matters, and school principals are at the heart of effective schools (Sanzo, 2016). Formal learning of school leaders has been one of the primary focuses of research in educational research, however informal learning has not. Veelen et al., (2017) found that informal learning happens more frequently in one's career, however informal learnings relationship to school leadership has not been a focus in educational leadership research.

This study focused on informal learning networks as a vehicle to learning amongst school principals. Informal learning is important to any field, due to the fact that informal learning

happens organically and more frequently than formal learning opportunities during set dates and times (Veelen et al., 2017). The researcher hoped to determine whether or not Social Capital led to the creation of Social Networks of principals who informally learned from one another, and if they did, what did the learning look like. The goal was to gain a better understanding of the relationship between peer networks and the informal acquisition of job related knowledge and skills. Three research questions guided the case study of six different elementary school principals in three different school districts:

1. What role does networking play amongst school administrators learning from each other?
2. To the extent that networking is a vehicle to informal learning, how is knowledge acquired, what knowledge is passed, and under what circumstances or conditions?
3. How and to what extent do principals use networking as a vehicle to informal learning?

This study used a theoretical framework borrowing concepts from sociology literature. Social Capital and Social Network theories were used as a framework to better understand informal learning amongst school principals. Social Network theory is related to interdependent individuals within an organization and the connections they form amongst each other. These connections can then be leveraged into opportunities for informal learning. Dunn (1983) defined Social Network Theory as the study of knowledge creation, diffusion, and utilization. Hite et al., (2006) defined the theory further as nurtured networks of relationships that are leveraged to build pathways for knowledge and resources. For Social Networks to act as a conduit amongst individuals, Social Capital is required.

The second part of the theoretical framework was Social Capital. Inkpen and Tsang (2005) defined Social Capital as an individual's ability to secure a resource or knowledge from

membership within a Social Network. Social Capital is the knowledge an individual has and is used as “currency” for knowledge acquisition and sharing amongst other network members. The two theories combined created a framework that provided a better understanding of “currency exchanges” amongst principals that resulted in informal learning. If an individual does not have Social Capital, he or she is not likely to benefit from the connections they form within their Social Networks. This study found that once Social Networks are formed amongst principals, informal learning will take place.

Statement of the Problem

Principals are provided a wide range of formal learning opportunities with the potential to increase their effectiveness within their building. A great deal of research has been done on formal learning of educational leaders and the outcomes that learning has on the improvement of instruction and student outcomes, however there is a clear lack of research on informal learning’s effect on school leaders (Veelen et al., 2017). The hole in educational leadership research on informal learning amongst school leaders is a problem because many other fields have thoroughly examined the link between informal learning and overall job effectiveness, while also finding that leaders or managers who informally learn on the job are more effective than those who do not. Identifying whether or not informal learning takes place amongst school leaders has the potential to provide an improved understanding of if and how school leaders leverage Social Networks and Capital for informal learning.

Findings

The six case studies were used to gain a better understanding of whether or not principals leveraged learning networks amongst their peers to informally learn. Another focus of the case studies was what informal learning looked like and how it took place. This section will present

the findings as they relate to the three research questions posed in chapter one and early in this chapter. The conceptual framework of Social Capital and Social Network Theories was used to identify the locus of knowledge acquisition. Locus of knowledge acquisition deals with opportunities for learning and how these opportunities present themselves. In the six cases, the locus of knowledge acquisition focused on informal learning of the participants. The learning networks of principals identified in the case studies created the opportunity for knowledge transfer amongst principals of varying levels of experience. Structural holes between school districts will also be discussed in the findings section.

The case studies took place over a ten-week period in the spring of the 2017-18 school year. Six elementary school principals took part in individual case studies. The principals ranged in experience from first year to over ten years of experience. Initial interviews were conducted as well as ten follow up interviews for each participant. Over sixty interviews and check-ins in total were conducted with the six participants. The interviews focused on the principals own perceptions of their learning and whether or not they were informally learning through a Social Network of peers. If they were informally learning, they researcher sought to determine what types of knowledge they were sharing or gaining, and what the process of knowledge transfer looked like.

Social Capital and the Creation of Social Networks as a Conceptual Framework

Social Capital deals with an individual's ability to secure a resource or knowledge from membership in a Social Network or other social structure (Inkpen & Tsang, 2005). Social Capital allows for ideas and resources to flow amongst individuals (Tsai & Ghoshal, 1998). In the six cases, the participating principals leveraged their knowledge as Social Capital to learn from one another. Social Capital accumulates through the sharing of knowledge and

information, while it is maintained as long as both parties invest their knowledge into the relationship (Watson & Papamarcos, 2002; Bhandari & Yasunobu, 2009). The relationships formed through the sharing of Social Capital leads to the creation of Social Networks.

Social Network theory focuses on the creation, diffusion, and utilization of knowledge, and how individuals build and nurture Social Networks into pathways for knowledge and resources (Dunn, 1983; Hite et al., 2006). The Social Networks created provide the opportunity for learning to take place. The learning that takes place is often informal and takes the form of asking for advice, collaborating, or helping (Borgatti & Ofem, 2010). Social Networks act as a conduit of knowledge exchange (Hite et al., 2006). Using knowledge as Social Capital leads to the creation of a Social Network of peers. The principals who participated in the study all used Social Capital to create and maintain Social Networks, while gaining knowledge related to their leadership roles within their schools.

The conceptual framework of this study allowed for the researcher to determine whether or not Social Capital and Social Networks were used by principals to informally learn. The formation of Social Networks was clear in each of the cases within the study and the participants used these networks to learn from and share knowledge with other principals. The principals leveraged Social Capital in the form of knowledge and information to be shared or gained. The participants felt that they learned from formal opportunities, however the majority of their learning came from informal conversations with other principals. When asked about their preferred method, each of the participants identified informal as their preferred way of learning about job related knowledge and skills.

The participants did not discredit formal learning opportunities, however they realized that formal professional learning provided them with a small take away, while informal learning

was targeted and specific to a need that had arisen in their building. There was also a discrepancy in the timeliness of the learning. Formal learning opportunities only happened at set dates and times while informal learning could happen at any time, often when there was a need. Tailored and specific feedback and timeliness were the two primary reasons the participants preferred informal learning within their social networks rather than learning in the formal setting. Informal learning provided knowledge instantly to the participants in a way that allowed for immediate application to their schools. The participants in this study used Social Capital they had gained through their individual experiences to form and maintain Social Networks focused on informal learning. This conceptual framework allowed for a deeper understanding of informal learning amongst principals and what the locus of knowledge acquisition looked like.

Knowledge Acquisition within a Social Network

Social Capital and Social Networks led to the informal acquisition of job related knowledge and skills for all six participants. The study's next goal was to discover the how and what of knowledge transfer, as well as the circumstances that led to informal learning. Eraut's (2004) typology of learning identified five types of knowledge as codified, skills, resources, understanding, and decision making/judgement. The types of knowledge within the typology of learning allowed for a more complete understanding of knowledge transfer and informal learning.

The two primary types of knowledge the participants shared or sought out were codified and decision making knowledge. Codified knowledge deals with procedures and systems while decision-making deals with rapid decisions that do not have time for multiple perspectives to be sought (Eraut, 2004). These two types of knowledge align with the individual case studies as well as the cross case analysis. The majority of learning the principals were doing revolved

around procedural learning and rapid learning that was spur of the moment. Spur of the moment learning ties into what Scribner (1999) would describe as “hot action” and what this study described as organic learning opportunities. The principals in this study were primarily learning about various systems within their division combined with unplanned situations that arouse daily.

The use of their individual Social Networks allowed the principals to informally learn from their peers. They primarily learned about codified knowledge and decision-making knowledge. This learning took place in a variety of ways; however, the preferred communication methods for knowledge sharing were texting, Google chat, and phone conversations. These learning opportunities were rarely planned, and linked to unpredictable situations that would arise throughout the school day. The participants each had a unique set of needs within their buildings and the needs of the building drove their informal learning needs.

The Extent of Informal Learning

The six independent case studies and cross-case analysis determined that in the case of the six elementary school principals in this study, informal learning was prevalent in each case. The principals interacted with their informal Social Networks weekly, and usually daily. As shared in the cross-case analysis, each participant had a primary and secondary network of principals that made up their Social Networks. The primary principals in the participant’s networks communicated with each other daily about a variety of tasks, concerns, and needs. Participants relied on these individuals whenever they needed information in a timely manner. The participants described their learning needs as occurring “organically” as needs arouse in their buildings they would reach out to their networks for input.

Whenever the participants were not familiar or comfortable with a given aspect of their job, they immediately reached out to their “self-formed” Social Networks of other principals. The majority of their learning was happening informally whenever specific needs arose. Once they gained knowledge on a given topic, they could then use that knowledge as Social Capital with other network members faced with similar challenges. The principals learned implicitly, reactively, and deliberately; however, they primary learned reactivity. Reactive learning deals with learning that addresses an immediate need “on the fly” (Eraut, 2012). This “on the fly” learning is in line with the level of responsibilities a building principal has. The learning of the six participants was needs driven and continual. The participants never stopped learning and were in constant communication with their individual Social Networks. Ultimately, the participants were reactive learners with a focus on codified and decision-making knowledge.

Strengths and Weaknesses of Informal Networks

Social networks offer a wide range of benefits to individuals who leverage Social Capital to learn from peers. Principals who form Social Networks with their peers have access to a much wider range of knowledge and information than their peers who do not partake in a Social Network. The informal nature of Social Networks is beneficial to principals due to the reactive nature of their learning (Eraut, 2012). Principals are always on the move and can never fully predict what knowledge they may need during a given day. Informal learning does not require planning and can happen at any time. The only thing required for informal learning to take place is Social Capital and membership within a Social Network.

Informal learning is a powerful tool for principals to gain immediate knowledge on issues that are considered pressing within their school buildings. Although Social Networks are excellent places for informal learning to take place, it is important to distinguish between

knowledge being learned versus information being passed within the Social Network. Learning is required for new knowledge, while information is merely given and then used. The participants in the study learned from one another, but they also passed information through the network. In the six cases used for this study, Social Networks acted as a conduit for both knowledge and information to pass.

Interpretation

This study focused on the role of informal knowledge transfer through the use of Social Capital and Networks amongst elementary school principals. This type of research is new to educational leadership, however informal learnings relevance and importance to each of the six participants was clear. The principalship is often described as a lonely endeavor (Herlihy & Herily, 1980), however through the leveraging of informal learning networks, principals do not have to operate in isolation from one another. This study sought to determine whether or not informal knowledge transfer was taking place, and if it was to what extent. In the case of the six participants, informal knowledge transfer through Social Networks was an everyday occurrence.

The participants each took part in a variety of formal learning opportunities during the time before and during the principalship, however most of their learning was actually taking place informally from trusted peers within an informal network. The conceptual framework focused on Social Capital as knowledge that could be leveraged, with Social Networks being the conduit for informal knowledge transfer to take place. This learning was observed through the ten-week interview process with each of the six participants. Social Capital and Networks ultimately led to informal learning for all six participants. Although each principal had challenges and needs specific to their individual building, they felt confident in their ability to find relevant answers and feedback from their Social Networks.

Ultimately, the principalship is a difficult job that requires a wide range of skills and knowledge. This research showed that job related knowledge and skills are not something a principal has the first day they are hired. Like any other role, principals require ongoing learning and experiences lead their buildings effectively. The research showed that principals do not operate in “silos” and they seek out information informally from trusted peers. The importance of job related knowledge and skills cannot be understated. As principal’s progress through their career, they are exposed to more learning experiences and thus have more Social Capital to share within their given network. The principalship requires leaders with a wide range of experiences and knowledge base to effectively lead the school forward. Informal learning plays an integral part in the learning principals take part in. For principals to lead their schools’ effectively, they must learn both formally and informally, while maintaining a group of peers that both share and seek learning about job related knowledge and skills.

Recommendations for Practice

This section will highlight the recommendations for practice related to the findings of this research study. The section is broken down into three sub-sections titled implications for principal preparation, implications for current principals, and implications for school districts. The implications will be presented in relation to each of the three areas, however there is overlap amongst the three sections. Recommendations for future research will also be shared.

Implications for Principal Preparation/Higher Education

Principal preparation programs are a formal learning experience for school leaders at the beginning of their school leadership journey. Although most aspiring administrators start out as assistant principals, the findings of this study can be applied to higher education. Informal learning and its benefits should be a part of the instruction aspiring administrators receive in their

formal administrative licensure programs. The need for collaboration and networking should be highlighted to all future school leaders. Principal preparation programs can highlight this need by providing opportunities for their students to network with other students as well as current assistant principals and principals. These opportunities should be ingrained in their coursework throughout the program. The need for informal learning and networking does not require an entire course, more so a mindset shift in the individuals that coordinate learning opportunities for future administrators. The need for collaboration, networking, and ongoing informal learning amongst school leaders should be a direct focus of all principal preparation programs and be a priority when designing and implementing program requirements.

Implications for Current Principals

In the case of the six participants, they were aware of the benefits and need for informal learning and networking to take place, however that does not mean that all principals partake in informal learning and knowledge transfer. Current principals who take part in Social Networks should look to include those who may not leverage a Social Network for learning. Networked principals should look to recruit new members to not only diversify their own knowledge base, but to remove the isolation that non-networked peers face. The creation of more knowledge holders and seekers would ultimately strengthen the networks overall knowledge base and level of experiences. Current principals should also look to utilize structural holes to improve their learning.

Structural holes are defined as the infusion of new ideas and knowledge from individuals operating outside of an organization (Inkpen & Tsang, 2005). In the case of all six participants, none of the individuals utilized structural holes to reach out to individuals outside of their school districts. The participants were missing out on an opportunity to receive knowledge from outside

sources that may have improved their learning and knowledge base. If the participants had utilized structural holes they would have had the opportunity to receive ideas and knowledge they may have otherwise missed by keeping their Social Network members specific to their own school district. Structural holes provide an interesting proposition to further ones learning outside of their own school district. Diverse ideas are important to improving ones effectiveness and overall knowledge of job responsibilities (Inkpen & Tsang, 2005).

Implications for School Districts

School districts should look to encourage and facilitate a wider range of networking and knowledge sharing opportunities for its principals. The case studies revealed that new administrators who had been provided a mentor did not rely upon their mentors for their informal learning needs. Instead of assigning one mentor, districts could shift to connecting their new principals to a variety of different principals thus creating a network of peers, rather than one sole mentor. Networks should be leveraged to provide new principals with a variety of options when seeking or sharing knowledge. This would allow for a wide range of ideas and knowledge to be immediately accessed by new principals. The idea of assigning networks would require future research. At this time, it is not possible to conclude whether or not assigned network participation would be as beneficial as organic network formation through previous work experiences.

Recommendations for Future Research

As mentioned throughout this study, the research regarding informal learning and knowledge transfer amongst administrator Social Networks is new to the field of educational leadership. Although these six case studies offered exciting insights and knowledge, future research will need to be conducted to ensure the reliability and generalizability of the findings.

There are also various opportunities for different approaches to the phenomenon of knowledge transfer within Social Networks of principals. This section will present three recommendations for future research linked to knowledge transfer and Social Networks within the field of educational leadership.

The first recommendation for future research is to complete a study similar to the one conducted, while including a wider range of participants. Six case studies were completed for this study and the findings would benefit from a larger scale study over a longer period of time. This study was a first step into better understanding the phenomenon, as well as determining whether or not the phenomenon even happens. Future research should look to expand upon the number of cases that are completed while also looking to branch to secondary level principals (grades 6-12). These studies would provide further knowledge related to Social Networks and Capital in educational leadership.

The second recommendation for future research would be to conduct a study focused on determining if “knowledge influencers” exist within Social Networks of principals. This study would focus on plotting knowledge transactions amongst Social Networks of principals. Through the plotting it could be determined if certain individuals were more likely to be reached out to for information. It could potentially be determined that a few key principals in Social Networks have wide reaching effect across the school district and multiple independent networks. The idea of knowledge influencers within Social Networks would be interesting to observe. This idea of plotting Social Network knowledge transactions would also allow the researcher to determine if principals take part in more than one Social Network of peers, and if boundaries exist within Social Networks.

The final recommendation for future research ties directly to structural holes and their effect on principal learning. This study found that structural holes were not utilized by the six participants, however some principals may actually use structural holes. It would be interesting and beneficial to determine the different learning that takes place within versus outside of a principal's school district. It would also be beneficial to compare and contrast principals that utilize structural holes versus those who do not.

Social Networking and informal knowledge transfer amongst school administrators is new to educational leadership research. This is an area of research that has the potential to be extremely beneficial to the field, while also improving upon leadership effectiveness in regards to the principalship. It is imperative that future studies are done to build of the knowledge of this phenomenon. Ultimately, improving the learning of school principals directly improves outcomes of the students in their schools.

Conclusion

The formal learning of school administrators is important in the era of federal and state accountability. Formal learning experiences provide opportunities for leadership development and growth. Although formal learning opportunities are crucial, this study created a theoretical framework that combined Social Capital and Social Networks with informal learning to understand what, if any effect informal learning had on principals. Leveraging a Social Network of peers provides school principals the opportunity to continually develop and refine their practices and knowledge base. This study used six independent case studies to determine whether principals informally sought knowledge from one another. In the case of the six participants, the answer was yes in all six cases. Informal learning takes place amongst

administrators daily. Once this was determined, the focus shifted to the what and how aspects of informal knowledge transfer.

Principals are speaking to one another daily about a wide variety of topics related to effectively running their schools and improving student outcomes. In all six cases, the focus was always on improving student outcomes. These six participants were dedicated to their students and staff while continually searching for answers and feedback on ways to improve their schools. They leveraged their knowledge as Social Capital while participating in a Social Network of peers and colleagues. The six participants were reactive learners who gained both knowledge and information from their peers. Social Networks ensured that each principal had a group of peers they could informally learn from about the job related knowledge and skills required to effectively improve a school, and more importantly the student outcomes within the school.

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Appendix A

Initial Interview Questions (March 2018)

1. Tell me about yourself
2. Why did you want to become an educator?
 - a. Why a principal?
 - b. Can you describe your pathway to the principalship?
 - i. Probing questions about leadership development program if not shared
3. Can you describe to me the types of learning experiences you have been provided about being a principal through your school division?
4. How do you learn best about leadership, and more specifically, about being a principal?
 - a. How have you learned about procedures and policies in your division for principals and for your school?
 - b. How have you learned about the expectations for instructional supervision in your division?
 - c. How have you learned about financial and other operational management tasks from your school division?
5. Since becoming a principal, what opportunities have you had to further your knowledge and expertise?
6. Who do you talk to when trying to learn about your role as a principal and how do you find answers regarding issues within the school?
 - a. How do you talk to these people (meetings, phone, email, text, etc.)?
 - b. How did you connect with these people?
 - c. What types of advice or knowledge to these people share?

- i. Ask for specific examples of how this has helped them as principals?
 - ii. Are these people in the school division? Outside of the division? How did you meet them?
7. What type of setting do you do the majority of your learning in? What is your preferred forum for seeking or sharing knowledge?
8. What does informal learning look like for you?
9. Who do you learn from informally?

Appendix B

Weekly Interview Protocol

1. Who did you talk to this week that either shared or asked for you to share knowledge?
2. How long have you known this person?
3. Describe where and how you met this person
4. Did any situations this week require you to seek guidance in making a decision?
5. What was the situation?
6. What format did you contact these individuals through? (In person, phone call, text, email, twitter, etc.)
7. Were these individuals you spoke to from within the school district or outside?
8. How often do you reach out to this individual? Or when was the last time you spoke with this individual?
9. How often does this individual reach out to you?

VITA

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Education

Master's in School Administration and Education Leadership at Old Dominion University, May 2015

Certification: School Administration, K-12

Reading Specialist Certification at University of Pittsburgh, August 2012

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