SUPERINTENDENT DECISION MAKING AND COMMUNICATION PRACTICES IN THE AGE OF SOCIAL MEDIA AND SOCIAL NETWORKING

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A dissertation submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Doctorate of Education in the School of Education

Chapel Hill
2015

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Abstract

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<u>Superintendent Decision Making and Practices in the Age of Social Media and Social Networking</u>
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"Social media is…transforming people from content readers into publishers. It is the shift from a broadcast mechanism, one-to-many, to a many-to-many model, rooted in conversations between authors, people, and peers" (Cox, 2013, pp. 8). Through social networking and social media, information can be shared immediately in a way that makes control of the news cycle impossible for educational leaders. Superintendents now operate in an environment where the general public, and district employees, no longer simply wait for television, radio stations, or newspapers to provide information in a one-way basis. Superintendents work with a labor force and community that is becoming technology dependent and demanding an interactive role with leaders.

The purpose of this research was to examine the impact of social media and social networking on the decision making process of superintendents and their approach to communication. Research was conducted utilizing Philip Wood's (2005) framework of democratic leadership, which provides a theoretical perspective on democratic leadership in education, and the North Carolina Superintendent Evaluation, which provides a rubric for observable behaviors expected of district leaders. Using an exploratory approach, the study was conducted through an online survey distributed to North Carolina Superintendents with both open-ended and Likert scale questions. Superintendents responded to questions regarding district demographic data, their personal and professional use of social media,

perspectives on the use of social media as part of a communication strategy, and experiences with social media when used by district staff members or the public to express opposition to district policies.

The results demonstrate superintendents do not appear to use social media and social networking tools to develop the two-way communication practices increasingly required by the public. The disconnect, between a superintendent's use of social media and the public's use, has ramifications for future reform efforts, professional advocacy, and access to resources in an increasingly competitive environment. The data indicate current and future superintendents need support in learning and applying the strategic capabilities of social media and social networking. Social media and social networking have greatly increased the capacity to effectively craft, frame, and broadcast information, but have also magnified the potential pitfalls.

ACKNOWLEDGEMENTS

This dissertation would never have happened without the love, patience, and high expectations given me by my Mother. You were here when I started this journey and while you have left this world, I know you are still with me and that you are proud of this moment.

This dissertation could not have been completed without the significant support of a number of people. First I would like to thank all of the professors and my fellow students at the University of North Carolina at Chapel Hill. You challenged me, encouraged me, tutored me, and taught me more than I deserve. I specifically want to thank Dr. Fenwick English who advised me through the initial research, proposal and defense of this study. His steady hand provided the guidance and structure I needed to see this through to the end. I would also like to acknowledge the support of my co-workers and supervisors. As a principal and then district leader, I was always able to count on the understanding of my colleagues. The flexibility given to me to take the time needed to complete coursework or research, the positive encouragement to keep going, and the advice that I received was always appreciated.

I also want to thank my mentor and friend George Cooper. If it were not for the countless hours you dedicated to my growth as a professional and the care you gave to my growth as a person, I would not be where I am today and I might never have started this journey.

Lastly, to my wife Heather, your understanding, patience, support, and belief in me, are the definition of love. And to my boys Chase and Will, you will always be my inspiration to strive to be a better person each and every day and to live up to the honor of being your father.

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CHAPTER 1

Introduction

In 2013 leaders of a Midwestern school district created a music task force composed of teachers and administrators to investigate and make a recommendation to the school board regarding beginning instrumental music instruction in the sixth grade rather than in the fifth grade (Cox, 2013). The investigation lasted for more than 18 months and during this time the district held discussions, researched various music programs, and conducted site visits. The net result of this work led to a recommendation of a 45 percent increase in overall music instruction in the middle school years. Despite the time taken by the district to examine the issue, parents expressed their frustration through online petitions using social networking sites such as "Take Back Our Schools" and social media sites such as the blog section of the city newspaper. Parents used Facebook pages, twitter and other sites to mount challenges to the district decision and spread their opinions and information faster than the district could respond.

The scenario presented by Cox (2013) is now becoming an all too familiar situation facing school districts and superintendents. The Internet now provides more information at a speed faster than ever before. In fact, as Brian Solis, an award winning blogger, pointed out, "Social media is…transforming people from content readers into publishers. It is the shift from a broadcast mechanism, one-to-many, to a many-to-many model, rooted in conversations between authors, people, and peers" (Cox, 2013, pp. 8). The new media is blurring the lines between news and opinion, with social media users now conveying both in a wave of digital chatter (Marbella, 2013). Even large news networks such as CNN and Fox

News search online tools such as Twitter for news stories (Venters, Green, and Lopez, 2012, pp. 90). Through social networking and social media, information can be shared immediately with opinions, thoughts, and factoids added in a way that makes control of the news cycle nearly impossible for educational leaders.

The expanding use of social media and social networking is not limited to just a narrow range of the youthful segment of the general public. While the highest percentage of social networking and social media users are found in the 18 to 24 years of age category (Boyd & Ellison, 2007), the percentage of 30-49 year olds using social media is now at 78%, with 60% of those between 50-64 years of age now using social media as well (Brenner & Smith, 2013). In one specific example of the broadening use of social media, the overall percentage of adults using Twitter has more than doubled in just two years, from 8% in 2010 to 18% by 2013.

Social networking and social media's influence is not simply a phenomenon of personal use, its influence reaches into the professional world, largely driven by a new generation of Internet users. The growth of social networking and social media is not simply a chronologic phenomenon, but also a generational one. Millennials, those born between 1981 and 1997, are becoming an increasingly larger segment of the work force. Their behaviors, and generational traits, are significantly impacting how organizations function (Venters, Green and Lopez, 2012, pp. 86). In fact, Millennials are so comfortable with the current explosion of technology over the last decade and are more adept at using it that they are actually technology dependent, with 97% of Generation Y participants using Facebook at least once a week. Research by Albion, Peter and Gutke (2010) showed Millennials as having distinctive ideals, values, and opinions which include shared leadership and a desire to work

in collaborative and inclusive environment and are used to attending to things at times that are convenient to them. By 2014, half of the workforce will consist of Millennials (Venters, Green and Lopez, 2012, pp. 86) and social networking and social media have provided these individuals with the perfect medium to meet their needs.

   School district leaders now operate in an environment where the general public, and district employees, no longer simply wait for television, radio stations, or newspapers to provide information in a one-way basis. Now all members of a school's community can create, edit, and share information faster than district leaders can control. The impact of these tools on society goes beyond just the spread of information but includes a noticeable impact on how public opinion and perception are created. Auer (2011) reported that almost 50 percent of social network users between the ages of 18 and 29 declared they had used social media to discover their friends' political interests or affiliations, to receive campaign information, to sign up as a "friend" of a candidate, or to join or start a political group. In the 2008 American presidential election, the Pew Research Center's Internet & American Life Project found that around 20 percent of Internet users posted their thoughts, comments, or questions about the campaign on a web site, blog, social networking site, or other online forum with 14% of Internet users and 11% of all adults forwarding or posting someone else's political commentary or writing. Social media is now, and will continue, to play a major role in mediating the general public's understanding of news events and decisions by public leaders, including superintendents (Auer, 2011).

   Social media and social networking are creating a brand new context for understanding the leadership practices of superintendents. The Interstate School Leaders Licensure Consortium (ISSLC) and other groups, such as McREL, that are responsible for

superintendent evaluation systems are now expecting superintendents to implement distributed leadership practices that seek to gather input from all segments of the school community. Additionally, superintendents are expected to provide information in multiple ways in order to meet the 21st century needs of a district (McREL, 2010). While leveraging social media and social networking does allow for greater communication and direct information sharing in a timely manner (Veil, Buehner, Palenchar, 2011), the Internet does not necessarily make it easier for the public to interpret the information (Grill, 2011). The result of which is superintendents now working with ever increasingly popular Internet tools without research indicating a clear optimal leadership or governance structures for how to use these tools (Candace, 2011).

Social media and social networking have become an essential part of daily activities for a majority of the population. The impact of these tools is not limited to their social component; these tools now influence the way information is shared, created, and interpreted. Superintendents are working with a workforce and community that is becoming technology dependent and demanding an interactive role with their leaders. The purpose of this research is to examine the impact of social media and social networking on the decisions of superintendents and how they communicate these decisions.

Statement of the Problem

A few years ago social networking was of little concern to school leaders beyond possible misuse by high school students and determining whether to penalize students for inappropriate use of school technology (Davis, 2010). However, with Facebook reporting over a billion monthly users and Twitter averaging 340 million messages per day, social networking and social media are cultural norms for all segments of society. This trend is

increasingly true for Millennials who are fast becoming the workforce and parent community for schools. Previous research, such as that conducted by Stock (2009), focused on the utilization of specific social media tools by school principals and superintendents, while the work Cox (2013) conducted examined how a comprehensive social media strategy could aid schools. Little research could be found describing how superintendents have shifted from traditional media to new media as it relates to marketing and public relations nor is there significant research examining how social networking and social media impact the way superintendents make decisions and communicate those decisions. While ample research exists on the tools available to superintendents, and there is growing research on what superintendents communicate, there is a dearth of research regarding social networking's and social media's impact on the decision making process of superintendents.

Research Questions

This study examined the impact of social networking and social media on the decision making processes of superintendents and how superintendents communicate their decisions with both employees and the general public. The research was guided by using the following questions:

1) How are social networking and social media impacting the decision making processes used by Superintendents?

2) How are social networking and social media impacting the communication strategies used by Superintendents?

The first part of this research specifically looked at how the prevalence of social media and social networking has impacted the decision making processes used by superintendents. This question was guided by queries such as:

- What structures are in place at the district level to gather input from the public and staff?

- What steps are used by superintendents to make policy decisions or decisions that may impact staff and the public across the district?

- Who is responsible for communicating district decisions to parents, staff, students and the community?

- In what ways are superintendents using social networking for personal purposes?

- In what ways are superintendents using social networking for professional purposes?

- What have been the previous professional experiences with social media or social networking?

- Has the public's use of social networking or social media impacted previous district decisions?

- Has the speed of information sharing impacted the amount of time devoted to the decision making process?

These queries were important in two significant ways. First, it was important to discover what steps or processes a superintendent goes through in making leadership decisions that may impact district policies, budgeting, staffing, instructional practices, and implementing a coherent vision for a district. Second, to understand the way a superintendent's decision making is impacted by social media or social networking, a superintendent's personal viewpoint toward these online tools must be accounted for as well as their professional experiences with these tools.

The second guiding question for this research centered on the question of how superintendents create and implement plans relative to the communication of district policies

and decisions. This question focused not just on what superintendents communicate through social media and social networking but also how they craft the message. This question was guided by queries such as:

- How is the speed of information sharing being accounted for in the district's communication plan?
- What structures are in place at the district level to determine the content of and method for communicating district decisions to the public and staff?
- How do superintendents feel about using social media to gather input from the public and staff?
- What types of media are used to communicate with all members of the community?
- What type of communication is currently being shared to the public or staff through social networking and/or social media?
- What systems are in place to develop communication between and among district leaders, the business community, parents, and students?

Superintendents are expected to have effective systems for gathering input and responding to the whole school community. These expectations are not necessarily new, but the overwhelming use of social media and social networking by the general public is already having researched implications for how school districts communicate and respond to the public. Much of the existing research centers on the private sector, or focuses on the specific tools that districts use to communicate. This research attempted to move the discussion forward to examining how these new tools are impacting the way the superintendents make decisions and then craft the message to their staff and district community.

Conceptual Framework

Social media and social networking have dramatically increased the speed at which information is generated and shared. One cause of the increased speed of information sharing is the greatly expanded access that individuals have to information through the ease at which these tools can be accessed through a variety of mobile technologies. The broadening access to information and the ability of individuals to edit as well as generate additional news and opinion is causing a shift in leadership behaviors from hierarchal, top-down approaches to shared or democratic practices. Social networking and social media have removed the ability of single leaders to possess information as a single property. Information is now a shared good that individuals further down an organizational chart no longer have to wait to be delivered to them from those higher up in the leadership chain.

Superintendents, as leaders of a school district, are subject to the same pressures that are present in other public and private organizations. Leadership is now being largely examined by a person's ability to create a shared or democratic approach to leadership that invites, utilizes, and shares information using multiple methods of communication. Wood's theoretical perspective on democratic leadership in education provides a lens for examining the reasons for which a shared or distributed form of leadership is now a necessity in order to effectively lead schools and school districts. Democratic leadership frames how leaders provide the structures necessary to ensure the sharing of information and engage people throughout the organization (Woods, 2005). As social media and social networking provide a forum for people to exchange ideas, perspectives and information, a key function of democratic leadership is to engage people in processes that cause participants to grapple with complex issues resulting in new knowledge or ideas.

The ISLLC and North Carolina Superintendent Evaluation Process provide standards and present specific behaviors that speak to leaders who are able to fulfill the theoretical framework presented by Woods. The Standards are meant to change schools and districts from an industrial model with teacher-centered learning to one where the student is the center of learning and measure whether superintendents were successful in leading 21st century districts using a shared or distributed approach to leadership. Through a series of Standards, these tools provide explicit examples and ratings for measuring how well superintendents are using the practices of distributed leadership, including encouraging collaboration and effective communication within the organization and with the community. The Standards further define ways in which superintendents should solicit and respond to input from district-wide stakeholders.

This study intended to examine if and how social networking and social media are impacting the decision making practices of superintendents and how they communicate these decisions. Since social networking and social media are increasing the emphasis in the private and public sector to move toward a distributed leadership model, Woods' theoretical framework for democratic leadership along with the ISLLC and NC Superintendent Evaluation Standards provide an appropriate means for analyzing and comparing the decision making practices of superintendents.

Assumptions

The primary assumption of this study was that superintendents are using social media and social networking tools. A further assumption was that superintendents are also facing pressure to move to democratic leadership practices. As research has documented the impact of the increased access to information and the speed with which it is shared, leaders in the

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private sector and superintendent evaluation tools have changed to include distributive

leadership practices as an expectation, the assumption exists that superintendents are already

changing to some level of democratic leadership. Given that additional research has also been

conducted to show that superintendents are using social media, it was further assumed that

superintendents are in fact using social media or social networking to some degree to

communicate information, either district level information or information from the

"superintendent's office". Lastly, it was assumed that some superintendents have already

faced controversial or contentious decisions in which social media or social networking were

used by opponents or the district to shape the final decision.

Limitations

The study faced several limitations, the first of which was the geographic scope. The

study was limited to districts within North Carolina. While school districts in North Carolina

vary in size, socio-economic make-up, access to technology and ethnic make-up, all

superintendents in North Carolina are bound by the same evaluation tool. As such, the

potential perspectives shared during this study were shaped by the existence of this

evaluation tool. If the study had been conducted elsewhere in the country it was quite

possible that superintendents using different instruments would have felt compelled to

implement certain leadership practices based on the instruments used in their districts/states.

A second limitation was the voluntary nature by which the study was conducted. Not

all of the one hundred and fifteen superintendents participated and so the research data were

limited to those who responded. As the responses were voluntary, the researcher was not able

to pre-determine or ensure that equal representation was in place from all possible variables

including experiences, geographic location within North Carolina, district enrollment, and district setting.

A further limitation was the sparse amount of research in this specific area. While there is greater depth of research on the online tools themselves, the impact on the leadership practices in private sector organizations, and which online tools superintendents use, there was very little research on how these tools are changing the leadership and decision making practices of superintendents.

Definitions

This section offers key definitions to terms used frequently throughout this study.

ISLLC Standards: Interstate School Leaders Licensure Consortium Standards. The knowledge of these standards is the basis for Superintendent Evaluation Process in North Carolina. The ISLLC standards were originally developed in the 1990's by the Council of Chief State School Officers. As the basis of the superintendent evaluation process it sets forth the expectations for implementing a shared or distributed leadership approach.

Old Media: Newspapers and magazines not read or on the internet, as well as television and radio communications not delivered through the Internet or mobile technology.

New Media: Any source of information, whether text, video, or audio, delivered through the Internet or any mobile technology.

North Carolina Superintendent Evaluation Standards: Developed in cooperation between the North Carolina Department of Public Instruction and the McREL organization, this is the primary document used to evaluate superintendents in North Carolina. The evaluation document consists of eight standards describing the effective practices of superintendents.

For the purposes of this study the standards in question are numbers 1 and 5, which focus on strategic and managerial leadership respectively.

Shared/Distributed Leadership: An approach to leadership emphasizing the soliciting of input from district stakeholders, intentionally encouraging ideas and participation in the decision making process, and emphasizing communication using multiple methods.

Social Media: Any set of online tools that allow individuals to view, share and respond to information. These sites are not necessarily limited to specific members, and in cases where membership is available, members are not grouped in distinct sub-sets. Further, such sites often have a user profile attached and are open to the general public to view, but not necessarily respond. Examples would include wiki's, blogs, and Twitter. Texting was not be included for purposes of this research as there is not a user profile attached, not generally available to the public and is intended to receive a response.

Social Networking: Any set of web-based services which allow individuals to construct a public or semi-public profile, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system.

Superintendent: The chief executive or senior leader of a school district.

User: An individual who accesses any social media or social networking site to read, write, respond to information on that site.

CHAPTER 2

Literature Review

In 2008 China suffered a terrible earthquake. The first reports of the tragedy came not from traditional media sources or the Chinese leadership, but from China's largest social networking site and Twitter (Wright & Henson, 2009, pp.1). In fact, the BBC reporter credited with breaking the story first learned of the earthquake from Twitter (pp.1). Following the 2007 and 2008 wildfires in California, the 2009 crash of US Airways 1549 in the Hudson River, the 2010 earthquake in Haiti, and the 2011 Tunisian and Egyptian uprisings it was social networking sites that were used to quickly share information and coordinate responses (Veil, Beuhner, and Palenchar, 2011, pp.110), not specific centralized leaders or formal organizations. Social networking sites and similar tools such as Twitter, Flickr, Facebook, and Instagram now provide information and pictures of events from around the world instantly (Cox, 2013, pp. 6). The speed of information sharing is only increasing with the proliferation of hand-held devices such as smartphones that now combine the functions of a camera, computer, telephone, navigation system and web browsing (Venters, Green and Lopez, 2012, pp. 85). Standard telephone lines, mail, and to some degree even e-mail, are becoming obsolete as methods to gather and share information with the shift toward social media and hand-held devices (pp. 85). In just the last decade the number of Americans who purchased cell phones increased from roughly 128.5 million in 2001 to 298.4 million in 2011, representing a 232% increase (pp. 86).

The speed of information, and the ease of access, social media provides to the general public has added an additional dynamic to how information is generated and shared. News and information are no longer one-way propositions from traditional media sources, business, or from organizations but are now two-way interactions (Cox, 2013, pp. 16). Consumers of information no longer simply wait for news to be given to them; instead consumers and users of social media can post ideas and pictures or write commentary through blogs, thereby creating news events or stories. This new ability of the public to receive and create news or information has signaled a change in public relations practices (pp. 16). The emergence of social media is forcing government and business leaders to alter how they market their products or ideas as well as how they communicate with or respond to customers (Norris & Porter, 2011, pp.70). This increased engagement with customers comes at the same time individuals are increasingly using social media tools to share their positive and negative experiences in dealing with particular organizations (Cox, 2013, pp. 5). When the information is shared, it is not just with a local community but the entire world.

The impact of social media is not limited to corporate or government leaders, school district superintendents too are learning that social media can be more powerful than they realize as school administrators are often faced with the same types of communications issues and crises (pp. 7). Parents who are upset at a particular school district decision can take to Facebook, YouTube, Twitter or any number of other social networking sites to share their displeasure, generate sympathy from the community, and organize opposition faster than district leaders can often answer specific concerns. Elsewhere, some districts are beginning to use social media to increase outreach and share information, such as Mt. Diablo

and Carlsbad Unified school districts which have created entire blogging communities devoted to teacher and student use (Gonzales, 2002, pp. 22).

Even as districts now use technology as an integral part of enhancing classroom learning, its use as a means to communicate with constituents throughout the school community is still lacking (Gordon, 2012, pp. 59). As districts try to keep pace with these evolving technologies questions arise such as whether district leadership practices are evolving with these changes? Further, how is the presence of social media, its rise in use, and expanding functions impacting how district leaders communicate with the public?

The two guiding questions for this study focus on the impact of social media and social networking on the decision making processes of superintendents and how superintendents then communicate their decisions. In order to best inform and frame this study a review of current literature was conducted specifically to examine what defines social media and social networking, if and how these tools are in fact changing the way the general public seeks and interacts with information from organizational leaders, and whether public school superintendents are using social media and social networking to distribute information and if so how and to what degree.

The first section of this chapter provides a brief history of social media and social networking and describes appropriate definitions and descriptions for the online tools and their sites. Next this section examines the prevalence of social media and social networking use across various segments of the general public. The chapter then moves to an analysis of how social media and social networking are being used by the general public to access and share information and how these trends are affecting organizational leaders and leadership structures. The third section of this chapter explores how superintendents currently use social

media and social networking as part of their strategic and managerial leadership practices. Lastly, this chapter provides a conceptual framework to examine the pressures that social media and social networking may be placing on superintendents to incorporate new decision making practices due to the public's demand for information through social media and social networking as well as expectations from within the profession to shift away from centralized leadership to shared or distributed leadership practices.

Social Networking and Social Media

A case study conducted by D. Cox (2013) described a scenario in which parents, upon hearing that their school district was going to unveil a new school uniform policy, organized themselves through Facebook and similar social networking sites, including the blog section of the city newspaper to stage their opposition. Parents used social media to provide quick, engaging information and opinions to argue against changes to the policy as well as working to recruit potential school board candidates and to oust the superintendent. Opponents even used these online tools to garner statewide attention. Meanwhile, the district relied on traditional forms of communication including its website, school newsletters and word of mouth rather than social media tools to answers concerns raised by the community.

In order to examine the impact of social networking on the leadership practices of superintendents, it is important to examine the history of social media and social networking and provide definitions of these tools and their functions. This section also provides an analysis of the prevalence of social media and social networking through various segments of the general public and the degree to which its use is changing the public's expectations for how news and information should be shared.

<u>Definition of Social Networking and Social Media</u>

In examining the impact of social media and social networking on the decision making practices of superintendents a clear understanding of what constitutes these tools is required. When most people hear the term "social networking", sites such as Facebook or MySpace are often the first images to come to mind. However, social networking and social media encompass a range of Internet sites beyond Facebook or MySpace to include sites such as Twitter, LinkedIn, Flickr, YouTube and even personal blogs. While many people use the terms social networking and social media interchangeably there are key distinctions. Both social networking sites and social media sites have at their core the basic function of communication. Sites that fall into either category can often be defined as those that possess characteristics of participation, community, connectedness, and conversation (Veil et al., 2011, pp. 110). A further common trait is these sites allow individuals to become sources of information through sharing opinions, insights, experiences and perspectives (Auer, 2011, pp. 712). However, certain important distinctions are worth noting. While both types of sites allow individuals to share and respond to information, social media sites are those that are open to a broad if not unlimited audience. Similar to television, radio, or newspapers, social media is a system that delivers information to anyone who can pick up the signal (Marabella, 2013). Social media is not a specific site a person would visit, but a tool to allow users to either share or spread information. Unlike television or radio, which are dependent upon a single organization or corporation to spread information, once information is shared on social media it is available for a nearly unlimited audience to retransmit.

Social media's functions continue to evolve so that they are no longer just platforms for sharing recipes, or videos of family trips, but now include over 400 various sites covering

dating, fashion, finance, movies, pets, politics, education and more (Wright et al., 2005, pp. 5). In each of these examples the sites are based on information being posted for others to read and share, but not necessarily respond to or generate direct dialogue. Wikipedia classifies social media sites into categories such as Internet forums, weblogs, social blogs, podcasts, wikis, and those dealing primarily with pictures or videos (pp. 5). The most famous of these types of sites is Twitter which started in 2006 and by July of 2011 had been used to send over 20 billion messages (Cox, 2013, pp. 36). By 2012, Twitter was averaging 340 million messages, or tweets, per day (MacArthur, 2013).

Social networking is a more targeted effort to specifically engage other identified members of a social group. Danah Boyd and Nicole Ellison (2008), in their study "Social Networking Sites: Definition, History and Scholarship", offer a technical definition for social networking sites describing them as any set of web-based services which allow individuals to construct a public or semi-public profile, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system. Social networking members are not necessarily looking to meet new people, instead they are primarily communicating with people who are already members of their social circle (Boyd & Ellison, 2008). Unlike social media which is intended to be open to anyone, social networking has a defined group or membership. Further, social networking is often a specific site a person visits to generate two-way communication and connect with a network of members. The most famous social networking site is Facebook, which describes its purpose as being a means to helping people communicate more effectively with their friends, family and coworkers (Boyd & Ellison, 2008). As of June 2013, Facebook reported

having over a billion monthly users. Of that number, over 800 million users were accessing Facebook through some type of mobile device (Facebook, 2013).

Together, social media and social networking allow users to interact with information almost instantaneously with a global reach. The sheer number of users these sites now have and the degree of peer-to-peer sharing these sites have enabled requires a fundamental shift in the way information is shared, understood and acted upon (Takaragawa & Carty, 2012, pp. 85). As a result of this shift, there are real and actual consequences on political decisions and public relations practices (Auer, 2011, pp. 710).

<u>History of Social Networking and Social Media</u>

A key assumption for this research study is that the prevalence of social media and social networking in society has become so significant that business and governmental leaders, including superintendents, have been forced to incorporate these tools in their leadership practices. To establish the basis for this assumption, a review of their histories is necessary. This section also establishes the depth of the public's use of social media and social networking.

In their 2008 examination of social networking, Boyd and Ellison (2008) provide a thorough review of its history and rise to prominence within society. Using the previously mentioned definitions, the first recognizable social networking site, Sixdegrees.com, was launched in 1997. This website allowed users to create profiles of their interests, post general demographic information and allowed users to list friends who also had profiles while reviewing other people's lists of friends. It was not until 2001 that another significant wave of social networking sites was on the scene, more for professional than social reasons. Ryze.com was launched in 2002 to help people create business networks along with a social

component known as Friendster.com. At this time the two uses were still on separate websites, but Friendster hit a chord with people on the west coast, and by 2003 it had 300,000 registered users and began to get media attention. The publicity brought competition in the form of MySpace which separated itself from Friendster by allowing users to add features and personalize their pages (Boyd & Ellison, 2008).

In 2004 Facebook changed the social networking landscape. What Facebook brought was its unique focus on supporting distinct users who could show a prior connection to an identified group, in this case the Harvard student body. Boyd & Ellison (2008) explain that Facebook distinguished itself from other social networking sites by providing a semi-public arena where a user had to demonstrate membership to join, but once in, the user could see other profiles. What began with restricted access to students with valid university emails spread to allow high schools and corporate networks as well as users without verified email addresses (Kennedy & Macko, 2009). Together MySpace and Facebook enabled youth to socialize with their friends even when they were unable to gather in unmediated situations. Essentially, social networking sites became "networked publics" that support sociability; just as unmediated public spaces do (Boyd & Ellison, 2008).

Facebook is not the only social networking site to have grown dramatically in the past few years. While Facebook focused on a more personal and social aspect of networking, other sites such as LinkedIn formed to focus on professional networking. LinkedIn was launched in 2003 and by 2006 had introduced features similar to Facebook such as user profiles, connections to other users and recommendations, analogous to Facebook's "likes" option (LinkedIn, 2013). In just three years LinkedIn went from less than a hundred users to five million. By 2013 the site listed more than 225 million users growing by an average of

two users per second. Together with Facebook, LinkedIn, and sites such as MySpace, Google+, Bebo, Ning and Orkut comprise the most popular social networking sites currently being used (Cox, 2013, pp. 40).

Social media sites are most identified with what are now called blogs. The term "blog" was coined in 1997 from the words "web log" (Cox, 2013, pp. 30). These sites differed from the more traditional web site of the time because they were interactive and written in a conversational tone (pp. 30). Anyone could create a blog with the software now available and users could up-date these sites frequently. Originally blogs were used to provide diary like entries which were time stamped as a way to archive the entries, but now blogs are used to provide opinions, insights, and information on everything from news to cooking (Gonzales, 2011, pp. 22). In 2002, there were around 13,000 blogs in existence (Cox, 2013, pp. 30) and in 2004 the word "blog" was chosen by Merriam-Webster as the word of the year (Stock, 2009, pp.11). In 2008, there were 23 million bloggers with 94 million blog readers; by the end of 2011 the Nielson Company had identified over 176 million different blogs (Cox, 2013, pp. 30) with the blogging site Wordpress.com hosting over 2 million different blogs just by itself (Gonzales, 2001, pp. 22). Each blog represents an individual sharing their thoughts and retransmitting the thoughts of others to a global audience. Cox (2013) references work done by Baker and Green (2008) summing up the impact blogs are having in the business world stating "organizations simply cannot afford to close their eyes to them, because they are simply the most explosive outbreak in the information world since the Internet itself" (Cox, 2013, pp. 31).

Much like Facebook changed the landscape of social networking, Twitter and YouTube had a similar impact on the world of social media. Twitter introduced "micro-

blogging" which limits the length of any particular blog entry, or tweet, to just 140 characters. Twitter managed to bridge the gap between social networking and social media by having a platform that was able to create a community feel with the use of the terms such as "follower" (Gonzales, 2011, pp. 20) and the conversational tone used when asking questions or giving out information (Cox, 2013, pp. 30). The casual nature of Twitter continues to evolve as both individuals and organizations have found ways to engage each other directly through Twitter. At one point in 2009, Twitter had a growth rate of 1,300% and as of June 2013, nearly 1 billion tweets were being sent every three days, with over 140 million active users (Gonzales, 2011, pp. 20). Blogs and the micro-blogs that constitute much of the social media world have allowed chief executives of organizations of all sizes to communicate with employees, employees to communicate with each other, and for the organization to communicate directly with clients (Cox, 2013, pp. 31).

What Twitter did for the written word within social media, YouTube did for the use of video. YouTube was launched in 2005 as a way for the public to upload and share videos on the Internet (Wikipedia, 2013). In 2006, YouTube was the fastest growing Internet site with more than 65,000 videos being uploaded and more than 100 million video views occurring each day. That same year Time magazine named YouTube as its "Person of the Year" representing all of the user-created media sites that were now forming the basis of the social media medium. In 2008, YouTube received a Peabody Award for embodying and promoting democracy and was ranked as the fourth most visited website on the internet behind only Google, Yahoo! and Facebook (Wikipedia, 2013). By May of 2010, YouTube reported the rate of video views on its site was more than double the total prime-time

audience for all three major networks and, as of 2013, the number of visitors to the site reached 1 billion per month.

It is clear from this research that social media and social networking tools have exploded in popularity and the variety of use. The expansion of social networking and social media tools from desktop computers to mobile devices such as laptops, cell phones, and hand held tablets is creating a new set of powerful communication tools capable of influencing users' opinions regarding politics and policy (Auer, 2011, pp.709). Multiple social media tools are used by employees in schools with blogs being written by teachers, principals and district leaders springing up as part of school or district websites (Cox, 2013, pp. 29). Stock (2009) best describes the resulting impact of the explosion of the popularity and diversity of these online tools by reminding superintendents that in the era of social media "everyone has a barrel of ink so you better have one too" (pp.10).

One of the purposes of this study is to determine what impact the general public's access to this "barrel of ink" is having on superintendents' decision making. The next section reviews existing research on whom constitutes a social networking or social media user as well as what impact user-generated information is having on how organizational leaders gather and share information.

Impact of Social Networking and Media on the Access and Sharing of Information

Ann Flynn, a director for the National School Boards Association, noted if districts fail to get out and tell their story "someone else will and it might not be the story they'd want to be told" (Gordon, 2012, pp. 59). School leaders realize they must now start using social media if they wish to ensure accurate information is available quickly in order to tell their

story (Cox, 2013). This section examines the breadth of social networking and social media users across all segments of the general public.

It would be incorrect to assume that social media and social networking are solely the world of teenagers or young adults; doing so would minimize the true scope of social media's popularity and reach. The Pew Research Center found that while 71% of teens have a Facebook profile, 75% of adults have one too (Williamson, 2012, pp.1). Brenner and Smith (2013) found that as of May 2013 almost three quarters of U.S. adults use social networking sites, up from 67% in late 2012. This represents a 59% increase from earlier research they conducted in February 2005, when just 8% of online adults said they used social networking sites. Social networking sites are a key online destination for internet users from a wide range of demographic groups. Younger adults are especially avid adopters, but social networking continues to grow in popularity for older adults as well (Brenner & Smith, 2013, pp.2). Six out of ten internet users ages 50-64 visit social networking sites, as do 43% of those ages 65 and older. While online seniors are the least likely group to use social networking sites, rates for this group have tripled in the last four years, from 13% in the spring of 2009 to 43% as of May 2013 (pp. 2).

The growth and breadth of who is using social media and networking is not limited to just Facebook. The percentage of internet users who are on Twitter has more than doubled since November 2010, currently standing at 18%, with the most likely users being those between the ages 18-29 (pp. 2). However, the number of Twitter users between the ages of 30-49 has grown from 7% to 18% in the same time period while the users between the ages of 50-64 has grown at a comparable rate (pp. 6).

The growth of social media and social networking users goes beyond just a discussion of the chronologic age of users. The generational characteristics of social media and social networking users are having an impact on organizational leadership. By 2014, half of the workforce is estimated to be Millennials, those born between 1981 and 1997, also known as Generation Y (Venter et al., 2012, pp. 86). Millennials are more comfortable using the technology that has exploded in the past decade and are more adept at using this technology, and in fact Millennials could be described as technology dependent (pp. 86). Over 75% of Millennials have profiles on social networking sites and 97% use Facebook at least once a week (pp. 87).

The evolution of the mobile phone and other mobile technologies, computers, Internet access, and digital video equipment are further reshaping communications and the ways organizational leaders connect with employees and the public (Veil et al., 2011, pp. 110). A 2010 Pew Internet study found nearly 31% of online adults are using platforms such as blogs, social networking sites, online video, and text messaging through portable digital devices, (pp. 110) only increasing the access the public has to information and the speed with which it is shared. As one superintendent reported, Twitter and similar tools are now a natural mode of communication for millions of people (Hughes, 2010). The emergence of these tools and their breadth of use across multiple segments of society means superintendents must factor the role of these tools in their policy and public relations practices.

These generational, demographic, and technological shifts in the workplace are impacting how organizations are run and how they respond to the public (Venter et al., 2012, pp. 86). While the research demonstrates that shifts in the workplace are occurring, it is unclear exactly how superintendents are adapting or altering their leadership practices to

these shifts. The absence of this information in the literature is a driving factor for this study. The next section of this chapter analyzes the shift in the relationship between the public and organizational leaders in regards to how information is shared.

Significance of Two-Way Information Sharing

As one prominent blogger explained, "Social media is the democratization of information, transforming people from content readers into publishers. It is the shift from a broadcast mechanism, one to-many, to a many-to-many model, rooted in conversations between authors, people, and peers" (Cox, 2013, pp. 8). The values and opinions posted through social media and social networking are shaped and shared by the way that digital posts spawn commentary, sway views, and spur action (Auer, 2011, pp. 712). This section will review research on the impact two-way information sharing has on how the public reacts to and with the news and information accessed through social media and social networking sites.

The 2008 presidential campaign by Barack Obama provides an excellent example of the potential impact of two-way information and the way that it is changing public relations practices. In the 2008 American presidential election, the Pew Research Center's Internet & American Life Project found that around 20% of Internet users posted their thoughts, comments, or questions about the campaign on a web site, blog, social networking site, or other online forum (pp. 712). The proportion of Americans who stated that they regularly learned about the campaign from the Internet more than doubled since 2000, from 9% to 24%, and 42% of those aged 18-29 reported that they learned about the campaign from the

Internet, which was triple the percentage for any news source (Takaragawa et al., 2012, pp. 74).

During this same election, the growth of social media use was not just on the user or consumer end. By 2008, the use of social media was extensive in political campaigns. Blogs, social networks, text messaging, email lists, candidate's Web pages, social networking sites, and photo and video sharing sites were harnessed to reach, inform, and mobilize supporters. All candidates used social networking and social media to ensure a presence online, including Facebook, MySpace and YouTube as a means to connect with potential voters. Seven of the sixteen candidates who ran for the presidency announced their candidacies on YouTube, and all opened YouTube accounts (pp. 77).

The above research demonstrates that social media is now used to mediate public understanding of events, trends and decisions (Auer, 2011, pp. 730) and is influencing the way people and organizations deliver and receive news. Online platforms such as Twitter and Facebook are taking the place of traditional news sources as the place where people get news (Larkin, 2013). Where television might have taken years to solidify political action, social media and social networking can accomplish this same effect in days (Marabella, 2013). Collective identity can now be formed through individuals joining a cause on Facebook, or following and commenting through Twitter and posting videos on YouTube. Through these tools, the dynamics of collective behavior are very different than in the past. Participation in and leadership of a cause are accessible to anyone, without concern for long-term allegiance to an ongoing cause (Takaragawa et al., 2012, pp. 82). In fact, activists for a cause are able to use social media to create their own influence, reducing the control of information organizations previously enjoyed, as Veil et al (2011) detail in describing a

situation with the British Petroleum Corporation. Following the Deepwater Horizon oil-rig explosion, the company quickly established an official Twitter account detailing news of the event and providing updates. However, an anonymous satirical Twitter feed established at the same time had 410 times more followers within the first week of the accident than BP's account.

The two-way nature of social media also allows for the development and expansion of communities and networks despite physical distances, and research is now demonstrating a carryover effect to face-to-face offline political or social behavior (Takaragawa et al., 2012, pp. 75). Social media has provided the public with an ability to assemble in person in order to sustain causes initially created online. Sites such as Facebook, Twitter and YouTube enabled large groups of people to mobilize. Users of these sites are not just consumers of information but are simultaneously contributors of information, providing the basis for user-generated media (Wright et al., 2009, pp. 3).

Social networking and social media sites are becoming critical players in the news cycle, with Facebook being credited for driving seven to eight percent of its traffic to the major news organizations (Marabella, 2013). Organizations that rely on traditional media methods are finding that the news cycle is out of control before the organization can even react. Wright and Hinson (2009) reported that 61% of respondents to a 2008 business survey believed the emergence of social media has changed the way their organizations communicate.

Despite the increasing awareness of the importance of social media among organizational leaders, only 13% have incorporated social media into their communications plans (Veil et al., 2011, pp. 111) and the rules and practices regarding best practices for new

media communication strategies are still forming (Norris et al., 2011, pp. 69). Social media initiatives have resulted in a restructuring of the way companies think about their relationships with customers and employees (Candace Deans, 2011, pp. 187).

Similar to the shift that took place with the birth of the Internet, the social networking and social media platforms require organizations to adapt and develop new strategies. Organizations are finding that the best avenue to get their message out to target audiences in a credible way is not through traditional media, but through blogs and social networking sites (Norris & Porter, 2011, pp. 70). The general public is becoming accustomed to not only having instant access to information, but the ability to interact with and respond to school and district leaders. School leaders have started to shift their communications and marking practices to develop better relationships with their staffs and community members (Cox, 2013, pp. 16)

Daniel Cox (2013) examined this shift in communications strategies on public school leadership practices in his dissertation entitled *School communications 2.0: A social media strategy for K-12 Principals and Superintendents*. Using semi-structured interviews of principals and superintendents from across the United States and Canada, Cox's study examined the experiences of principals and superintendents who use multiple social networking tools and to examine why the tools were chosen. The research questions in this study centered on how social media and social networking fit in regards to a general communications approach or strategy. The results of the study showed that principals and superintendents felt social media tools allowed for increased communication between the school and home, and that the use of social media was no longer an option but an expectation. Cox describes how in one scenario a school district's decision to rely on

traditional media severely limited its ability to respond while opponents were able to rally to a cause using social networking and social media.

Evidence from recent research shows how social media has the capacity to expand the numbers of the politically active, allowing convenient opportunities for participation and attracting more citizens to get involved in political activities (Cox, 2013, pp. 1-3). Organizational leaders, including superintendents, are adjusting to the new realities of social media and social networking. At the same time, these leaders face trends that are fast-paced and generally not guided by corporate strategy, revealing that most organizational leaders were caught off guard by these new mediums (Candace Deans, 2011, pp. 194). Further, not only were organizational leaders surprised by the speed of these trends, almost all of them are having a hard time "getting their hands around social media" (pp. 194).

An analysis of social media and social networking demonstrates how these tools have created a new relationship between organizational leaders and their constituencies. This new relationship has been forged because of the nature of two-way information sharing that these online tools have created. However, as Cox (2013) points out, very little research exists in regards to the use of social media and social networking tools by K-12 public school officials in regards to how they have incorporated this new relationship into their decision making and communication strategies. Social media is providing superintendents with a means to "provide stakeholders with an avenue to engage schools in authentic two-way communication" (pp. 22).

Social media, as Gonzales (2011) writes, provides superintendents with an opportunity to connect directly with stakeholders and increase relationships that enhance social and political capital while strengthening the community. Previous studies primarily

looked at the utilization of specific social media tools by superintendents and at the application of these tools to build one-way communication relationships. This study hopes to further existing research to examine how superintendents are now incorporating a two-way information sharing strategy to make decisions and communicate these decisions.

Social Media and Social Networking Leadership

Nearly 90% of organizations have been experimenting with social media as they have recognized that employees and the general public use social media as one of their primary communication tools to find and share information (Cox, 2013, pp. 26). While research has not indicated a specific leadership or governance structure that seems best to implement social media (Candace Deans, 2011, pp. 190), leaders who closely guard who they are, what they like, and what they are doing will seem out of touch and non-participative in an ever more collaborative culture (Norris et al, 2011, pp. 72). As Kaplan (2013) noted, a social media presence gives leadership a bully pulpit where he or she can share his or her voice. It can be used as an opportunity to empower a community, nurture the culture of the workplace, and inspire and encourage people to reach their goals.

Social media tools may be providing school district leaders with myriad opportunities to share their district's successes on a frequent basis with stakeholders in the fashion that the stakeholder prefers (Cox, 2013, pp. 7). In fact, it is those school districts led by superintendents able to harness social media that win votes on bond and tax measures because they have built a connection with the community (Gordon, 2012, pp. 62). Gordon (2012) continues by quoting Ann Flynn as saying, "Districts should be using technology for communications much like they want schools to use technology for instruction, as a seamless

part of their approach to doing business" (pp. 62). It is not clear from current research how and to what degree superintendents are in fact implementing such an approach.

Norris and Porter (2011) refer to leadership in the era of social media and social networking as being virtual, "a social influence process mediated by advanced information technologies to produce changes in attitudes, feelings, thinking, behavior, and/or performance of individuals, groups, and/or organizations" (pp. 69). This corroborated research conducted by Cox (2013) who described effective organizational communication as essentially being about three main objectives; increasing awareness, shaping perceptions and influencing behavior (pp. 18). Influence through virtual leadership maintains a focus on these three goals and differentiates itself from traditional leadership which is essentially top-down. In traditional leadership scenarios authority figures monitor and control subordinates (Norris et al., 2011, pp. 71) while virtual leadership is "open, highly distributed, decentralized" (pp. 72). In fact, as Norris and Porter (2011) point out, members of social networks or bloggers on social media sites are becoming more influential than people in positions of authority.

The next section examines the research on current superintendent leadership practices as it relates to social media use toward the three main objectives mentioned earlier; increasing awareness, shaping perception and influencing behavior.

Superintendents and Social Networking and Social Media Leadership

Officials at corporations, nonprofits, and government agencies have dramatically increased their use of social media as a way to communicate within the organization and with potential customers (Cox, 2013, pp. 26) but according to Stock (2009) superintendents may be among the least likely of K-12 educators to see the benefits of using social networking,

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blogging, or other social media tools. At the same time, many school and district mission statements allude to preparing students to be responsible citizens with references to 21st century citizenship (Larkin, 2013) and one state's superintendent's evaluation rubric speaks to the requirement for superintendents to develop and communicate a "personal vision of a 21st century school district" (McREL, 2010). Research shows that in an era of reform, and in order to respond to the speed of social networking and social media, communication with stakeholders is a crucial element to implementing and sustaining change within a district (Decman, Badgett, Randall, Parmer, Sanchez, & Coryat, 2010, pp. 24). This section reviews existing literature on how superintendent communication and leadership practices are evolving as a result of social media and social networking.

The Superintendent's Evaluation Rubric written by the McREL organization, which has partnerships with twelve states, lays out a series of standards for superintendent leadership practices (McREL, 2010). Several of these standards specifically mention leadership and communications practices that are closely tied to the three communications goals previously mentioned. Standard 1 of the rubric specifically mentions developing "effective systems of open and honest communication between and among district leaders, the business community, faith community, parents, and students" (pp. 8) as well as stating that superintendents should participate "in consistent, sustained and open communication with principals" (pp. 8) along with other stakeholders. Standard 5 of this same document further states that superintendents are expected to utilize "various forms of formal and informal communication so that the focus of the school can be on improved student achievement" (pp. 15) as well as applying "a variety of media to communicate with all members of the community" (pp. 15) and lastly to anticipate "the information needs of the

various community stakeholder groups and provides this information in a timely and effective manner" (pp. 15). These standards for leadership and communication align closely with the organizational communication goals that Cox (2013) outlined.

While some superintendents may be reluctant to make the transition away from traditional media, social media has given superintendents the ability to put out positive news from schools rather than sit back and wait for the news media to show up (Larkin, 2013). Many building level administrators and school superintendents have embraced Twitter as an effective communication tool with their stakeholders (Auer, 2011, pp. 729). In these cases superintendents are seeing blogging as a quicker way to reach a broader audience of stakeholders (Cox, 2013, pp. 34) with school related news such as instructional matters, school celebrations, weather-related delays or closings and good news happening in the classroom (pp. 38).

Stock (2009) lays out the advantages of social networking and social media from a superintendent's point of view. As he explains, these tools allow superintendents to get news out more quickly, increase the flexibility of readers to access information on their own schedule, increase coverage through traditional media, and communicate during an emergency. Each of these benefits speaks directly to ability to raise the awareness of stakeholders in regards to district information. In research conducted by D. Cox (2013), Stock is quoted as describing the move from more traditional media tools to social media tools as going from "chili suppers, Friday night ball games, and face-to-face events" (pp. 34). Some superintendent blogs are becoming sources of information for major media outlets such as the *Chicago Tribune*, *Sacramento Bee*, *The Boston Globe*, and *Reuters* (Esposito, 2009; Larkin, 2013). It has been noted that establishing a positive relationship with the local news

media has been an important piece of the overall strategy of effectively communicating with employees, students, parents, and community members (Cox, 2013, pp. 25). Superintendents are finding that a significant advantage to writing a blog is the ability to control the message, eliminating the chance of being misquoted or waiting for someone else to cover a story; the blogger is in control (pp. 34).

The ability to control the message and preemptively cover news worthy events speaks not just to the ability to increase awareness among stakeholders but to also shaping perception. Several scenarios bring the connection between awareness and perception to the forefront. The first example involves Superintendent John Aycock of the Vacaville School district. Superintendent Aycock used social media and social networking to build an advocacy campaign when his district faced school closures. As Aycock explained,

> Our younger parents were very knowledgeable in the use of Facebook, YouTube, Twitter, texting and blogging. The social media outlets became the foundation for our outreach to raise funds for our schools. After a short, intensive multi-media campaign, we raised thousands of dollars and have thousands of contacts that we continue to use for our outreach and support for our schools. (Gonzales, 2011, pp. 19)

In a second scenario, Terry Holliday, a former Superintendent of the Iredell-Statesville School System in North Carolina, used a combination of blogging, web postings, and an electronic issues bin to engage parents during a redrawing of attendance boundaries. Superintendent Holliday went on to say that "social media tools are an essential component of my efforts to keep stakeholders informed, Twitter allows me to (tell followers) where I am, what I am doing and key issues I am dealing with" (Hughes, 2010). Social media's role in shaping perception is critical for many superintendents as districts face challenges including closing achievement gaps, increasing graduation rates, and increases in class size (Gonzales, 2011, pp. 38). Through the use of blogs community members can get to know a

school leader and to stay informed of what is happening just like those who would participate in face-to-face events (Cox, 2013, pp. 34).

The importance of shaping perception is not limited to parents or community members. In 2000, the National Association of Elementary School Principals stated effective communication is essential in creating an atmosphere in which all staff members feel valued, respected and part of a team and staff members have wished for increased levels of communication (pp. 22). Social media allows employees to post things as they happen and by modeling the way, leaders can inform employees of what is expected in the use of social media in the workplace and hold them accountable for their actions (Venters et al., 2012, pp. 90). Research from the private sector is showing that organizations that encourage workplace learning and allow their employees to have social media access have the potential to increase the organization's competitive advantage (pp. 89). A survey reported in the American Association of School Administrators reported that 93% of Superintendents who responded said that communication was essential in creating a shared vision (Decman et al., 2010, pp. 21). Social media tools could provide school employees with myriad opportunities to share their successes on a frequent basis (Cox, 2013, pp. 21) and these new technologies are providing superintendents a platform to accelerate learning potentials in the workplace (Venters et al., 2012, pp. 88).

The combined processes of increasing awareness and shaping perception are intended to shape behavior. Gonzales (2011) asserts that as a part of shaping behavior, educational leaders have a duty to share their perspectives to help politicians, and the community, navigate through uncertain times. In describing educational leaders, he writes that they "are powerful, not just because of what [they] know as school administrators, but because of

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[their] immeasurable impact as education experts in [their] private and personal networks"
(pp. 19). However, CEO's and superintendents at the top of organizational charts cannot
control what information is shared with the public because the public is communicating
information at lightning speed through social media. This creates conditions which imply
that leadership in the social media landscape must be through shared leadership (Norris et al.,
2011, pp. 71). Since a single leader at the top cannot possibly handle all of the daily decisions
in 21st-century organizations, contemporary theorists recommend superintendents empower
people at all levels of the organization and encourage employees to participate in decision
making (pp. 71).

School leaders used to rely on traditional communication methods such as
parent/teacher conferences, back-to-school nights, sending home a weekly or monthly
newsletter, parent/teacher associations, booster club meetings, and staff bulletins to get their
story or voice out (Cox, 2013). Superintendents now lead in an environment where power is
no longer positional, but shared due to the greatly expanded ability to information (Norris et
al., 2011). They also find themselves serving at a time that social networking and social
media are changing the face of leadership (pp. 69).

There is ample evidence that effective leadership is a key element in the success of
schools, but it is less clear how leadership should be exercised in a period of rapid change in
society's institutions, including education (Albion, & Gutke, 2010, pp. 2). Research in this
section has demonstrated the evolving nature of leadership in the age of social media and
social networking. Leadership and decision making practices must now account for a
decentralized form of leadership due to the power of two-way information. While Stock
(2009) lays out the advantages for superintendents who use these tools, there are only a few

examples of research on whether superintendents have internalized these advantages and acting upon them. The lack of such research contributed to the research questions posed in this study.

Conceptual Framework

This study examines the impact of social media and social networking on the decision making process of superintendents and the methods used to communicate these decisions. The research will be guided by two main questions: the first focuses on how the extensive use of social media and social networking by the general public is impacting how superintendents make district decisions while the second question centers on the communication practices superintendents then use to share their decisions with both the general public and staff. In preparing the research and data collection for this study, the research will be relying on the overlap of two frameworks. The first element of the framework is the work by Philip Woods (2005) on democratic leadership. This view of educational leadership provides a frame to understanding the potential impact of social media and social networking on the decentralization of power. Woods' work sets the stage for the importance of and practical realities of the need for a democratic approach to school leadership. The second element of this framework is the Interstate School Leaders Licensure Consortium Standards (ISLLC) and resulting McREL Superintendent Evaluation Process.

These standards provide a measurable description of the behaviors associated with how superintendents gather input from and communicate with all constituents in a democratic or shared leadership approach. While social media and social networking are not specifically mentioned in these standards, the research discussed earlier demonstrates that

these tools were possibly becoming a critical supplement to how superintendents meet the expectations put forth in these two standards.

The democratic leadership approach described by Woods (2005) provides a theoretical view behind non-centralized leadership styles. This theoretical framework is especially relevant given the research conducted on the effects of social media and social networking in regards to leadership practices. The results of this research have demonstrated that the speed with which information is shared and the interactive nature of these online tools has significantly furthered the move toward a shared or distributed leadership approach (Decman et al, 2010; Albion et al., 2010; Norris et al., 2011).

The greater emphasis being placed on including staff members, parents, students and the general community in the ISLLC and McREL Standards as well as the emphasis on continuous improvement, is requiring a movement away from previous hierarchal based leadership. Democratic leadership is a framework based on a focus about social interaction, continuous engagement in the creative cycle, and influencing others (Woods, 2005, pp. 25). The shared leadership described throughout the ISLLC and McREL Standards aligns closely with Woods' description of democratic leadership. The increasing emphasis in the public sector regarding shared leadership draws attention to the need for dispersed property, shared by a number of individuals and groups.

Woods (2005) explains leadership in this setting as arising "from a variety of planning and spontaneous forms of coordination" (pg. 23). Use of a democratic style of leadership enables school leaders to better handle the complex and intensified work environment caused by the immense amount of information generated and shared in modern society (Woods, 2005). As previously discussed research points out, social networking and

social media are clearly a significant piece of the increased rate at which information is

shared and generated. The application of democratic leadership includes; the recognition that

people need to participate in decision making, creating means for deliberation, encouraging

shared and open access to knowledge, and accepting the realities of modern social behavior.

These practical considerations are worth noting as they closely align with the recommended

practices contained in the ISLLC and McREL Standards as well as aligning with the

descriptions of leaders who have successfully worked with social networking and social

media (Candace Deans, 2011; Cox, 2013; Li, 2011; Norris & Porter, 2011; Albion et al.,

2011; Kaplan, 2013).

The subtitle of Woods' book, *Democratic Leadership in Education: Leading*

teachers, Leading Schools, along with many of the practical examples he gives may make it

appear this framework would be solely suited for a school based discussion. However; the

themes and perspectives Woods put forth are applicable to district leadership as well. The

ability to make this transition is highlighted by Woods in his introduction in which he writes:

> Democratic leadership is not only about a *responsive impulse*, which concerns
> leaders respecting the educational values and wishes of those they serve…But
> the impetus to democratic education comes equally from professional and
> philosophical understanding of what good education essentially comprises…
> Education which is infused with the democratic spirit is not dependent on a
> rationale that views participation as being in "the gift of management". Rather,
> it is integral to the educational enterprise. (pp. xx-xxi)

The philosophical framework described above is as pertinent to district leadership as it is

school based leadership.

As this research will focus on how the decision making processes and communication

strategies of superintendents may be changing, an established framework for the observable

behaviors inherent in these processes is needed. The behaviors are best defined and framed

using the Interstate School Leaders Licensure Consortium (ISLLC) Standards. These standards are the basis for the Superintendent Evaluation Process used in North Carolina. The ISLLC standards were originally developed in the 1990's by the Council of Chief State School Officers. In a paper presented by Joseph Murphy and Neil Shipman, the authors provide a detailed explanation of how the standards came into existence (Murphy & Shipman, 1998). The authors explain that two major forces caused the ISLLC standards to be written; the changing environment in which education exists in the United States and research and knowledge of models of schooling in the 21st century. Murphy and Shipman (1998) further explain that the Consortium's decision to develop standards also came from the use of standards in other areas of educational reform, including teacher evaluations, as well as the Consortium's view that there was a void in area of educational reform when it came to school administrators. The Standards are meant to respond to the need to change schools and districts from an industrial model with teacher-centered learning, to one where the student is the center of learning. The Standards were meant to move superintendents and other district leaders from being managers, where successful operation of a bureaucracy was the main task, to one where they are leading 21st century districts.

The ISLLC Standards, most recently in 2008, serve as the basis for the North Carolina Superintendent's Evaluation Process designed by the McREL Organization in conjunction with the North Carolina Department of Public Instruction. This instrument translates the ISLLC Standards into eight areas covering:

1) Strategic Leadership
2) Instructional Leadership
3) Cultural Leadership
4) Human Resource Leadership
5) Managerial Leadership
6) External Development Leadership
7) Micro-Political Leadership
8) Academic Success of Students

For the purposes of this research, Standards 1 and 5 are the most useful in examining the decision making and communication practices within which superintendents in North Carolina are expected to operate. Standard 1 focuses on the strategic leadership practices superintendents use to create a district's vision, mission, goals, and prepare students for the 21st century. Contained in Standard 1 is language that speaks specifically to how the superintendent creates leadership and decision making structures throughout the district and participates in consistent, sustained and open communication. Standard 5 speaks to the importance of having processes and systems in place for budgeting, staffing, problem solving, and communicating expectations. This Standard further outlines that superintendents must design and utilize various forms of media to communicate with all members of the community, while anticipating the information needs of the various community stakeholder groups, and provide this information in a timely and effective manner.

Woods' framework for democratic leadership along with the ISLLC and McREL Standards provide theoretical and practical basis for examining the behaviors of superintendents. These standards provide a framework to discuss the expectations that superintendents operate under and how they therefore may incorporate the presence of social media and social networking in their decision making processes and approaches to their communication

Summary and Need for Further Research

Mark Twain once said "a lie can travel around the world while the truth is putting on its shoes" (Cox, 2013, pp. 34). The speed of information sharing that social media and social networking have generated is changing the leadership practices of businesses and organizations of all kinds (pp. 16). There is ample existing research related to the definition and history of social networking and social media, as well as on how these Internet tools are shaping how the general public reacts to and generates information.

Superintendents are now moving beyond the district website using tools such as Facebook, Twitter, and YouTube to share information (Williamson et al., 2012, pp.1) but this surge in cyberspace interactions comes while many are still grappling with how to craft an online version of themselves to appeal to multiple audience (Norris et al., 2011 pp. 71). The National School Boards Association has told Superintendents that they should be using technology for communications much like they want schools to use technology for instruction as a seamless part of their approach to doing business (Gordon, 2012, pp. 59) but little research exists that describes the experiences of superintendents who use multiple social media tools are part of a comprehensive communication strategy (Cox, 2013).

Social media is changing the amount of information accessible to the public and the speed at which it travels. Superintendents are now expected to lead school districts as 21st century organizations, but little research exists to examine what impact the two most popular 21st century tools used by the general public are having on how superintendents make decisions and communicate these decisions. Superintendents are working in a world where the decentralization of power and information caused by social media and social networking impacting their approach to the leadership. Superintendent leadership now has to account for

the fact that information can and will spread faster than they can control. This study is intended to provide needed research on how social media and social networking are affecting the way in which superintendents make and implement decisions in order to move forward discussions on what 21st century school district leadership may look like.

The research that currently exists speaks to social media and social networking impacting leadership processes or decision making, but is largely devoted to private sector organizational leadership (Candace Deans, 2011; Gonzalez, 2011; Norris & Porter, 2011). Research that examines the interplay between superintendents and social media or social networking is primarily focused on the content of what superintendents communicate through social media and social networking (Esposito, 2009; Decman et al., 2010; Gordon 2012; Larkin 2013), or how these tools could be used to better connect with the school community (Stock 2009; Cox, 2013)

Gonzalez (2011) presents research outlining the new methods and approaches necessary in an age of social media and social networking calling it "Leadership 2.0" (pp. 1). While Gonzalez's article details experiences of organizational leaders who are now working with social media and does offer recommendations, it does not specifically examine the experiences of superintendents. The article also does not examine how leadership decisions may be changing as a result of their use or the public's use of social media and social networking. Other authors such as Candace Deans (2011), as well as Norris and Porter (2011), offer additional research on private sector leadership and the impact of social networking, but neither addresses school leadership.

Daniel Cox's 2013 dissertation provided an excellent starting place as his focus was on the impact of using multiple social media tools by school principals and superintendents

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as part of an overall communications program. While Daniel Cox, and others, have conducted research in regards to the use of social networking and social media, Cox's research questions were in isolation from how the initial decision making process may be impacted by social media and social networking.

Previous research has clearly demonstrated the expectations for the use of social networking and social media, as well as showing it has become an expected tool for superintendents. However, there is a gap in research related to superintendent leadership practices, specifically the examination of how these tools are impacting the way the superintendents process decisions, determine the necessary outcomes and then implement a communication strategy. The absence of research in these areas led to the guiding questions proposed for this study.

CHAPTER 3

Methodology

This chapter reviews the research methodology applied for this study and is divided
into sections that review the purpose of the study, research questions, research design and
rationale, population and sampling, and significance of the study.

Purpose of the Study

Social networking and social media have become the primary means of receiving and
spreading information for much of the general public. Research has shown that both public
and private organizations are changing their approach to information sharing in response to
the growth of the number of social networking and social media users. These new approaches
go beyond just changes in communication strategies to include changing to a decentralized
leadership structure. Superintendents now are expected to lead through a distributed
leadership model that must account for the public's desire to constantly receive, generate,
and share information. The purpose of this study was to examine how these new technologies
are impacting the way superintendents, as organizational leaders, make decisions and then
use this new medium to communicate their decisions.

Research Questions

The research was guided by using the following over-arching research questions:

1) How are social networking and social media impacting the decision making
    processes used by Superintendents?

2) How are social networking and social media impacting the communication strategies used by Superintendents?

The first part of this research specifically looked at how the prevalence of social media and social networking has impacted the decision making processes used by superintendents. To that end, the first major research question used guiding questions designed to explored what organizational structures are in place within the district that utilize social media or social networking to gather information, dispense information, and respond to social media and social networking users. Further guiding questions examined the degree to which the superintendent directly interacts with social media and social networking through their uses of these tools for personal and professional purposes, what steps or processes superintendents use to make decisions, and in what ways, if any, have a superintendent's experiences responding to or using social media and social networking impacted their decision making processes. The final set of guiding questions posed to support this research question included; do superintendents report an increase in the expectation for the amount of content and the speed with which information should be shared and whether the presence of social media and social networking has changed superintendent leadership practices.

The second major research question was guided by queries examining how a superintendent's communication strategies have been impacted by the presence of social media and social networking. Specifically, the research sought to explore how the speed with which information can be spread and interacted with has changed district communication strategies. Additionally, this major research question sought to understand how superintendents determine what information might be shared using this new media versus

what may be shared using traditional media. Lastly, this question explored the perspectives superintendents hold regarding the use of social networking and social media as a significant piece of their communication strategies.

As part of answering the two guiding research questions, the study started with several hypotheses:

- There will be a significant positive statistical relationship between a superintendent's indication of their use of a democratic leadership style and:

    a. A perceived effectiveness in the use of social media or social networking as part of their communication strategy
    b. Reporting a greater use of social media and social networking to dispense information staff and the public when compared to superintendents that use a centralized leadership approach.
    c. Reporting a greater use of social media and social networking to directly receive information from staff and the public than superintendents that use a centralized leadership approach.

- There will be a significant positive statistical relationship between a superintendent's use of personal social media and social networking and their use of social media and social networking for professional uses.

- There will be a significant positive statistical relationship between those superintendents that report using social networking and social media sites as part of the district's communication strategy and those superintendents who report placing a high value on communicating with and getting input from parents/guardians.

- There will be a significant positive statistical relationship between superintendents who report recently responding to one or more incidents of social media/networking being used to oppose district policies and those who report social networking and social media sites impacting their leadership

- There will be a significant positive statistical relationship between the size of a district's student enrollment and the superintendent's perceived pressure to use social networking and social media as part of the district's communication strategy.

The variables being measured during this study centered on the degree to which social networking and social media are impacting superintendent decision making protocols, the

type of information being dispensed and gathered on district social networking and social media sites and what changes, if any, are being made to the communication strategies used by superintendents. Additionally, the study sought to examine the relationship between a superintendent's existing use of a democratic leadership style and their attitude toward social media and social networking. Some of the additional participant variables that the researcher examined included the impact of a superintendent's years of experience and degree of personal use social media and social networking by the superintendent. Based on feedback the researcher received during the pilot study and content validity phases, a determination was made not to use superintendent's age and geographic location as additional variables. Pilot participants reported feeling uneasy answering age and location as that may make them identifiable. Survey questions looking at student enrollment and descriptions of districts as rural, urban, and suburban were felt to provide similar information. Additionally, superintendent experience was a factor in which superintendents were presented with questions dealing with possible changes in professional expectations. Additional filtering of responses to the number of years served as a superintendent, while not exact, did provide a means to investigate the possible impact of a superintendent's current chronological age on their perspectives towards the use of social media and social networking.

Research Methodology

The research method employed was a quantitative exploratory study to determine the perspectives of superintendents regarding the major research questions. Creswell (2012) explains the steps to quantitative data analysis including preparing the data, a descriptive

analysis of the data, an inferential analysis of the data, and then reporting. The first step requires the survey answers to be translated into scores that can be analyzed.

The researcher created a self-constructed survey (Appendix B) that examined several of the hypotheses previously mentioned. The survey was constructed by the researcher utilizing the survey created by EdWeb.net as a useful starting point (EdWeb.net et. al, 2010) along with the interview questions used by Cox (2013) in his dissertation on the selection of social media and social networking tools by principals and superintendents. During the initial item writing, the research also worked with the Odum Institute at the University of North Carolina at Chapel Hill which provided guidance in the area of survey methodology, wording and participant recruitment.

As this research was intended to measure the perspectives and attitudes of participants, the survey included the use of Likert scales as suggested by Gall, Gall and Borg (2007). The Likert scale questions were given numeric ratings based on the variables mentioned earlier using single score items (Creswell, 2012; Gall et al. (2007). Aspects of the research are also intended to solicit specific examples of policy or political situations where social media and social networking played a role in the superintendents' decision making process. Therefore, the survey included some open form questions to allow superintendents to provide additional details regarding the impact social media and social networking on their leadership processes.

Reliability and Validity

Creswell's (2012) second step to appropriate quantitative data analysis includes applying descriptive statistical analysis to the data collected. The use of these descriptive

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tests is designed to ensure a level of validity and reliability to the data and resulting analyses and conclusions. Gall, Gall and Borg (2007) point out that validity is not a measure of the item score itself, but the interpretation of the results. Evidences supporting validity may include examining content, response processes, internal structure of the survey, and relationships to other variables. To establish the reliability and validity of the survey used in this research and the resulting data, the researcher relied on evidence from an analysis of content validity, a pilot study and resulting internal reliability measures prior to releasing the study and then conducted additional internal reliability measures following the study itself.

In order to best ascertain the content validity of the survey instrument, the researcher contacted professionals in nearby school systems who possessed an expertise in the use of social media and social networking by school systems as well as individuals who served in district leadership capacities who would be responsible for implementing various communication strategies. Those assisting in validating the content of the study included two Chief Technology Officers (C.T.O.'s), two Public Information Officers (P.I.O.) and two Assistant Superintendents with responsibilities for district communications. Each person was provided a summary of the research, the research questions, the survey, and then asked to specifically assess the survey for whether the questions posed were relevant to the issues of social media/networking faced by educational leaders, whether the topics/areas covered were the most relevant and if not, what areas should added. Lastly each person was asked to provide any additional suggestions. The feedback received ranged from the addition of some technologies for consideration, re-wording of a few questions and the elimination of several questions deemed redundant in nature as well as some questions that were not necessary. The

recommended changes to the content of the survey were applied prior to conducting a pilot survey.

Following completion of the validity review, the researcher conducted a pilot survey administered in two phases. The first phase included the recruitment of current doctoral students in the Educational Leadership Program who are currently working toward superintendent licensure. Recruitment in this first phase was based on a random sampling through a volunteer process. A second phase of recruitment utilized selective participation based on recommendations of district leaders near the researcher's current district. The researcher specifically sought out the participation of a current superintendent, a recently retired superintendent as well as a current assistant superintendent and one who just recently retired. In total, thirteen individuals participated in the pilot survey. Following a three week time period for participants to complete the pilot survey, results were compiled and analyzed through the STATA software program measuring for internal reliability using Cronbach's Alpha on all questions that contained multiple item response options. In each case the measurement result was higher than 0.8, above the standard of 0.7 considered "good" for reliability. (George and Mallory, 2003) Single item response questions and those with open-ended responses were excluded from this type of analysis. Open-ended response questions were reviewed to determine if the nature of responses provided information related to the research themes they were designed to solicit. It was determined that the pilot study participants were responding as intended.

The survey was a combination of single item choice responses and multiple item choice responses with responses based on scales or categories. Questions 1 and 2 were based on a nominal scale while Question 3 was scaled by participants entering a numeric response.

Questions 4, 5, 6, 7, 9, 11, 12, 13, 14, 16, 18, 19, and 21 were based on ordinal scales. The remaining questions; questions 8, 10, 15, 17 and 20, were open-ended questions soliciting additional information from participants.

The reliability of the survey is the degree to which results are stable and consistent. According to Gall, Gall, and Borg (2007), there are four criteria commonly used to evaluate the reliability of a survey: objectivity, standard conditions of administration and scoring, standards for interpretation, and fairness. The survey was delivered using an online format utilizing the Qualtrics program through the University of North Carolina at Chapel Hill. This program provided standard administration and method of scoring as well as data collection method. Participant responses were compiled within the Qualtrics system which the research could access through a website. The on-line survey format allowed for both greater efficiency and reduced costs. A further benefit to the online format was an increased likelihood for broad participation from a range of superintendents across North Carolina. Utilization of the internal reliability measures provided evidence of an appropriate level of standard interpretation. Table 1 provides the internal reliability measures for each survey question that contained multiple item choices.

Table 1 – Alpha Measures for All Multi-Item Choice Questions

Questions	N	Cronbach's Alpha	No. of Items
Q4 – Perceived Internet Access	48	.820	5
Q5 – Personal Use of Social Media	48	.786	5
Q6 – Professional Use of Social Media	48	.701	5
Q11 – Self-Rating of Democratic Leadership Style*	48	.638	9
Q12– Social Media/Networking Effectives to Provide Basic Information	48	.761	6
Q12 - Social Media/Networking Effectives to Provide Complex Information	48	.831	6
Q13 – Social Media/Networking to Receive Information from District Staff Members	48	.765	6
Q13 – Social Media/Networking to Receive Information from Community Members	48	.780	6
Q14 - Social Media/Networking to Gather Information from District Staff Members*	48	.741	7
Q14- Social Media/Networking to Gather Information from Community Members*	48	.611	7
Q16 – Social Media/Networking to Dispense Information to District Staff Members*	48	.765	10
Q16 – Social Media/Networking to Dispense Information to Community Members*	48	.684	10
Q21 – Perception of District Values	48	.779	8

Those items marked by an asterisk indicate questions in which the presence of an item choice that was removed due to the manner in which a particular item choice skewed alpha scores. In the case of Question 11, those item choices asked participants to rate their self-perception on a series of statements that describe characteristics of democratic leadership as put forth by Woods (2005). Item choice 12 within Question 11 posed a negative worded statement asking participants if they believed that organizations were structured best when done so in a "hierarchical" nature. Indicating agreement to this item choice would be antithetical to believing in a democratic leadership approach, where all other options were

worded such that agreement did indicate a democratic leadership approach. Due to the change in wording, this item was removed from the internal reliability calculations. Questions 14 and 16 included an item choice of "other" and in doing so participants could indicate "none" as a level of use for that item. This item as an option appeared to skew the intent the question, with 24 and 22 participants respectively, indicating a response to this item, which constituted half of the responses when compared to all other item choices.

Only questions 11, 14, and 16 had results less than 0.7, considered within the "acceptable" range (George and Mallory, 2003), all other scores were above 0.7 and can be consider having a "good" level internal consistency.

Data Collection and Analysis

The purpose and design of this study was to explore and then be able to generalize the ways superintendents, as organizational leaders, make decisions and to what degree, and in what manner, these decisions are being impacted by their interactions with social networking and social media. The research design relied primarily on the collection of quantitative data, with a small sampling of qualitative data, obtained in an online survey.

The qualitative questions asked superintendents to provide specific situational details to various questions regarding their interactions with social networking or social media. These questions provided follow up to items asking whether district staff members or the community has used social media, how superintendents determined which if any social media or social networking tools to use in their communication strategies, what if any other tools were used in their communication practices, and what impact social media and social networking have had on their leadership styles. The answers to these questions were first

reviewed for the previously determined themes of democratic leadership behaviors, perception of social media, uses of social media, and the presence of a comprehensive communication strategy. As part of the exploratory analysis suggested by Gall, Gall and Berg (2007), responses were then re-read looking for any additional themes related to nature and purpose of the study. Additional themes such as topics being communicated to and by superintendents through social media and the emotions expressed by superintendents toward social media and social networking were noted.

The quantitative data were collected through an anonymous survey. Analysis of this data employed descriptive tests that included reviewing mean scores, variance among responses, measures of statistical significance between questions that measured previously determined variables related to the key hypotheses and guiding research questions such as a superintendent's use of social media for personal and professional purposes. Additional variables included the superintendent's years of experiences, size of student enrollment, and the superintendent's self-reported application of a democratic leadership framework. Following the recommendations of Gall, Gall and Berg (2007), data analysis also included additional exploratory analysis, as a method for "discovering unforeseen or unexpected patters in the data and consequently for gaining new insights and understanding" (pp. 151).

Population and Sample

Given the ability to use online survey instruments, and the desire to sample as great a percent of the population as possible, the survey was sent to 115 of the 115 North Carolina school district superintendents with one superintendent dropping out of the survey based on prior participation in the content validity checks. In disseminating the survey,

superintendents were provided a letter of introduction that outlined the purposes of the study and the general focus of the questions. Due to the timing of the initial release of the survey immediately following the July 4th weekend, three email reminders were sent to those superintendents who had not yet completed the survey, with each reminder going out three weeks a part with the last email reminder going out following the fifteenth day of school. After these efforts fifty three responses were submitted for a participation rate of 46.5% with forty eight fully completed surveys for a rate of 42.1%. While the five partially complete responses answered all of the demographic questions as well as those investigating democratic leadership practices, in order to ensure consistent interpretation only the forty eight fully completed surveys were used for data analysis.

During the research design phase the researcher had employed the process for determining the minimal sample return rate described by Gall, Gall and Berg (2007). In selecting the appropriate level of rigor to apply several issues emerged. Gall, Gall and Berg (2007) question the need for the use of tests for statistical significance when the entire population of a group is being studied. While the researcher intended to send the survey to the entire population, it was unlikely that number would respond. Additionally given that this was largely an exploratory study the researcher believed the use of an alpha value of 0.05 would be the most appropriate. Gall, Gall, Berg (2007) provide a detailed table demonstrating that 64 responses would be necessary to achieve the noted value of 0.05 (pg. 145), fourteen more responses than collected by this study. However, based on the existing research, it is was expected that there would be a medium to large effect size, or difference among participants, when measuring leadership styles as it related to the impact of social media and social networking. The table Gall, Gall, Berg (2007) provided demonstrates that a

sample size of 26 would be sufficient for an alpha value of 0.05 for an anticipated large effect size. Given the total sample size fall closer to the 64 mentioned earlier and the desire to employ a more rigorous test of the hypotheses, the researcher employed the test level of 0.05 rather than the acceptable 0.1.

A Review of Participant Characteristics and Key Independent Variables

The participants were asked to respond to several background questions used to help determine variables for the study including reporting their district's average student enrollment; describing their district population density as rural, urban, or suburban; and their tenure as a superintendent. Additional questions examined the participant's perception regarding internet access in their district, personal use of social media, and their perception of the degree to which they see themselves as democratic leaders.

The first two questions on the survey asked participants to self-describe their district by type of indicating setting (rural, urban, suburban) of the district and the student enrollment. Table 2 provides the breakdown of participants' district setting with 79.2% of participants describing their district as rural and 8.3% describing their district as urban. In terms of district size based on student enrollment, Table 3, 60.4% of respondents indicated their district enrollment was 8,000 students or less. The participant distribution among the three categories that comprise this breakdown (500-2000, 2001-4000, 4001-8000) is closely aligned to the same category totals based on the tenth day numbers provided by the NC Dept. of Public Instruction, which when added together total 57.3% of the districts in North Carolina. The remaining participants reporting urban and suburban comprised 20.8% of the total sample. The choice of population density rather than actual district population was both to protect anonymity and concern that participants may not be able to provide an accurate

response. The self-perception superintendents have toward their districts is also an important consideration when analyzing responses to questions dealing their experiences and use of social networking and social media as a means to communicate with their communities.

Table 2 – Distribution of Participants based on District Setting		
	Frequency	Percent
Rural	38	79.2
Urban	4	8.3
Suburban	6	12.5
Total	48	100.0

Table 3 – Distribution of Participants based on Student Enrollment			
	Frequency	Percent	2013 State Enrollment
500-2000	10	20.8	13.0
2001-4000	12	25.0	22.6
4001-8000	7	14.6	21.7
8001-20000	15	31.3	27.0
20001+	4	8.3	15.7
Total	48	100.0	100.0

Question 3 of the survey asked superintendents to indicate their experience level as a superintendent, Table 4. 72.9% of participants are within their first six to seven years as superintendent with an overall mean of 5.67 years of experiences. These results demonstrate a majority of the participants are relatively new to the superintendency and ascended to their positions just as social media and social networking were becoming prevalent.

Question 4 of the survey sought to measure the participants' perception regarding access to the internet. Participants reported each possible access location point as "most often" available with the exception of "restaurants/coffee shops" which was perceived as "somewhat" available. Three of the five listed categories had means over 2.5 out of 3, with the other two categories having means over 2.0 out of 3. This would indicate participants all worked in districts where internet access was "often" if not "somewhat" available to the district community.

Questions 5 and 6 asked participants about the degree to which they used social media or social networking tools in their personal lives as well as part of their professional

duties. Table 6 shows the mean scores for the six different social media and social

networking tools listed as examples from which the participants could choose. Participants

could rate the level of use for each tool on a scale from 1 (never) to 3 (about every two

weeks) up to a maximum of 6 (multiple times a day). Likewise participants also rated their

use of the same tools within their professional duties.

Table 4 – Years of Experience as a Superintendent			
	Frequency	Percent	Cumulative Percent
1	9	18.8	18.8
2	6	12.5	31.3
3	5	10.4	41.7
4	6	12.5	54.2
5	5	10.4	64.6
6	4	8.3	72.9
9	3	6.3	79.2
10	2	4.2	83.3
11	1	2.1	85.4
12	1	2.1	87.5
13	2	4.2	91.7
15	2	4.2	95.8
17	1	2.1	97.9
20	1	2.1	100.0
Total	48	100.0	

Table 5 – Perceived Access to Internet														
Internet Access at Home			Internet Access of Place of Employment			Internet Access at Public Library			Internet Access at Restaurants/Coffee Shops			Internet Access at Other Locations		
(1) Rarely	(2) Some	(3) Often	(1) Rarely	(2) Some	(3) Often	(1) Rarely	(2) Some	(3) Often	(1) Rarely	(2) Some	(3) Often	(1) Rarely	(2) Some	(3) Often
1	22	25	1	16	31	2	1	45	7	24	17	9	29	10
Mean = 2.5			Mean = 2.63			Mean = 2.90			Mean = 2.21			Mean = 2.02		

Participants reported the greatest mean use of YouTube with Facebook and Twitter the next two most personally used social media tools. While 41.6% participants reported never using Facebook, 39.5% reported using it at least weekly with 29.1% using it daily or multiple times a day. Participant distribution patterns were similar for YouTube and Twitter. 37.5% of participants reported using Twitter at least weekly with 20.8% using it at least daily. YouTube received the fewest number of participants indicating they never used the tool for personal use and had 35.4% reporting they used it at least weekly. Results demonstrate that in the cases of YouTube, Twitter and Facebook a majority of participants are familiar with the tools and use them at least on a bi-weekly basis. Instagram was the least used tool and the data indicated it as the least familiar tool to participants with 81.2% indicating they had never used the tool.

Table 6 - Distribution of Personal Use of Social Media									
#	Question	Never	About Once a Month	About Every Two Weeks	About Every Week	Almost Daily	Multiple Times a Day	Total Responses	Mean
5	LinkedIn	15	15	6	9	2	1	48	2.40
4	Instagram	39	0	4	3	1	1	48	1.54
3	Facebook	20	6	3	5	8	6	48	2.85
2	YouTube	6	12	13	11	4	2	48	3.02
1	Twitter	24	3	3	8	6	4	48	2.60

Table 7 displays the response patterns for the given social media and social networking tools. Mean scores for participants' use of social media and social networking for professional use followed the overall pattern of responses when compared to those for personal use, but with much smaller distances between means and variances between items. Facebook, YouTube and Twitter were again the three most commonly used tools with an identical percentage of participants reporting that they used Twitter for professional purposes.

#	Question	Never	About Once a Month	About Every Two Weeks	About Once a Week	Almost Daily	Multiple Times A Day	Total Responses	Mean
Table 7 - Distribution of Professional Use of Social Media									
5	LinkedIn	22	10	5	9	2	0	48	2.15
4	Instagram	44	0	2	0	2	0	48	1.25
3	Facebook	21	5	5	6	9	2	48	2.65
2	YouTube	14	18	6	8	2	0	48	2.29
1	Twitter	24	3	3	10	4	4	48	2.56

Only two fewer participants reported using Facebook at least on a weekly basis for professional uses when compared to personal usage. YouTube was the only social media tool, of the top three reported by participants, to see a notable drop in the number of participants indicating they used the tool at least weekly when compared to personal use. The table below provides a comparison for the mean rate of use and standard deviation for each given tool.

Table 8 – Personal and Professional use of Social Media/Networking				
Social Media/Network Tool	Median for Personal Use	Standard Deviation for Personal Use	Median for Professional Use	Standard Deviation for Personal Use
Twitter	2.60	1.842	2.56	1.797
YouTube	3.02	1.313	2.29	1.184
Facebook	2.85	1.935	2.65	1.744
Instagram	1.54	1.220	1.25	.887
LinkedIn	2.40	1.333	2.15	1.304

Question 11 on the survey asked participants to rate their agreement with a series of

statements aligned to practices associated with democratic leadership practices. These

statements were derived from characteristics and practices outlined by Woods (2005) when

describing how democratic minded leaders approach their organizations. Table 9 outlines the

response patterns and standard deviations. It is important to note that Item choice 12 was

worded as a negative in comparison to the other item choices.

Table 9 - Participant Agreement with Democratic Leadership Characteristics								
#	Question	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	N	Mean	Standard Deviation
7	Collaboration among district leaders is important for effective decision making.	1	0	4	43	48	3.85	0.5
8	A sense of community among district leaders is important for effective decision making.	1	1	10	36	48	3.69	0.62
9	Independence should be encouraged among district leaders.	1	5	32	10	48	3.06	0.63
10	Independence should be fostered among principals.	1	7	30	10	48	3.02	0.67
11	A sense of community among principals is important for district reform efforts.	0	1	9	38	48	3.77	0.47
12	Organizations are best structured when they are hierarchical in nature.	4	19	23	2	48	2.48	0.71
14	Participation is most effective when all participants speak with an equal voice regardless of position, title, or role.	0	4	25	19	48	3.31	0.62
15	Effective district leadership comes through inspiring cooperation, participation in decision making.	0	1	14	33	48	3.67	0.52
17	A democratic leadership style is likely to be more effective in an age of social media/networking.	1	3	27	16	47	3.23	0.67
18	My leadership style is best described as a democratic.	0	0	23	25	48	3.52	0.50

This item asked participants to rate their agreement that organizations should be hierarchal in nature, something not associated with democratic leaders. In this case, 52.1% of participants rated they agreed or strongly agreed. Another important note is the response pattern

regarding a democratic leadership style being more effective in connection to the use of

social media and social networking. 91.5% of participants agreed or strongly agreed.   The

importance of these points will be discussed later in Chapters 4 and 5.

Table 10 - Participant Agreement with Beliefs Concerning District Communication							
#	Question	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	N	Mean	Standard Deviation
1	The district maintains clear, two-way communication with the community.	0	1	27	19	47	3.38	.53
2	The district maintains clear, two-way communication with the schools.	0	0	9	38	47	3.81	.40
3	The district successfully obtains the input of parents/guardian from under-represented groups.	0	7	28	12	47	3.11	.63
4	The district values the input of parents/guardian from under-represented groups.	0	0	13	34	47	3.72	.45
5	The district utilizes multiple methods for communicating with parents/guardians.	0	2	11	34	47	3.68	.56
6	The district utilizes multiple methods for communicating with staff members.	0	0	13	34	47	3.72	.45
7	Eliminating barriers to parent participation is an emphasis for schools.	0	1	15	31	47	3.64	.53
8	Eliminating barriers to participation by staff members is an emphasis for schools.	0	0	16	31	47	3.66	.48

The last set of independent variables used for this guiding question was contained in

Question 21 and the results are displayed in Table 10. This question sought to gather

information regarding the participants' level of agreement with how their district performs in

areas regarding communication, types of communication, and specific efforts toward the

parent/community as well as district staff. These questions came from three areas. First,

research noted in Chapter 2 regarding the impact social media and social networking on in

establishing two-way communication practices. Secondly practices noted by Woods (2003)

as part of true democratic leadership and lastly practices noted in the McRel Superintendent's

Evaluation Tool used in North Carolina. As noted in the examination of response for

Question 11, given the nature of the self-reporting, participants generally responded to items

within Question 21 by saying they agreed or strongly agreed with the statements in relation

to their district. All but 1 participant agreed or strongly agreed that their district maintains

two-way communication with identical results when asked about eliminating barriers to

parent participation and all participants stated they agreed their district emphasizes

eliminating barriers to participation by district staff.

Summary

This chapter has reviewed the methodology used by the research in conducting this

study. The study focused on two main questions; how are social networking and social media

impacting the decision making processes used by Superintendents? How are social

networking and social media impacting the communication strategies used by

Superintendents? The research relied on an online survey created by the researcher through a

process utilizing content validation and a pilot study prior to release. Following data

collection reliability measures were again conducted on all multi-item response questions and

open-ended response questions were analyzed for the evidence of identified themes. The

following chapter will provide analysis of the data collected during this study.

Chapter 4

<u>Results</u>

This study was designed to examine the impact of social media and social networking on the decision making processes of superintendents and their communication strategies. Social networking and social media have become the primary means of receiving and spreading information for much of the general public. Research has shown that both public and private organizations are changing their approach to information sharing; however, there is a gap in research related to superintendent leadership practices, specifically the examination of how these tools are impacting the way superintendents process decisions, determine the necessary outcomes and then implement a communication strategy.

The study used results from a survey of current North Carolina Superintendents utilizing Qualtrics, an online survey delivery program. The survey was created using the existing body of research with the assistance of the Odum Institute at the University of North Carolina. A process for ensuring content validity included a review of the survey by a retired superintendent, current assistant superintendents, district chief technology officers and public information officers. The survey was then piloted with a current superintendent, a current and a retired assistant superintendent, and random sampling of volunteer participants from a pool of current doctoral students working toward their superintendent licensure. Reliability tests were then run on the pilot survey data specifically looking at the alpha levels of multiple item response questions. Open-ended response items were reviewed to ensure the questions were soliciting the responses as intended. Following a three week period in which participants

could complete the survey, data collection was completed and reliability tests were conducted on all multiple item response questions and descriptive tests examining mean, standard deviations, and inter-item correlations were conducted. This chapter is divided into three sections. The first section describes the various type of data analysis conducted on the results. The second and third sections examine the results of the survey based on the two guiding research questions.

Methods of Analysis

The research study was an exploratory study looking at a number of different variables intended to help determine the impact social media is having on superintendents. The survey employed several types of questions in gathering data from participants and therefore several measures of analysis were used depending on the type of question and the number of responses possible within the question. As mentioned in Chapter 3, the first step in data analysis was to conduct descriptive and frequency tests per question. Key to the data analysis was the necessity to determine the relative significance and, in certain cases, degree and type of correlation between variables. In order to answer the research questions additional tests were conducted by cross-tabulating appropriate data from applicable survey questions.

The survey relied on the use of Likert scales in many cases. These types of scales can often be viewed as either categorical-ordinal or continuous. In order to most accurately interpret the results the research applied two tests in each case. The first analysis conducted was to review the Chi-square results and resulting level of significance (p-value). As stated in Chapter 3, because the researcher intended to survey the entire population and because

there was an expected medium to large effective size, the sample of 48 responses allowed for

the use of a p-value less than or equal to 0.05 in order to establish significance. However; the

Chi-square formula depends on a high degree of freedom for reliable measurements and in

some cases there were insufficient degrees of freedom present for the researcher to feel

confident in relying on the accompanying p-value to determine the level of significance.

Therefore the Pearson's R was used as a comparative measure to examine possible

correlations and significance. The Pearson's R is most appropriately used on continuous

variables and provides an alternate method for determining significance by examining the

correlation coefficient (Kremelberg, 2011)

Research Question 1 – Impact on Decision Making

The first research question attempted to examine the ways in which social media and

social networking are impacting the decision making processes of superintendents. Table 11

details which portions on the survey sought to provide specific data to answer the first

research questions. As part of answering this question several sub-questions were

investigated.

These included examining how a superintendent's personal use of social media would

impact their use of these tools for professional purposes. The researcher also investigated

how the degree to which a superintendent's use of a democratic leadership approach may

impact decisions in using social media. Further analysis sought to examine in what ways, if

any, a superintendent's experiences responding to or using social media and social

networking impacted their decision making processes and if superintendents reported an

increase in the expectation for the amount of content and the speed with which information should be shared.

<u>Relationship between Superintendent's personal and professional use of Social Media</u>

The initial step in determining the first research question was to examine whether a superintendent's personnel use of social media or social networking would impact their use of these tools for professional purposes. Question 5 asked participants to estimate how often they used various social media tools in the past year, while Question 6 asked the same question in relation to their use of these tools for professional purposes. The data from these questions were then analyzed by conducting a cross-tabulation to examine the relationship between these two variables. In order to reduce the overall number of cells and increase the values within each cell for the cross-tabulation, the researcher calculated the total usage of social media and social networking personal and professional by adding the total use for all five tools listed in each question. Each degree of use listed in the question was assigned a value on a scale of one (never), to six (multiple times a day). As a result a participant could have received a total ranging from a low of five, to a maximum of 30. Table 12 and Table 13 detail the resulting frequency, mean and standard deviation totals. Total personal use had a slightly higher range of frequency going from the minimum five to a high total of twenty seven while professional use ranged from five to twenty three. The means differed by 1.52 with personal use having a mean of 12.42 while professional use had a mean of 10.90.

Table 11: Guiding Research Question #1- How are social networking and social media impacting the decision making processes used by Superintendents?			
Variables or guiding questions	**Survey Questions involved**	**Method of Analysis**	**Measure of Analysis**
Impact of personal use of social media to professional use	Q5, Q6	Cross-tabulation, Bivariate Correlation	Chi-Square, Pearson's R, one-tailed test of correlation
Perception that Democratic leadership style will be more effective in an age of social media/networking	Q11/Item 17	Frequency distribution and descriptive analysis	Mean, Variance
Experience with staff and/or parents using social media and social networking to oppose district policies/decisions	Q7, Q8, Q9, Q10	Frequency distribution, descriptive analysis, cross-tabulation, thematic review of open-ended response.	Mean, Variance, Chi-Square, Pearson's R, Thematic Coding
Perception that social media and social networking have increased the speed with which information is expected to be shared	Q18	Frequency distribution and descriptive analysis	Mean, Variance
Perception that social media and social networking have impacted the time to make decisions	Q19	Frequency distribution and descriptive analysis	Mean, Variance
Relationship between participants view of the impact of social media/networking given situations in which staff used social media/networking to oppose decisions	Q18/Q7, Q19/Q7	Cross-tabulation	Chi-square, Pearson's R
Relationship between participants view of the impact of social media/networking given situations in which parents used social media/networking to oppose decisions	Q18/Q9, Q19/Q9	Cross-tabulation	Chi-square, Pearson's R
Participant description of the impact social media and social networking have had on their leadership	Q20	thematic review of open-ended response	Coding
Relationship between 1 or more incidents of social media as a form of opposition and impact on leadership	Q7, Q8, Q19	Bivariate correlation	one-tailed test of Pearson's correlation

Table 12: Frequency Distribution of Total Personal and Professional Use							
Total Personal Use				**Total Professional Use**			
Total Points	Frequency	Percent	Cumulative Percent	Total Points	Frequency	Percent	Cumulative Percent
5.00	3	6.3	6.3	5.00	5	10.4	10.4
6.00	4	8.3	14.6	6.00	6	12.5	22.9
7.00	4	8.3	22.9	7.00	5	10.4	33.3
8.00	3	6.3	29.2	8.00	3	6.3	39.6
9.00	4	8.3	37.5	9.00	2	4.2	43.8
10.00	5	10.4	47.9	10.00	4	8.3	52.1
11.00	2	4.2	52.1	11.00	4	8.3	60.4
12.00	2	4.2	56.3	12.00	2	4.2	64.6
13.00	2	4.2	60.4	13.00	6	12.5	77.1
14.00	3	6.3	66.7	15.00	2	4.2	81.3
15.00	4	8.3	75.0	16.00	1	2.1	83.3
16.00	2	4.2	79.2	17.00	2	4.2	87.5
17.00	1	2.1	81.3	18.00	1	2.1	89.6
19.00	4	8.3	89.6	19.00	3	6.3	95.8
22.00	2	4.2	93.8	21.00	1	2.1	97.9
23.00	1	2.1	95.8	23.00	1	2.1	100.0
26.00	1	2.1	97.9	Total	48	100.0	
27.00	1	2.1	100.0				
Total	48	100.0					

Table 13: Mean and Std. Deviation of Total Personal and Professional Use		
	Total Personal Use	Total Professional Use
N	48	48
Mean	12.4167	10.8958
Std. Deviation	5.71237	4.81239

The researcher then conducted a cross-tabulation of these two variables. As Table 14 shows, the results indicate a high number of degrees of freedom making the p-value a reliable measure. An additional comparison was also made to the resulting Pearson's R; both tests indicate a significant relationship between a superintendent's use of social networking and

social media and their likely use of social media and social networking for professional

purposes.

Table 14: Chi-Square and Pearson's R for Total Personal and Professional Use of Social Media and Social Networking			
	Value	df	Significance
Pearson Chi-Square	369.120	255	.000
Pearson's R	.820	N/A	.000
N of Valid Cases	48		

As part of the first guiding research question, the study began with a hypothesis there

would be a positive significant statistical relationship between a participant's use of social

media for personal reasons to their use of social media as part of their professional duties. In

order to test the hypothesis numerical values were assigned as indicated previously with

"never" receiving one point, "about once a month" receiving two points up to 6 points for

"multiple times a day". The researcher then conducted a one-tailed bivariate correlation

using SPSS to measure for a Pearson's correlation between the two variables. As Table 15

indicates, the statistical measure does indicate a significant positive statistical relationship

between the two variables. The result confirms the cross-tabulation results mentioned earlier.

Table 15: Correlation between Personal and Professioanl Social Media Use		Total Personal Use	Total Professional Use
Total Personal Use	Pearson Correlation	1	.820[**]
	Sig. (1-tailed)		.000
	N	48	48
Total Professional Use	Pearson Correlation	.820[**]	1
	Sig. (1-tailed)	.000	
	N	48	48
**. Correlation is significant at the 0.01 level (1-tailed).			

<u>Democratic Leadership in an Age of Social Media</u>

Standard 1 of the North Carolina Superintendent's Evaluation rubric mentions developing open and honest systems of communication and further states superintendents should participate in open communication with stakeholders. These practices are important elements of what Woods (2003) calls the democratic leadership approach. Therefore the researcher asked participants whether they believed that democratic leadership would be effective in an age of increased use of social media and social networking. This was important to ask as their beliefs regarding the effectiveness social media and social networking may impact their decision making process. 89.6% of participants reported believing that democratic leadership would be more effective in an age of social media, with one participant not responding. However; as Table 15 shows, when the belief in Democratic Leadership is compared with the frequency to which superintendents use social media as part of the professional duties (Question 6) there was no significant relationship. The implication being, while superintendents may self-report a high degree of support in democratic leadership approaches, they do not see the application of social media or social networking as an application of such a belief structure. Despite the smaller number of degrees of freedom, both the p-value and Pearson's R demonstrate the lack of a significant relationship.

Table 16: Democratic Leadership being more effective in Age of Social Media				
Mean = 3.23				
	Frequency	Percent	Valid Percent	Cumulative Percent
1 – Strongly Disagree	1	2.1	2.1	2.1
2 – Somewhat Disagree	3	6.3	6.4	8.5
3 – Somewhat Agree	27	56.3	57.4	66.0
4 – Strongly Agree	16	33.3	34.0	100.0
Total	47	97.9	100.0	
Missing	1	2.1		
Total	48	100.0		

Table 17: Chi-Square Test and Pearson's R for Democratic Leadership in an Age of Social Media and Superintendent Professional Use of Social Media.			
	Value	df	Significance
Pearson Chi-Square	48.677	45	.327
Pearson's R	0.047	N/A	.756
N of Valid Cases	47		

Social Media and Social Networking as a form of Opposition

The next variable investigated was the degree to which participants indicated they had experienced district staff members or community members using social media or social networking to express opposition to their or the district's policies. Question 7 of the survey asked participants if they had any knowledge of such situations involving district staff members with answer choices ranging from "never" to "three or more times". Question 9 of the survey asked an identical question except in reference to parents. Table 17 displays a comparison of the frequency and mean for each question.

Table 18: Mean and Frequency for use of Social Media and Social Networking to Oppose						
District Staff Members			Parent/Community Members			
Mean = 1.75			Mean = 2.63			
	Frequency	Percent	Cumulative Percent	Frequency	Percent	Cumulative Percent
1 – Never	33	68.8	68.8	14	29.2	29.2
2 – Once	3	6.3	75.0	9	18.8	47.9
3 – Twice	3	6.3	81.3	6	12.5	60.4
4 – Three or More	9	18.8	100.0	19	39.6	100.0
Total	48	100.0		48	100.0	

Participants reported a greater number of examples of parents or community members using social media and social networking to oppose district practices, with a mean 0.88 higher than

the mean for district staff members. Further, 39.6% of participants reported having knowledge of three or more incidents in which parents used these tools to express opposition. If the total is expanded to those with knowledge of at least two incidents the percentage increases to 52.1%. In the case of district staff members using social media to opposite district practices, a quarter of participants noted knowledge of at least two or more incidents.

To further explore this topic, in Questions 8 and 10, participants were asked open-ended questions to describe at least one incident in relation staff or parents respectively. The questions also asked participants to identify how they found out and what social media or social networking tool was used, if they knew. The researcher reviewed participant responses looking for specific examples identified by the participants, what tools were used, commonalities in the policies or practices being opposed, as well as any potential themes indicating how these experiences impacted the participants. Tables 18 and 19 outline the topics mentioned from participants in regards to district staff and parents. After discounting any "n/a" or "none", a total of twelve responses were received for Question 8, in regards to district staff members, while thirty one responses were received for Question 10, in regards to parents or community members.

Facebook was the only tool specifically mentioned in terms of district staff use, with a total of seven mentions. Participants reported parents and community members also using Facebook, a total of 5 mentions, along with Twitter and Instagram, each being mentioned once.

Table 19: Participant Responses to Question 8 Regarding <u>District Staff's</u> use of Social Media to Oppose Policies/Practices (*Some participants mentioned more than 1 example*)

Topic	No. of Instances
Dress Code	2
Administrative Decisions	2
Student Discipline	1
Employee Discipline	1
Read To Achieve Legislation	1
Student Promotion Policy	1
Social Media Policy	1
Naming of Schools	1
Grade Configuration	1
Social Media Policy	1

Table 20: Participant Responses to Question 8 Regarding <u>Parent's</u> use of Social Media to Oppose Policies/Practices (*Some participants mentioned more than 1 example*)

Topic	No. of Instances
Board Decision (school closing, redistricting, dress code)	12
Student Discipline	2
School Calendar	7
Personnel	4
School Specific Issues	4
Curriculum	2

In addition to the greater number of responses received related to parents using social media, participants provided greater detail in the tenor and tone of these situations. When it came to parents, participants used phrases such as "reputations have been destroyed", "taking uses out of context or using half-truths", "slam the system and myself", and "spreading information, accurate or otherwise". Additional phrases and descriptions such as these were absent from the examples given in reference to district staff members.

One of the researcher's hypotheses in initiating this study concerned the relationship between a superintendent's experiences with social media being used as a form of opposition

and the impact these incidents would have on a superintendent's leadership. Specifically, the researcher hypothesized that there would be a significant positive statistical relationship between these two variables. To measure this hypothesis, numerical values were assigned to participant responses when indicating knowledge of at least one incident of social media opposition in Questions 7, staff use of social media, and Question 8, parent or community use. Each increase in the number of known incidents a participant reported resulted in an additional point up to a total of four points if there were three or more known incidents. A one-tailed bivariate correlation was then computed in SPSS to determine the relationship with participant answers in Question 19 which asked participants to rate the degree to which the speed of social media had impacted their decision making in response to the community, parents or staff.

Table 21: Correlation between Social Media as a form of Opposition and Superintendent Decision Making			
		Social Media as a form of Opposition	Degree of impact on Decision making
Social Media as a form of Opposition	Pearson Correlation	1	.297[*]
	Sig. (1-tailed)		.044
	N	35	34
Degree of impact on Decision making	Pearson Correlation	.297[*]	1
	Sig. (1-tailed)	.044	
	N	34	47
*. Correlation is significant at the 0.05 level (1-tailed).			

As Table 21 indicates, the bivariate correlation did demonstrate a significant positive statistical relationship between the two variables. The significance for a one-tailed test needed to be below a level of 0.05. The results showed a significance of 0.044 and positive correlation of .297.

Impact of Social Media and Social Networking on Speed and Time

To further investigate how social media and social networking may be impacting the decision making process for superintendents, participants were asked two questions regarding the speed of information sharing and the time to make decisions. Question 18 was posed to those participants who reported more than four years of experience. The question asked participants to rate the degree to which they felt that the expectation for how fast information is shared has increased in the past five years. As Table 22 indicates, twenty eight of the participants had the minimum number of years to be eligible to answer the question. 41.7% of those participants with at least 4 years of experience indicated that social networking and social media had made a significant or nearly significant difference in the expectation. As a group, participants had a mean of 4.07, with only three participants indicating little to no difference.

This point was further investigated by examining the possible relationship between a district's enrollment and the manner in which participants responded to this question. A cross-tabulation between district enrollment and the expectation for the speed of information sharing revealed there was no significant statistical relationship, as neither the p-value nor Pearson's R reported any significant statistical relationship. The researcher chose to conduct an additional test comparing the impact that a superintendent's years of experience may have in connected with the perceptive toward the increase in the speed of information sharing. To conduct this test, the researcher recoded responses to Question 3, which asked for participants to indicate the number of years they have served as a superintendent by categorizing responses in the ranges displayed in Table 24.

Table 22 Increase in the Speed Expected for Information Sharing				
Mean = 4.07				
	Frequency	Percent	Valid Percent	Cumulative Percent
1 – No difference	2	4.2	7.1	7.1
2 -	1	2.1	3.6	10.7
3 – Some difference	5	10.4	17.9	28.6
4	5	10.4	17.9	46.4
5 – Significant difference	15	31.3	53.6	100.0
Total	28	58.3	100.0	
Missing	20	41.7		
Total	48	100.0		

Table 23 Chi-Square Test and Pearson's R for District Enrollment and Speed of Information Sharing			
	Value	df	Significance
Pearson Chi-Square	18.758	16	.281
Pearson's R	.126	N/A	.524
N of Valid Cases	47		

Table 24 : Range of Superintendent Experience			
Range	Frequency	Percent	Cumulative Percent
1-2 years	15	31.3	31.3
3-5 years	16	64.6	33.3
6-10 years	9	83.3	18.8
11 – 20 years	8	100.0	16.7
Total	48		100.0

These ranges were then cross-tabulated to the expectation for information sharing. The results indicate a significant relationship. While the degrees of freedom for the Chi-square p-value test are too few to calculate a reliable figure, the Pearson's R demonstrates a significant positive relationship indicating that as a superintendent's years of experience increase, so does their perception of the expectation for how fast they must share information.

Table 25: Chi-Square Test and Pearson's R for Superintendent Experience and Expectation for the Speed of Information Sharing			
	Value	df	Significance
Pearson Chi-Square	7.354	8	.499
Pearson's R	.401	N/A	0.34
N of Valid Cases	47		

In connection with Question 19, all participants were asked to rate the degree to which social media and social networking impacted the time available to make decisions. Out of those who responded, only four participants indicated there had been little to no change in the time available for decision making while 70.8% indicated a significant to nearly significant decrease in the time available.

Table 26: Decrease in Time Available to Make Decisions				
Mean = 3.98				
	Frequency	Percent	Valid Percent	Cumulative Percent
1 – No change	2	4.2	4.3	4.3
2	2	4.2	4.3	8.5
3 – Somewhat less time	9	18.8	19.1	27.7
4	16	33.3	34.0	61.7
5 – Significantly less time	18	37.5	38.3	100.0
Total	47	97.9	100.0	
Missing	1	2.1		
Total	48	100.0		

District enrollment was again examined to see if there was a significant relationship, as in the case of Question 18, Table 27 shows no significant relationship was detected. However, in examining for a relationship between a superintendent's years of experience there was a significant relationship detected by the Pearson's R. Given the small number of degrees of freedom for the Chi-square in Table 28, the researcher determined that the p-value

would not be as reliable as the Pearson's R, which calculated a significant relationship. Similar to the data reported in examining Question 18, as a superintendent's number of years of experience increase, so does the feeling that there is less time to make decisions.

Table 27: Chi-Square Test and Pearson's R for District Enrollment and Impact on Time for Decision Making	Value	df	Significance
Pearson Chi-Square	8.675	16	.926
Pearson's R	.166	N/A	.265
N of Valid Cases	47		

Table 28: Chi-Square Test and Pearson's R for Superintendent Experience and Impact on Time for Decision Making	Value	df	Significance
Pearson Chi-Square	14.198	12	0.288
Pearson's R	.341	N/A	0.019
N of Valid Cases	47		

<u>Social Media as a tool for Opposition and Participant views on the Impact of Social Media</u>

In order to further investigate the impact of social media and social networking on the decision making process the researcher examined for possible relationships between a participants experiences with social media being used as a tool for opposition and how participants viewed the impact of social media on decision making and information sharing.

To conduct these cross-tabulations, a new variable was created totaling a participant's number of experiences by assigning a value to each answer with an answer of "never" being assigned a value of zero, participants reporting at least one incident with either staff or parents were given a value of one, up to a total value of eight if participants reported "three or more" incidents with both district staff as well as parents. The resulting frequency table is displayed in Table 29. Thirteen participants reported having never had knowledge of staff or parents using social media or social networking to oppose superintendent or district decisions. These totals were then used to conduct cross-tabulations measuring for possible

impacts on how participants responded to the expectations for information sharing and time

for decision making.

Table 29: Total Count of Incidents of Opposition by Staff and/or Parents				
Count of Incidents	Frequency	Percent	Valid Percent	Cumulative Percent
3.00	7	14.6	20.0	20.0
4.00	4	8.3	11.4	31.4
5.00	12	25.0	34.3	65.7
6.00	3	6.3	8.6	74.3
7.00	3	6.3	8.6	82.9
8.00	6	12.5	17.1	100.0
Total	35	72.9	100.0	
Missing	13	27.1		
Total	48	100.0		

The results displayed in Table 30 indicate that there is a significant relationship

between the number of times a superintendent has experienced social media as a tool for

opposition and their feeling of an increased expectation for the speed of information sharing.

Due to the small degrees of freedom the researcher relied on the Pearson's R, which reported

a value below 0.05 as well as a strong correlation value of 0.035.

When examining the relationship between social networking as a tool for opposition

and the impact on time for decision making no significant relationship was discovered. The

Pearson's R reported in this case does present a slight positive correlation and indicated a

value below 0.1; however it was not below the level of significance needed at 0.05.

Table 30: Chi-Square Test and Pearson's R for Social Networking/Media as a tool for Opposition and Speed of information sharing			
	Value	df	Significance
Pearson Chi-Square	12.906	15	.610
Pearson's R	.462	N/A	.035
N of Valid Cases	47		

Table 31: Chi-Square Test and Pearson's R for Social Networking/Media as a tool for Opposition and Time for Decision Making			
	Value	df	Significance
Pearson Chi-Square	18.856	15	.462
Pearson's R	.297	N/A	.088
N of Valid Cases	47		

<u>Impact of Social Media and Social Networking on Leadership</u>

The final question used to determine the degree to which social media and social networking impact superintendent decision making process was to ask participants to describe what impact they perceived these tools to have on their leadership style. The responses were reviewed using a thematic analysis approach allowing themes to arise from responses themselves. Twenty nine of the forty eight participants provided answers to this question. Five themes emerged from the responses; impact on the speed with which information spreads, the decrease in time to make decisions, perceived value of social media, flow of information, and the degree to which these tools have influenced leadership practices. Table 32 lists the noted themes along with examples and the number of instances. Several participants provided multiple responses to the question.

The tone of responses varied among the twenty nine responses with six coded as generally positive, fourteen as neutral, and nine that were negative. Negative comments included those indicating dealing with "discordant issues", "more difficult to sort through misinformation", and "it[social media] creates more problems than it solves". The positive comments expressed viewpoints such as "allows us to tell our own story", "enables me to engage more stakeholders", "has enabled me to have more information readily available to make decisions" and "it has allowed for faster and more extensive feedback".

Participants also described a need to stay ahead of information sharing, with one participant commenting that his leadership team monitors sites to look for potential controversy. Another participant put it more bluntly noting that they have to try and "stay ahead of the minority of idiots" who post falsehoods.

Themes	Examples	No. of Instances	Percent of Response
Table 32: Impact of Social Media and Social Networking on Leadership Style (*Some participants mentioned more than 1 example*)			
Speed of Information	- "faster and more extensive feedback" - "I have to be more aware of just how quickly things can spread" - "Trying to anticipate and stay ahead" - "dealing with rumors that spread so quickly" - "Expectations for the speed of deliberations and decision making have been hastened by the proliferation of social media and networking tools"	13	44.8%
Perceived Value	- "I have nothing positive to say about it" - Dealing with "the minority of idiots who either put things out based on falsehoods or political agendas"	5	17.2%
Information sharing	- "makes it difficult to sort through misinformation" - "Allows us to tell our own story" - "share celebrations, to quickly share emergency information or to poll the community"	12	41.2%
Degree of Influence in Leadership Style	- "I utilize to a great extent" - "Very little" - "Somewhat changed leadership" - "I have an open style so it is easier to be transparent" - "Made me more sensitive to what parents and the community are thinking" - "more pro-active" - "I have been moved to be more thoughtful and deliberate in my decision making"	11	37.9%
Impact on time	- "my leadership team and [I] intentionally monitor social media for potential discordant issues" - "Has allowed me to spread my communication more easily" - "In the past you had more time to address… issues" - "Increasingly difficult to find enough time in the day to do all of the things that need to be done"	7	24.1%

Comments regarding the influence of social media and social networking on participants' leadership styles varied from "none" to "somewhat" to "a great deal". In three cases participants responded to the question by describing an actual degree of impact varying from little to no influence. In all other cases, participants described the influence more in terms of changing patterns of behavior rather than degree of influence. Examples of this included responses such as being "more proactive", "creates more urgency in sending messages and getting ahead of the curve", and "it effects my priority of community contacts".

As an additional layer of exploration in regards to the first guiding research question the researcher also examined for the potential relationship between the district type, as reported by participants, and the variables discussed previously. Three specific situations were examined: participant perspectives regarding the increased speed of information sharing, the decreased time for decision making, and the relationship with the amount that social media was used to oppose participant or district decisions. In all three cases both the Chi-Square and Pearson's R indicated a significant relationship did not exist. These results are displayed in the Tables 31, 32, and 33.

Table 33: Chi-Square Test and Pearson's R for District Type and Speed of Information Sharing			
	Value	df	Significance
Pearson Chi-Square	3.447	8	.903
Pearson's R	.212	N/A	.152
N of Valid Cases	28		

Table 34: Chi-Square Test and Pearson's R for District Type and Use of Social Media for Opposition			
	Value	df	Significance
Pearson Chi-Square	12.577	10	.248
.232	.155	N/A	.180
N of Valid Cases	35		

Table 35: Chi-Square Test and Pearson's R for District Type and Time for Decision Making			
	Value	df	Significance
Pearson Chi-Square	3.219	8	.920
Pearson's R	.155	N/A	.431
N of Valid Cases	47		

Research Question 2 – Impact on Communication Strategies

While the first research question examined how social media and social networking are impacting the decision making process of superintendents, the second guiding research question expanded on that questions by examining the processes used by superintendents to communicate their decisions. Therefore, the second guiding research question was designed to investigate the ways in which social networking and social media impact the communication strategies used by Superintendents. Table 36 outlines which questions on the survey sought to provide specific data to answer the second research.

As a part of investigating this question survey questions were designed to determine the perspectives of superintendents in regards to the uses of social media and the ways superintendents gather or dispense information to district staff and community members. In designing investigation, it was anticipated the presence of a significant relationship between a superintendent's use of a democratic leadership framework and their perceived effectiveness of using social media as a part of their communication strategy as well as their overall use of social media for communication. The researcher also anticipated that a district's enrollment would have a significant relationship to the superintendent's perceived pressure to use social media.

<u>Perception of the effectiveness of Social Media to provide information</u>

The first step in determining the degree to which social media and social networking may be influencing the communication strategies of superintendents was to determine participants' perception of the effectiveness of social media in communicating basic or complex information. Basic information was defined as items such as calendar events, weather delays, general news postings, and good news stories.

Table 36: Guiding Research Question #2 – How are social media and social networking impacting the communication strategies used by Superintendents?			
Variables or guiding questions	**Survey Questions involved**	**Method of Analysis**	**Measure of Analysis**
Superintendent's perception of the effectiveness of social media and social networking for providing basic information	Q12-A	Frequency distribution and descriptive analysis	Mean, Variance
Superintendent's perception of the effectiveness of social media and social networking for providing complex information	Q12-B	Frequency distribution and descriptive analysis	Mean, Variance
Superintendent's perception of the effectiveness of social media and social networking for receiving information from district staff and the community	Q13-A, Q13-B	Frequency distribution and descriptive analysis	Mean, Variance
Frequency and perception of superintendents in using various media to gathering input from district staff and the community	Q14-A, Q14-B, Q15	Frequency distribution, descriptive analysis, cross-tabulation, thematic review of open-ended response.	Mean, Variance, Chi-Square, Pearson's R, Thematic Coding
Frequency and perception of superintendents in using various media to dispense input from district staff and the community	Q16-A, Q16-B, Q17	Frequency distribution, descriptive analysis, cross-tabulation, Bivariate Correlation, thematic review of open-ended response.	Mean, Variance, Chi-Square, Pearson's R, one-tailed correlation test, Thematic Coding
Relationship between superintendent's use of social media/networking and perceived value of parent/community communication	Q14-A, Q14-B, Q16-A, Q16-B, Q21	Cross-tabulation, Bivariate Correlation	Chi-square, Pearson's R, one-tailed test of correlation
Relationship between district size and use of social media	Q2, Q12, Q13	Cross-tabulation	Chi-square, Pearson's R
Relationship between a superintendent's years of experience and comfort in using social media/networking	Q3, Q13-A, Q13-B, Q14-A, Q14-B, Q16-A, Q16-B,	Cross-tabulation	Chi-square, Pearson's R
Relationship Democratic leadership style and perceived effectiveness of social media as part of a communication strategy.	Q11, Q12-A, Q12-B	Bivariate Correlation	one-tailed test of correlation
Relationship Democratic leadership style and use of social media to dispense information to staff and the public.	Q11, Q16-A, B Items 4,5,8	Bivariate Correlation	one-tailed test of correlation
Relationship Democratic leadership style and use of social media to receive information from staff and the public.	Q11, Q14-A, B Items 5,6	Bivariate Correlation	one-tailed test of correlation

Complex information was defined by items such as student assignment issues, school bonds, new curriculum and other policy related topics. Tables 37 and 38 provide the results of these two questions. The total number of participant responses was forty eight. However; a possible answer choice for participants was "Do not Know". Those responses were removed from this analysis to focus on those participants had an existing notion of their perspective toward the effectives of social media in providing either basic or complex information. Removing the scores also allowed for consistency in examining other related questions which did not provide "Do Not Know" as an answer choice.

Table 37: Superintendent Perception of Social Media Tools to Provide Basic Information							
Tool	n	Mean	Standard Deviation	Not or Minimally Effective		Moderately or Highly Effective	
				Count	%	Count	%
Facebook	44	3.39	.813	7	15.9%	37	74.1%
Instagram	24	1.75	.737	20	83.3%	4	16.7%
YouTube	33	2.52	1.121	16	48.5%	17	52.5%
Twitter	40	3.20	.966	9	22.5%	31	77.5%
LinkedIn	29	1.72	.841	24	82.8%	5	17.2%
Texting	45	3.53	.757	3	6.7%	42	93.3%

Table 38: Superintendent Perception of Social Media Tools to Provide Complex Information							
Tool	n	Mean	Standard Deviation	Not or Minimally Effective		Moderately or Highly Effective	
				Count	%	Count	%
Facebook	39	2.64	.986	18	46.2%	21	53.8%
Instagram	24	1.42	.654	22	91.7%	2	8.3%
YouTube	32	2.25	1.047	18	56.3%	14	43.7%
Twitter	35	2.29	.860	22	62.9%	13	37.1%
LinkedIn	28	1.50	.793	25	89.3%	3	10.7%
Texting	37	2.41	1.066	22	59.5%	15	40.5%

Results from Table 37 demonstrate that Texting, Twitter, and Facebook are more often considered as moderately or highly effective than the other tools. This trend holds in

reviewing Table 38 which asked participants about these same tools when used to provide complex information. A greater number of participants indicated they did not know if these tools were effective in providing complex information, indicated by the smaller total "n" for each tool. So while the mean scores per each social media/networking tool increased when participants were asked about their use for complex information these results should be taken with caution due to the increased number of participants who responded "do not know". A more reliable measure may be examining the percentage of participant who reported each tool as being moderately or high effective. In this view all of the listed tools dropped in their perceived effectiveness.

A possible relationship between participants' perceptions toward using social media and social networking for basic or complex information was also examined. Eighteen of the participants provided information to both questions. Table 39 demonstrates the results. Due to the Chi-square having a high number of degrees of freedom, and because 100% of the cells have a count less than 5, the p-value of 0.020 for reporting significance should be interpreted with caution. The Pearson's R reported a slight correlation of 0.371 and a significance level of 0.130 indicating a possible relationship between how participants perceived the use of social media to provide basic and complex information. Together these two tests demonstrate a slight to possibly statistically significant relationship. Graph 1 demonstrates this general relationship.

Table 39: Chi-Square Test and Pearson's R for Relationship between Using Social Media to Provide Basic and Using Social Media to Provide Complex information			
	Value	df	Significance
Pearson Chi-Square	108.150	80	0.020
Pearson's R	.371	N/A	0.130
N of Valid Cases	18		

As an additional measure of investigation the researcher also examined for relationships between a superintendent's years of experience and their perception of these tools for providing basic and complex information as well as district size to the use of these tools in providing information. As Table 40 demonstrates, no statistically significant relationship was found using either the Chi-Square or Pearson's R method in regards to a relationship to a superintendent's experience. A relationship was also not established in regards to a district's enrollment and superintendent perception in the use of these tools as shown in Table 41.

Graph 1: Scatter Plot Comparing Social Media Use for Basic and Complex Information
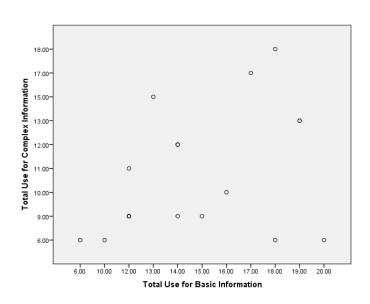
Table 40: Chi-Square Test and Pearson's R for Superintendent Experience and Using Social Media to Provide Basic or Complex information			
	Value	df	Significance
Pearson Chi-Square	27.562	27	.434
Pearson's R	-0.093	N/A	.714
N of Valid Cases	39		

Table 41: Chi-Square Test and Pearson's R for District Enrollment and Using Social Media to Provide Basic or Complex information			
	Value	df	Significance
Pearson Chi-Square	41.125	36	.256
Pearson's R	0.180	N/A	.475
N of Valid Cases	39		

Perception of the effectiveness of Social Media to receive information

The next step in examining the impact of social media and social networking on superintendent communication strategies was to investigate participants' perception of the effectiveness of social media and social networking as it relates to receiving information from district staff and community members. Table 42 reveals participant perceptions when information is received from district staff members.

Table 42: Superintendent Perception of Social Media Tools to Receive Information from District Staff							
Tool	n	Mean	Standard Deviation	Not or Minimally Effective		Moderately or Highly Effective	
				Count	%	Count	%
Facebook	46	2.07	.800	32	69.6%	14	30.4%
Instagram	44	1.45	.730	40	90.9%	4	9.1%
YouTube	46	1.63	.741	39	84.8%	7	15.2%
Twitter	46	2.09	.939	30	65.2%	15	34.8%
LinkedIn	46	1.50	.691	41	89.1%	5	10.9%
Texting	46	3.17	.877	8	17.4%	38	82.6%

In terms of receiving information from district staff members, participants perceived texting, Twitter and Facebook as the most effective means with texting being considered "moderately" or "highly effective" forty eight percentage points more than the next most effective. Texting was also the only social media tool that received a mean in the moderately

effective range. Facebook and Twitter were in the minimally effective range with Instagram,
YouTube and LinkedIn generally considered "Not effective at all".

The data displayed in Table 31 demonstrate a similar pattern in regards to receiving
information parents and community members. Facebook, texting and Twitter were again
perceived to be the most effective social media tools for receiving information. None of the
tools were considered to be "moderately effective" with texting and Facebook considered the
only tools that were between minimally to moderately effective. In comparison to receiving
information from district staff members, Facebook was the only tool that saw increases in
perceived effectiveness increasing with mean rising from 2.07 to 2.38 and the overall
moderate or highly effective from 30.4% to 47.2%

Table 43: Superintendent Perception of Social Media Tools to Receive Information from Parents and Community Members							
Tool	n	Mean	Standard Deviation	Not or Minimally Effective		Moderately or Highly Effective	
				Count	%	Count	%
Facebook	42	2.38	.987	23	54.8%	19	47.2%
Instagram	40	1.48	.679	38	95.0%	2	5.0%
YouTube	42	1.64	.759	37	88.1%	5	11.9%
Twitter	42	1.93	.921	32	76.2%	10	23.8%
LinkedIn	40	1.35	.533	39	97.5%	1	2.5%
Texting	42	2.55	1.017	24	54.8%	19	44.2%

The researcher did examine for the presence of a significant relationship between
district size as well as superintendent experience in regards to receiving information from
either district staff members or parents/community members. As Tables 44 and 45 show, in
neither case did the Chi-Square nor Pearson's R demonstrate the presence of a significant
relationship.

The researcher also conducted similar Chi-Square and Pearson's R tests examining the potential relationship between a district's size or a superintendent's experience in connection to receiving information from parents or community members. The results do not indicate a statistically significant relationship in either situation based on Chi-Square and Pearson's R tests.

Table 44: Chi-Square Test and Pearson's R for District Enrollment and Using Social Media to Receiving Information from District Staff			
	Value	df	Significance
Pearson Chi-Square	46.010	44	.389
Pearson's R	.137	N/A	.375
N of Valid Cases	39		

Table 45: Chi-Square Test and Pearson's R for Superintendent Experience and Using Social Media to Receiving Information from Parents			
	Value	df	Significance
Pearson Chi-Square	32.015	33	516
Pearson's R	.032	N/A	.205
N of Valid Cases	39		

As part of the investigation in examining the role of social media in relation to a superintendent's strategy for receiving information, the researcher hypothesized the use of a democratic leadership approach would have a significant positive statistical relationship with a greater use of social media to receive information. To test for this relationship the researcher totaled responses from items 4, 5 and 8 from within Question 14. These items asked participants to report their rate of use for three social media tools as a means for receiving information from staff and parents. This variable was then correlated to the participants' total value in regards to their self-reporting of their use of democratic leadership from Question11. Table 46 displays the results of the bivariate correlation which determined there was not a significant positive statistical relationship.

Table 46: Correlation between Use of Democratic Leadership Style and Social Media use for Receiving Information from Staff and Parents			
		Use of Democratic Leadership Style	Social Media to Receive Information
Use of Democratic Leadership Style	Pearson Correlation	1	.009
	Sig. (1-tailed)		.447
	N	46	46
Social Media to Receive Information	Pearson Correlation	.009	1
	Sig. (1-tailed)	.447	
	N	46	48

Frequency of Superintendents Use Social Media to Gather Input

Another element to examining the impact of social media and social networking on the communication strategies of superintendents was to determine the frequency with which superintendents use social media to gather input. To establish a degree of perspective on any influence or changes in communication practices superintendents were asked questions about their use of social media tools along with more traditional tools such as telephone surveys, paper-pencil surveys, PTA events and community meetings. In the question participants were given an "other" choice as a means of providing additional examples; however, in both the case of district staff members and parent communication, eighteen participants indicated it was "not used". Counting the results skewed the data analysis when attempting to compare to the remaining seven choices and as a result the researcher did not include those results. The researcher did include any open-ended comments from those participants when reviewing Question 15, which asked participants to provide information on any additional tools they may use.

Table 47 indicates participants relied on Facebook and Twitter the least of the given tools, with the exception of telephone surveys. However; over a quarter of the participants did indicate a moderate to heavy use of Facebook, and of the thirty one who indicated minimal or none, approximately half, fifteen , indicated at least some use. Similarly, thirteen of the thirty six participants who indicated minimal to no use of Twitter did respond they used it at least a minimal degree. Participants did not indicate any of the tools listed as being relied on heavily and only "online surveys" reached a mean score in the moderate range.

In contrast to the frequency of social media use with district staff members to gather information, participants reported greater use of Facebook and Twitter with parents and community members. Facebook and Twitter were tied for the third and fourth most relied on tools for gathering information from parents at 41.3% and 28.3% respectively. These percentages represented increases of seven percent for Facebook and five percent for Twitter. Participants also reported higher mean scores for the given tools with three tools (PTA events, online surveys, and community meetings) scoring in the moderate range. Facebook's mean score increased by 0.31 and Twitter's mean score increased by 0.17.

Table 47: Superintendent Frequency of Social Media Tools to Gather Input District Staff Members							
Tool	n	Mean	Standard Deviation	Not Used or Rely on it Minimally		Moderately or Heavily Relied	
				Count	%	Count	%
Telephone Surveys	47	1.60	.798	38	80.9%	9	19.1%
Community Meetings	47	2.66	.841	17	36.2%	30	63.8%
PTA Events	47	2.62	.874	18	38.3%	29	61.7%
Paper-Pencil Surveys	47	2.23	.786	30	63.8%	17	37.2%
Facebook	47	2.04	.908	31	66.0%	16	34.0%
Twitter	47	1.74	.820	36	76.6%	11	23.4%
Online Surveys	47	3.15	.932	9	19.1%	38	80.9%

Table 48: Superintendent Frequency of Social Media Tools to Gather Input Parents and Community Members							
Tool	n	Mean	Standard Deviation	Not Used or Rely on it Minimally		Moderately or Heavily Relied	
				Count	%	Count	%
Telephone Surveys	45	1.71	.843	34	53.3%	11	46.7%
Community Meetings	46	3.02	.683	35	76.1%	11	23.9%
PTA Events	46	3.17	.608	33	71.7%	13	28.3%
Paper-Pencil Surveys	46	2.35	.849	27	58.7%	19	41.3%
Facebook	46	2.35	.994	27	58.7%	19	41.3%
Twitter	46	1.91	.865	33	71.7%	13	28.3%
Online Surveys	46	3.09	.939	10	21.7%	36	78.2%

Participants who indicated using a tool for gathering input other than those listed in Question 14 were given an opportunity to specify those tools in Question 15. Nine of the participants responded with additional details. Four of the participants mentioned additional face-to-face settings such as Chamber of Commerce meetings, Economic Development

Councils, and one-on-one meetings with principals. Two participants mentioned using email as an additional technology related tool with two other participants mentioned programs able to send out mass telephone calls such as ConnectEd and AlertNow.

To further examine the influence of district enrollment or superintendent experience, cross-tabulations were run to test of the presence significant relationships in either case. In order to run these cross-tabulations the researcher created a scaled point value aligned to the frequency to which the social media tools listed, Facebook and Twitter, were used starting at one for "not used" up to four for "rely on heavily".

Table 49: Chi-Square Test and Pearson's R for District Enrollment and Using Social Media to Gather Information from District Staff			
	Value	df	Significance
Pearson Chi-Square	22.919	20	.293
Pearson's R	.374	N/A	.010
N of Valid Cases	47		

Table 50: Chi-Square Test and Pearson's R for District Enrollment and Using Social Media to Gather Information from Parents			
	Value	df	Significance
Pearson Chi-Square	24.378	24	.440
Pearson's R	.347	N/A	.018
N of Valid Cases	46		

As can be seen in Table 49 and 50, Chi-Square tests for significance both initially indicate no significant statistical relationship exists. However; in both cases there are a limited number of degrees of freedom and 100% of cells are below the expected value of five. Therefore the researcher also examined the Pearson's R for district enrollment. In examining district enrollment and gathering input from district staff, a significant relationship was noted with a value of 0.010. In regards to district enrollment and using social media to gather information from parents, Pearson's R results also indicated a significant relationship with a value of 0.018.

These same statistical tests were run in regards to determining a possible relationship between a participant's years of experience and the frequency with which they used social

media and social networking to gather information from district staff members or parents. In the case of superintendent experience there was not a significant relationship in connection with either gathering information from district staff nor parents and community members.

Table 51: Chi-Square Test and Pearson's R for Superintendent Experience and Using Social Media to Gather Information from District Staff			
	Value	df	Significance
Pearson Chi-Square	15.418	15	.422
Pearson's R	.236	N/A	.110
N of Valid Cases	47		

Table 52: Chi-Square Test and Pearson's R for Superintendent Experience and Using Social Media to Gather Information from Parents			
	Value	df	Significance
Pearson Chi-Square	21.626	18	.249
Pearson's R	.196	N/A	.193
N of Valid Cases	47		

Frequency Superintendents Use Social Media to Dispense Information

In addition to gathering information from district staff and parents, superintendent communication strategies also must account for the dispensing of information. This section will examine the various media tools, including social media, that participants reported using to dispense information to district staff members and parents.

Participants were asked to rate the degree to which they relied on using ten specific tools including several social media and social networking tools as well as traditional methods such as radio, television, newspapers, and face-to-face events. Participants were also given choices that included Facebook, Twitter, and YouTube as examples of social media and social networking options. Participants were given the option of selecting "other" as a way to solicit additional tools however participants only indicated "Not used" for that option. The result skewed data and as a result the researcher did not include "other" in the analysis.

Table 53: Superintendent Frequency of Social Media Tools to Dispense Information to District Staff Members							
Tool	n	Mean	Standard Deviation	Not Used or Rely on it Minimally		Moderately or Heavily Relied	
				Count	%	Count	%
Telephone Messages	46	3.65	.674	3	6.5%	43	93.5%
Community Meetings	46	2.63	.741	16	34.8%	30	65.2%
PTA Events	46	2.78	.941	16	34.8%	30	65.2%
Facebook	45	2.22	1.020	26	57.8%	19	42.2%
Twitter	46	1.83	.825	36	78.3%	10	21.7%
Radio	46	2.33	1.034	28	60.9%	18	39.1%
Television	46	2.09	.962	31	67.4%	15	32.6%
YouTube	46	1.54	.721	40	87.0%	6	13.0%
Newspaper	46	2.76	1.119	19	41.3%	27	58.7%
District Webpage	46	3.41	.909	7	15.2%	39	84.8%

Table 53 displays the results of participants responses in regards to the frequency with which they use given tools for dispensing information to district staff members, while Table 54 displays the same information except in regards to dispensing information to parents and staff members. In terms of dispensing information to district staff, social media and social networking tools were among the least used both in their mean and percentage of "moderately" or "heavily relied" upon. Facebook was the social media tool most often relied upon with 42.2% of participants relying on it "moderately" or "heavily" and a mean use of 2.22 placing it slightly above the "minimally relied" upon level. Facebook was higher than radio and television, as well as YouTube and Twitter.

Due to a decrease in the number of participants who responded to the question, when it came to dispensing information to parents, the mean and percentages are not exact in comparing results to dispensing information to district staff. When it came to dispensing

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information to parents and community members, participants rated all possible choices higher except for Radio, which declined by a one percentage point while radio's mean increased by 0.22. However; the overall trend was an increase in both the mean and rate of use for all tools including social media tools.

Facebook was the most commonly use social media tool and was sixth most relied upon overall. Facebook increased its mean by .33 and its rate of use increased by twelve percentage points. Twitter and YouTube also saw increases in their mean,.10 and .04 respectively, with percentage increases of 3.3% and 1.0%. Due to the smaller number of participant answers for this section, it is important to note that YouTube also saw a decrease in those not using it or only minimally using it from 40 with district staff to 27 in regards to parents. Twitter also saw a decrease in those "not" or only "minimally" using it from 36 to 33.

Table 54: Superintendent Frequency of Social Media Tools to Dispense Information to Parents and Community Members							
Tool	n	Mean	Standard Deviation	Not Used or Rely on it Minimally		Moderately or Heavily Relied	
				Count	%	Count	%
Telephone Messages	44	3.66	.568	2	4.5	42	95.5%
Community Meetings	44	2.91	.563	9	20.5%	35	79.5%
PTA Events	44	3.16	.645	6	13.6%	38	86.4%
Facebook	44	2.55	1.130	20	45.5%	24	54.5%
Twitter	44	1.93	.873	33	75.0%	11	25.0%
Radio	44	2.55	.926	23	52.3%	21	47.7%
Television	42	2.31	.975	26	61.9%	16	38.1%
YouTube	43	1.58	.794	27	86.0%	6	14.0%
Newspaper	43	3.07	.884	13	30.2%	30	69.8%
District Webpage	44	3.55	.663	4	9.1%	40	90.9%

Cross-tabulations were run to test of the presence significant relationships in terms of the influence of district enrollment or superintendent experience on how participants answered questions regarding the dispensing of information. In order to run these cross-tabulations the researcher provided a scaled point value aligned to the frequency to which the social media tools listed, Facebook Twitter and YouTube, were used starting at one for "not used" up to and four for "rely on heavily".

Table 55: Chi-Square Test and Pearson's R for Superintendent Experience and Using Social Media to Dispense Information to District Staff			
	Value	df	Significance
Pearson Chi-Square	25.676	21	.219
Pearson's R	.320	N/A	.032
N of Valid Cases	45		

Table 56: Chi-Square Test and Pearson's R for Superintendent Experience and Using Social Media to Dispense Information to Parents and Community			
	Value	df	Significance
Pearson Chi-Square	34.549	21	.032
Pearson's R	.291	N/A	.059
N of Valid Cases	45		

The Chi-Square tests in both cases have a small number of degrees of freedom and all cells contained less than the expected value of 5 and so there results must be interpreted with caution. Therefore the researcher also reviewed outcomes from the Pearson's R test. In the case of participant experience and using social media to dispense information, the Pearson's R did indicate a significant relationship and mild correlation with values of 0.032 and 0.32 respectively. In the case of using social media to dispense information to parents the results were not as clear. While the Chi-Square did indicate a "p-value" of 0.032, less than 0.05 threshold the Pearson's R was just slightly above the threshold at 0.059. The results indicate a possible, but not definite, statistically significant relationship.

The Chi-Square tests for examining the relationship between district enrollment and the use of social media for dispensing information to district staff members was far below the

required "p-value" of 0.05 as 0.005. Due to the low number of degrees of freedom and all

cells having less than the required value of 5, the Pearson's R was used as a comparison. In

this case the Pearson's R also showed a strong correlation and a statistical significance level

far below the required level with a result of 0.01 indicated in this case a strong relationship

between district enrollment and dispensing information to district staff using social media.

Table 57: Chi-Square Test and Pearson's R for District Enrollment and Using Social Media to Dispense Information to District Staff				Table 58: Chi-Square Test and Pearson's R for District Enrollment and Using Social Media to Dispense Information to Parents			
	Value	df	Significance		Value	df	Significance
Pearson Chi-Square	51.039	28	.005	Pearson Chi-Square	34.683	28	.179
Pearson's R	.497	N/A	.001	Pearson's R	.489	N/A	.001
N of Valid Cases	45			N of Valid Cases	45		

The Chi-Square test for examining district enrollment and using social media to

dispense information to parents did not achieve the required "p-value" of 0.05. However; due

to the low number of degrees of freedom and all cells having below the minimum required

value of 5 the Pearson's R was also calculated. In this case the Pearson's R demonstrated a

strong correlation and significance of 0.001 demonstrating a strong relationship between

district size and using social media to dispense information to parents and community

members.

An additional question was posed asking participants to describe how they determine

which communication tools, including social media, are used to dispense information.

Seventeen participants provided further information. Table 59 displays the results which

were reviewed by the researcher for themes that came from the response. The range of

responses is best exemplified with comments such as "We do not use social media tools at

the district level and highly discourage it among all staff. For all the good it could do, there

are some many arguments and nastiness produced… that it is worthless in my opinion" on

one end and others such as one who noted they use Facebook because "it is easy and free.

Most people have an account" and a similar response from another participant indicating

"Facebook, Twitter, and our district page are the three best methods we use."

Table 59: What determines which tools are used to dispsense information to either District Staff or Parents? (*Some participants mentioned more than 1 example*)			
Themes	Examples	No. of Instances	Percent of Response
The Message	- "depends on the nature of the information"	4	23.6%
The Audience	- "Depends on the audience" - "If the audience is a specific group of people, I would decide to use a automated phone message and send an email"	4	23.6%
Internet Access of Recipient	- "Over 40% of our county does not have high speed internet access" - "the available tools within the homes and community"	4	23.6%
Timeframe	- "depends on the urgency of the information" - "If I need to reach everyone quickly I will send an automated phone message…send out on Facebook and send out a tweet"	3	17.6%
Nature of the Tool	- What is effective in "light of safeguards and firewalls" - "Facebook, because it is easy and free" - "Whatever reaches the broadest audience"	3	17.6%

The second guiding question included a hypothesis that there would be a significant

positive statistical relationship between the participant's reporting of their use of a

democratic leadership style and their use of social media to dispense information. To

calculate this variable the researcher added the numerical value of participant responses to

Question 16 for items 4, 5, and 8. The values assigned began with zero for "never used" up to four for "rely on it heavily". The total for the new variable was then compared to the total self-reporting for each participant for their use of democratic leadership. The results displayed in Table 60 show there was not a significant positive statistical relationship between these variables.

Table 60: Correlation between Use of Democratic Leadership and Use of Social Media to Dispense information to Parents and Staff			
		Democratic Leadership	Use of Social Media to Dispense Information
Democratic Leadership	Pearson Correlation	1	.081
	Sig. (1-tailed)		.291
	N	48	48
Use of Social Media to Dispense Information	Pearson Correlation	.081	1
	Sig. (1-tailed)	.291	
	N	48	48

Relationship between Use of Social Media and Perceived Value of Communication

The final step in examining the impact of social media on the communication practices of superintendents was to investigate any relationship between the use of social media for communication purposes and the importance participants placed on various types of communication.

To accomplish this the researcher first combined the values for the degree of use for all social media tools in Questions 14 and 16 as they related to gathering and dispensing information for district staff members and separately for parents. Specific items were then pulled from Question 11, which asked participants to rate their agreement with various democratic leadership behaviors, and Question 21, which asked questions relative to

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participant perspectives about communication within the district. Table 61 outlines which

items were assigned to district staff member analysis versus parent and community members.

Some items were used in both categories.

Table 61: Items Used for District versus Parent Communication		
Question	District Staff Member Communication	Parent and Community Member Communication
Question 11	Items 7,8,14,17	Items 14, 17
Question 21	Items 1,2,6,7	Items 3,5,8

In examining both cases, neither the Chi-Square method nor the Pearson's R

calculated a significant relationship between the participants' reported agreement with

communication practices related to either district staff or parent and community members

and their use of social media.

Table 62: Chi-Square Test and Pearson's R for Parent communication practices in relation to social media use with Parents				Table 63: Chi-Square Test and Pearson's R for District communication practices in relation to social media use District Staff Members			
	Value	df	Significance		Value	df	Significance
Pearson Chi-Square	80.950	66	.102	Pearson Chi-Square	99.707	88	.185
Pearson's R	-.075	N/A	.639	Pearson's R	-.148	N/A	.338
N of Valid Cases	42			N of Valid Cases	44		

A final hypothesis, in regards to the relationship between social media and

participants' perceived value toward communication, was there would be a significant

positive relationship between participants reporting using social media and social networking

as part of the district's communication strategy and those who reported valuing

communication specifically with parents. To test this hypothesis a variable was created

which totaled participant responses from Question 14-B, Items 5 and 6, and Question 16-B,

Items 4, 5, and 8. These items specifically asked participants about their use of social media

to dispense or receive information from parents. This variable was then compared to a

variable examining Items 1, 3, 4, 5, and 8 from Question 21, which ask participants to report

the importance placed on various groups with whom they communicate. The results of the

bivariate correlation are shown in Table 64 no significant positive statistical relationship was

found

Table 64: Correlation between Use of Social Media and Value of Parent Communication			
		Use of Social Media	Value Placed on Parent Communication
Use of Social Media	Pearson Correlation	1	.020
	Sig. (1-tailed)		.447
	N	47	47
Value Placed on Parent Communication	Pearson Correlation	.020	1
	Sig. (1-tailed)	.447	
	N	47	48

Role of District Setting:

As part of the survey participants were asked to describe their district as either

"rural", "urban", or "suburban". The purpose was to provide another variable for examining

relationships between a district's setting and participants' perspectives toward social media

and communication strategies. To examine for any possible relationships the research

conducted cross-tabulations between district settings and the gathering and dispensing of

information using social media in connection with both district staff and parents.

In examining district setting to the gathering of information using social media,

Tables 65 and 61 detail the results. In both cases the Chi-Square degrees of freedom are low

along with 100% of cells having less than the expected value of 5. Therefore the results

should be interpreted with caution. The Pearson's R for district setting when connected to

gathering data from district staff members was calculated at 0.060, just above the required

0.05 for statistical significance. The relationship between district setting and gathering

information from parents and the community was significant with a value of 0.004.

Table 65: Chi-Square Test and Pearson's R for District Setting and Gathering Input from District Staff Members using Social Media			
	Value	df	Significance
Pearson Chi-Square	29.340	26	.296
Pearson's R	.277	N/A	.060
N of Valid Cases	47		

Table 66: Chi-Square Test and Pearson's R for District Setting and Gathering Input from Parents and Community Members Using Social Media			
	Value	df	Significance
Pearson Chi-Square	24.946	24	.409
Pearson's R	.425	N/A	.004
N of Valid Cases	45		

In terms of dispensing information to district staff and parents, the results indicate the

presence of a strong relationship between the district setting and gathering input from staff

members. While the Chi-Square degrees of freedom are low and 100% of cells had less than

the required value of 5, both the Chi-Square p-value and the Pearson's R had significance

levels below 0.05 with the Chi-Square p-value at 0.006 and the Pearson's R at 0.04. The

relationship between district size and dispensing information to parents and community

members was not at a statistically significant level, as both the Chi-Square p-value and

Pearson's R were above 0.05.

Table 67: Chi-Square Test and Pearson's R for District Setting and Dispensing Information Input to District Staff Members using Social Media			
	Value	df	Significance
Pearson Chi-Square	30.826	14	.006
Pearson's R	.307	N/A	.040
N of Valid Cases	45		

Table 68: Chi-Square Test and Pearson's R for District Setting and Dispensing Information Input to Parents and Community Members using Social Media			
	Value	df	Significance
Pearson Chi-Square	15.136	14	.369
Pearson's R	.298	N/A	.052
N of Valid Cases	43		

As part of investigating the overall approach of superintendents to the design and implementation of a communication strategy, the study began with the several hypotheses regarding a superintendent's communication strategy. One element to examining this larger picture was to test for the researcher's belief, based on existing research, there would be a statistically significant positive relationship between a superintendent's use of democratic leadership and the superintendent's reported perception in the effectiveness of social media as a part of their communication strategy. The researcher's hypothesis was the stronger a superintendent's reported use of a democratic leadership style the greater the perceived effectiveness of social media.

In order to calculate the bivariate correlation between these two variables the numerical values were added from the responses to both parts of Question 12 which asked participants about the effectiveness of social media to provide basic and complex information, and Question 13 which asked participants to rate the effectiveness of social media to receive information from staff or the parents and community. The values were combined to a single variable and then compared to participants reporting of their use of a democratic leadership style from Question 11. The results did not indicate a significant statistical relationship or a significant correlation.

An additional hypothesis was to examine the possible implication of district size. The researcher's hypothesis was there would be a significant positive statistical relationship between a district's size and the perception of superintendents toward the use social media as part of their communication strategy.

Table 69: Correlation between Use of Democratic Leadership and Perceived Effectiveness of Social Media as part of Communication Strategy			
		Democratic Leadership	Perceived Effectiveness of Social Media
Democratic Leadership	Pearson Correlation	1	.053
	Sig. (1-tailed)		.361
	N	48	48
Perceived Effectiveness of Social Media	Pearson Correlation	.053	1
	Sig. (1-tailed)	.361	
	N	48	48

To test this hypothesis the researcher combined participants' responses between Questions 18 and 19 to measure both the expectation for the speed of information sharing and the reduction in time to make decision. These totals were then compared against the range of responses in Question 2 which asked participants to indicate what the student enrollment was for their district. The results are displayed in Table 70, indicating there was not a significant statistical relationship, with a very slight positive correlation.

Table 70: Correlation between District Enrollment and Perceived Pressure to Use Social Media as a Part of District Communications			
		District Enrollment	Perceived Pressure
District Enrollment	Pearson Correlation	1	.166
	Sig. (1-tailed)		.133
	N	48	47
Perceived Pressure	Pearson Correlation	.166	1
	Sig. (1-tailed)	.133	
	N	47	47

Table 71: Correlation between District Enrollment and Perceived Pressure to Use Social Media as a Part of District Communications (Question 19 only)		District Enrollment	Perceived Pressure
District Enrollment	Pearson Correlation	1	.145
	Sig. (1-tailed)		.231
	N	48	28
Perceived Pressure	Pearson Correlation	.145	1
	Sig. (1-tailed)	.231	
	N	28	28

It is important to note that the researcher chose to combine Question 18 with Question 19; however, only twenty eight participants were able eligible to answer Question 18 as it was shown just to those participants with at least four years of experience. No significant positive statistical relationship was found when the researcher calculated the bivariate correlation examining just for Question 19 and district enrollment.

Table 72: Summary of Levels of Significance by Variables	
Variables Examined	Level of Significance
Use of Social Media for Providing Basic Information to Providing Complex Information	Statistically Significant
Superintendent Experience and Expectation for the Speed of Information Sharing	Statistically Significant
Superintendent Experience and Impact on Time for Decision Making	Statistically Significant
Social Networking/Media as a tool for Opposition and Expectation for the Speed of Information Sharing	Statistically Significant
District Enrollment to the Frequency of using Social Media to Gather Information from District Staff	Statistically Significant
District Enrollment to the Frequency of using Social Media to Receive Information from Parents	Statistically Significant
Superintendent Experience to the Frequency of using Social Media to Dispense Information to District Staff	Statistically Significant
Superintendent Experience to the Frequency of using Social Media to Dispense Information from Parents	Statistically Significant
District Enrollment to the Frequency of using Social Media to Dispense Information to District Staff	Statistically Significant
District Enrollment to the Frequency of using Social Media to Dispense Information from Parents	Statistically Significant
District Setting and Dispensing Information Input to District Staff Members using Social Media	Statistically Significant
District Enrollment and Impact on Time for Decision Making	Not Statistically Significant
Democratic Leadership in an Age of Social Media and Superintendent Professional Use of Social Media.	Not Statistically Significant
District Enrollment and Increased Expectation for the Speed of Information Sharing	Not Statistically Significant
Social Networking/Media as a tool for Opposition and Impact on Time for Decision Making	Not Statistically Significant
District Setting and Time for Decision Making	Not Statistically Significant
District Setting and Speed of Information Sharing	Not Statistically Significant
District Setting and Use of Social Media for Opposition	Not Statistically Significant
Superintendent Experience to the Use of Social Media to Provide Basic or Complex Information	Not Statistically Significant
District Enrollment to the Use of Social Media to Provide Basic or Complex Information	Not Statistically Significant
District Enrollment to the Perceived Effectives of Social Media to Receive Information from District Staff	Not Statistically Significant
Superintendent Experience to the Perceived Effectives of Social Media to Receive Information from District Staff	Not Statistically Significant
Superintendent Experience to the Frequency of using Social Media to Receive Information from District Staff	Not Statistically Significant
Superintendent Experience to the Frequency of using Social Media to Gather Information from Parents	Not Statistically Significant
Parent Communication Practices to the use of Social Media with Parents	Not Statistically Significant
District Communication Practices to the use of Social Media with District Staff Members	Not Statistically Significant
District Setting and Dispensing Information Input to Parents and Community Members using Social Media	Not Statistically Significant

Table 72: Summary of Levels of Significance by Hypotheses	
Hypotheses Examined	Significance
Social Networking/Media as a tool for Opposition and impact on leadership	Positive Statistical Significant
Personal use of Social Media and Professional use of Social Media	Positive Statistical Significant
Democratic Leadership and Perceived Effectiveness of Social Media as part of Communication Strategy	Not Statistically Significant
Democratic Leadership and use of Social Media to Dispense Information	Not Statistically Significant
Democratic Leadership and use of Social Media to Receive Information	Not Statistically Significant
Superintendent use of Social Media as part of Communication Plan and Value of Parent Communication	Not Statistically Significant
District Enrollment and Perceived Pressure to use Social Media	Not Statistically Significant

Conclusion

This research study began with two guiding research questions that sought to examine the ways in which social media and social networking may be impacting superintendent leadership and communication practices. Related to these guiding questions, the researcher had several hypotheses in regards to the use of a democratic leadership style and the use of social media, as well as expected relationships between variables such as; a superintendent's use of social media for personal reasons, district enrollment, encounters with social media as a form of opposition and a superintendent's use of social media as part of their professional duties.

Research Question #1 – Social Media and Superintendent Leadership

Two hypotheses related to the first research question were found to have significant positive statistical significance. The researcher expected to find a significant positive relationship between a participant's use of social media for personal reasons and their likelihood to use the same tools for professional purposes. A one-tailed bivariate correlation

found a p value of < 0.000 and a Pearson's correlation of .820. The researcher also found a

significant positive relationship between the degree to which a participant indicated social

media impacted their leadership decision making and the number of times the participant had

encountered social media being used to express opposition to a participant's or district's

decisions and policies. A one-tailed bivariate correlation found a p value of <.044 and a

positive Pearson's correlation of .927.

Additional areas found to have statistically significant relationships included the

connection between a superintendent's experience and the perceived increase for the speed

with which information should be shared as well as the decreased time for decision making

due to social media. Those superintendents that are likely to be older and have engaged with

social media to a smaller percentage of their career, either personally or professionally, are

likely to feel a greater impact than superintendents more accustomed to the workings of

social media. Additional evidence points to the two-way nature of social media and its

impact on superintendent leadership practices as evidenced by the statistically significant

relationship between the number of times a superintendent has encountered social media

being used to express opposition and the degree to which superintendents report social media

impacting their leadership. It is important to note that results did not find a statistically

significant relationship between the number of times a superintendent reported dealing with

social media as a tool for opposition and the reduction in time for decision making.

The data does not indicate that the district setting a superintendent works in (rural,

urban, suburban) has a statistically significant relationship to the degree with which social

media is impacting how superintendents feel toward the reduction in time for decision

making and the increased expectation for the speed of information sharing. The results also

indicated that district setting was not statistically significant in terms of the use of social media to oppose district or superintendent decision. Further, the data does not support a statistically significant relationship between district enrollment and the impact of social media on the reduction in time available for decision making and the speed of information sharing. Superintendents from all settings report reductions in time and increased speed for information sharing as a result of social media and social networking.

A final piece in researching the impact of social media on superintendent leadership and decision making was examining the role a democratic leadership approach might have in perceptions regarding social media. While democratic leadership was believed to be more likely effective in an age of social media and social networking, no statistically significant relationship was found between that belief and the actual use of social media for professional purposes.

Research Question #2 – Social Media and Superintendent Communication Practices

Several of the variables examined found statistically significant relationships regarding social media and superintendent communication strategies; however, none of the researcher's original hypotheses were found to have statistically significant positive relationships.

A statistically significant relationship was found between the degree to which superintendents perceived the effectives of social media to provide basic information with the perception it could provide complex information. Superintendent experience was found to have statistically significant relationships when connected to the frequency of using social media to dispense information to district staff and parents.

District enrollment had statistically significant relationships with the frequency with which superintendents used social media to gather information from district staff members as well as the frequency with which superintendents used social media to dispense information to staff and the parent community. District enrollment also was found to have a statistically significant relationship in regards to superintendent perceptions regarding the effectiveness of social media to receive information from parents. A final area in which a statistically significant relationship was found in examining the connection between a district's setting and the degree to which superintendents used social media to dispense information to district staff members.

The study started with several hypotheses related to superintendent communication strategies in relation to social media. Key among these was the expected connection between the use of a democratic leadership approach and the use of social media for communication practices. The researcher examined for evidence that a democratic leadership style would have a statistically significant positive relationship on the use of social media as a large part of an overall communication strategy as well as on the use of social media to dispense information and in the effectiveness of social media to receive information. In none of these cases was a statistically significant positive relationship found. Further, no statistically significant positive relationship between the use of social media as part of a communication plan and the reported value placed on parent communication was found. This does not indicate that superintendents who use social media do or do not value parent communication, but rather valuing parent communication did not by itself suggest an increased likelihood to use social media, as the researcher had expected to find.

The final hypothesis the researcher had expected to find related to a district's enrollment and a superintendent's perceived pressure to use social media. Here too, the researcher did not find a statistically significant positive relationship indicating whatever perceived pressure exists to use social media it was unrelated to the size of a district's enrollment.

A number of other possible variables related to district enrollment and superintendent experience were explored for any possible statistically significant relationships. District enrollment was examined for any statistically significant relationships with the use of social media to provide basic or complex information and the perceived effectiveness to receive information from district staff. In neither case was district enrollment found to have a statistically significant relationship. Superintendent experience was examined for any statistically significant relationship to the use of social media to provide basic or complex information, perceived effectives to receive information from staff or parents, and the frequency with which social media was used to gather information from parents. In all cases, a statistically significant relationship was not found to exist. The researcher also explored for any statistically significant relationship between a superintendents practices related to parent communication and their use of social media with parents and failed to find a statistically significant relationship. As a follow up to this, the researcher explored for any statistically significant relationship between a district's setting and the use of social media to dispense information to parents. No statistically significant relationship was found between those two variables.

The final topic explored was the possible relationship between a district's communication practices with staff members and the use of social media to communicate

with district staff. As was the case with parent communication and use of social media with parents, no statistically significant relationship was found between communication practices related to district staff and the use of social media.

Summary

This chapter reviewed the survey results in connection with the two questions that guided this research study; the impact of social media on superintendent decision making and superintendent communication practices. Table 64 details those areas where relationships were examined between specific variables and the results of those relationships. Given the frequency with which the Chi-Square analysis contained a limited number of degrees of freedom and 100% of cells did not contain the minimum expected value of 5, the Pearson's R was utilized as an alternative method for examining Likert scale data, which can often be interpreted as either categorical or continuous.

In addition to reviewing statistical significance the researcher also examined a thematic based approach to open-ended questions which asked participants to provide additional details on their perception of the impact of social media and social networking on their leadership and how they factored these tools in their communication strategies.

The following chapter will review the implications of this research study, limitations, and discuss further research possibilities.

Chapter 5

According to Amanda Ciccatelli (2014) "over the past decade, [organizational] governance has drastically changed with the rise of social media" (pp. 1) and social media can now allow leaders to communicate their goals directly, rather than just filtering them down through the ranks of management. This study was intended to examine how social media and social networking are impacting the way superintendents, as organizational leaders, make decisions and then use new technologies to communicate their decisions. This chapter will review the study and its outcomes as well as discussing the implications and areas for future research.

This research study was guided by two primary questions. The first was to examine the impact that social networking and social media may be having on the leadership decision making of superintendents. As a part of this, the study began with several hypotheses including the expectation that there would be a statistically significant positive relationship between the frequency a superintendent used social media for personal use and the frequency with which they used social media and social networking for professional uses. This question also sought to explore whether superintendents report an increase in the expectation for the amount of content and the speed with which information should be shared and whether the presence of social media and social networking has changed superintendent leadership practices.

The seconding guiding research question examined the impact social media and social networking have on the communication practices and strategies superintendents

employ in their district. As a part of this guiding question, several hypotheses were utilized at the start including the expectation there would be statistically significant positive relationship between a superintendent's use of a democratic leadership style and their use of social media and social networking to communicate with parents and staff members. This question also sought to understand how superintendents determine what information is shared using this new media and the perspectives superintendents hold toward social networking and social media as a significant element of their communication strategy.

The study utilized a conceptual framework built on the work of Philip Woods' description of democratic leadership and the North Carolina Superintendent's Evaluation Instrument. The use of democratic leadership as an element of the conceptual framework provided a lens to examining ways school leaders handle intensified work environment caused by the immense amount of information generated and shared in a society where social media and social networking have become a mainstream method of communication. The application of democratic leadership includes; the recognition that people need to participate in decision making, and therefore leaders must create means for deliberation, encourage shared and open access to knowledge, and accept the realities of modern social behavior. The North Carolina Superintendent's Evaluation Instrument builds upon Wood's work by providing a practical basis for examining the behaviors and beliefs of superintendents. The standards within the instrument provide a means to discussing the expectations that superintendents operate under and how they may incorporate the presence of social media and social networking in their decision making processes and approaches to their communication strategies.

The study took an exploratory approach using an online survey methodology employing both Likert scale and open-ended questions gathering data from participants regarding their districts, level of experience, personal use of social media, professional applications of social media, perspectives on democratic leadership and lastly their districts effectiveness at communicating with parents and staff. Prior to the release of the survey a pilot study was conducted as was a content validity review. Feedback from the content review and pilot study was used to make final adjustments prior to being released to one hundred and fourteen of the one hundred and fifteen North Carolina superintendents. The resulting survey data were analyzed using Cronbach's Alpha to measure the internal reliability of multi-item choice questions. Research questions and related hypotheses were examined using Pearson's Chi-Square, Pearson's R and one-tailed correlations. As the data were analyzed the researcher explored additional variables such as district enrollment, district setting, and superintendent years of experience.

The study has several limitations that must be accounted for when discussing implications and future potential areas for additional research. As the researcher chose to include the North Carolina Superintendent's Evaluation Instrument within the conceptual framework of the study, only superintendents in North Carolina were asked to participate. While school districts in North Carolina vary in size, socio-economic make-up, access to technology and ethnic make-up, all superintendents in North Carolina are bound by the same evaluation tool. As such, the perspectives and implications shared are largely shaped by the existence of this evaluation tool. If the study had been conducted elsewhere in the country it is possible that superintendents using different instruments would have felt compelled to implement certain leadership practices based on the instruments used in their districts/states.

A second limitation was the voluntary nature of participation. While participation did come from all district enrollment ranges and district settings, the rates were not exact to the breakdown for all North Carolina districts. Further, of the one hundred and fourteen superintendents sent the survey, fifty three responded to a majority of the survey with forty eight responding to the entire survey. The responses of these participants may not necessarily translate to the perspectives and actions of the remaining North Carolina superintendents or superintendents in other states. A final limitation was the sparse amount of research regarding the impact of how these tools are changing the leadership and decision making practices of superintendents.

Discussion

Democratic Leadership

Cox (2013) points out that social media and social networking represent the democratization of information, "transforming people from content readers to publishers" and these tools are shifting the conversation from "one to many, to a many to many" model (pp.8). It was for this reason the lens of democratic leadership was applied to the study. The results indicate that superintendents see themselves as democratic leaders and they believe that social media and social networking enhance the potential effectiveness of this type of leadership. Superintendents also report seeing their districts as largely maintaining two way communication practices with district staff, parents and the community through multiple methods or tools. However; no statistically significant relationships were found when examining for superintendent beliefs or perspectives towards their leadership practices and actual use of social media. So, while superintendents agreed that a democratic leadership

approach was likely to be more successful, this belief does not appear to be translating to

changes in behavior leading to an increase in the use of these tools.

A significant element of Woods' democratic leadership approach is the understanding

that communication must be a two-way process for there to be a true sharing of ideas and

ownership. Social media provides superintendents with an opportunity to connect directly

with stakeholders and increase relationships that enhance social and political capital

(Gonzalez, 2011), yet the results of this study indicate that even those superintendents who

are using social media within their professional duties are only doing so between once a

month and every two weeks. Further, when superintendents do use social media they are

generally doing so through one-way methods such as telephone surveys, district websites,

radio and the newspapers. Superintendents are doing so even though online platforms such as

Twitter and Facebook are taking the place of traditional news sources as the place where

people get news (Larkin, 2013). These forms of communication do not allow for an

interactive exchange of ideas. Superintendents appear to see themselves as democratic

leaders but preferring communication focused on basic types of communication such as

calendar events, weather, and general news. This trend was true with both external

communication and internal, with even less of a focus on communicating internally.

The general public is becoming accustomed to having the ability to interact with and

respond to school and district leaders (Cox, 2013). While this research does provide a

baseline to indicate what the current level of the application of these tools is among

superintendents, it is difficult to say to what degree school leaders have actually shifted their

communications and marking practices to staffs and community members as Cox (2013)

implies. Social media and social networking use were evident, but its frequency fell below all other more traditional means of communication.

  If in fact superintendents believe they are utilizing a democratic leadership approach then there should be evidence of open participation in decision making, means for deliberation, and open access to knowledge. While superintendents may be attempting these efforts through the use of telephone or online surveys, attending PTA meetings and community meetings unlike social media these tools do not allow for such democratic conversations. A key element of creating a means for participation and deliberation is the ability to gather and receive information from constituents in an on-going and unsolicited manner. No significant statistical relationship was found between the self-reported use of democratic leadership principles and using social media to gather or receive information from parents or staff. A majority or near majority of superintendents who responded to the survey reported that social media was minimally or not effective at all in receiving information and less than half used social media to gather information. There is a clear disconnect between the perception of social media's effectiveness within a democratic leadership framework and the actual use of social media as a means to create two-way information. Given the research showing communication with stakeholders is a crucial element to implementing and sustaining change within a district, the speed of social networking and social media requires superintendents to increasingly consider a more effective use of these tools and to use these tools proactively. (Decman, Badgett, Randall, Parmer, Sanchez, & Coryat, 2010, pp. 24).

"The surface area of social media is vast and is how to you communicate to your market, to your consumers, to your stakeholders and to the general public" (Ciccatelli, 2014, pp.1). Social media is one the signature forms of communication for much of the public and its use is growing across many age groups (Auer, 2011 Cox, 2013). The emergence of social media is forcing government and business leaders to alter how they market their products or ideas as well as how they communicate with or respond to customers (Norris & Porter, 2011, pp.70) and the increased engagement customers seek comes increasingly through the use of social media tools to share their positive and negative experiences in dealing with particular organizations (Cox, 2013, pp. 5).

Results of this survey indicate the speed of social media and social networking and the messaging packaged for these tools are something superintendents are struggling to comprehend. This study examined communication in terms of superintendents' perspectives toward using these tools for receiving and providing information, as well as how often they dispense and gather information using social media and social networking tools. The survey also examined for differences between how superintendents viewed communication with parents as compared with district staff members.

The results of this study make it clear that a majority of superintendents feel social media and social networking have significantly increased the speed with which they are expected to share information and decreased the time available to make decisions. Superintendents, like most organizational leaders, appear to have been caught off guard by these new mediums (Candace Deans, 2011) and were surprised by the speed of these trends. This was evident in some of the participant responses including those indicating they were

learning to manage the "faster and more extensive feedback" and "trying to anticipate and stay ahead" of online conversations.

However; it does not appear that superintendents are in turn using these tools to turn these tools to their own advantages. This study appears to confirm Gordon's (2012) conclusion that even as districts use technology as an integral part of enhancing classroom learning, social media's use as a means to communicate with constituents throughout the school community is still lacking (Gordon, 2012, pp. 59). Superintendents in this study report far greater use of traditional methods of communication (phone, websites, traditional media) when communicating with parents and staff. One cause for this may be that while 70% or more of superintendents reported perceiving social media and social networking being "moderately or highly effective" in regards to basic information, the numbers dropped by twenty percentage points or more when asked about their perceptions toward social media to provide complex information. This indicates that superintendents may have an "all or nothing" perspective on the use of social media to provide information.

This trend continues when looking at how superintendents perceive social media as a tool to receive information, with less than thirty five percent finding any social media tool "moderately or highly effective" in this regard. Texting was the only exception to this with 82.6% viewing it as "moderately or highly effective". This may be because texting is the most similar tool to email, a long establish form of electronic communication.

When it comes to the frequency of using social media or social networking to gather or dispense information, superintendents still greatly prefer using more traditional means of communication with both district staff and parents. Social media tools are among the lowest used tools in both contexts, placing as three of the four least used options out of ten. The

most frequently used social media tool for both gathering and dispensing information was Facebook.

Several aspects of the superintendency appear to play a significant impact with regard to use of social media to dispense information. In the case of superintendent experience and using social media to dispense information, the study did find a significant statistical relationship and mild correlation with values of 0.032 and 0.32 respectively. In the case of using social media to dispense information to parents the results were not as clear. An additional factor for superintendents when it came to dispensing information was the size of the district's enrollment. In the case of both parents and staff, significant statistical relationships were found in connection with enrollment, suggesting that the pressure related to communication in general with increased numbers of clients and stakeholders does put some pressure on superintendents to use social media or social networking tools to get information out.

Yet, even in this case, the focus appears to be on the giving of information and not receiving information. These results may speak to the realization, on the part of more experienced superintendents, about the importance of sharing information and ensuring people are aware of future organizational actions. However; it also indicates a continued preference for a one-way form of communicating, and dispensing information is one-way without requiring a reciprocal structure.

The survey also found differences in how superintendents reported communicating with parents when compared to district staff. In contrast to the frequency of social media use with district staff members to gather information, participants reported greater use of Facebook and Twitter with parents and community members. Facebook and Twitter were

tied for the third and fourth most relied on tools for gathering information from parents at 41.3% and 28.3% respectively and Facebook increased its mean by .33 while its rate of use increased by twelve percentage points when comparing its use between staff and parents.

The differences between staff and district communication, in terms of social media use, were further evident in the nature of the open-ended responses from superintendents. Only twelve responses were received when superintendents were asked to describe issues with district staff members and social media, while thirty one were received in regards to parent and community interactions. Superintendents provided greater emotional detail in speaking to situations involving parents who were perceived to have misused information, "destroyed" reputations, or spread false information. When superintendents were asked about the impact of social media on their leadership, the examples given again focused more on external situations with comments focused on having to sort through potential discordant issues, becoming more sensitive to parents, and being aware of how quickly things can spread. Those responses that were received in terms of communication with district staff were more likely to be those suggesting the districts attempt to restrict or discourage staff from using social media. This is occurring while the National Association of Elementary School Principals found district staff members are wishing for increased levels of communication and how essential these tools can be in creating an atmosphere in which all staff members feel valued, respected and part of a team. The qualitative and quantitative results seem to indicate that superintendents are more likely to view social media and social networking as a tool for external communication and not one for internal communication.

Standard 5 of the NC Superintendent's Evaluation Instrument states that superintendents are expected to utilize "various forms of formal and informal communication so that the focus of the school can be on improved student achievement" (pp. 15) as well as applying "a variety of media to communicate with all members of the community" (pp. 15) and lastly to anticipate "the information needs of the various community stakeholder groups and provides this information in a timely and effective manner" (pp. 15). Yet, as Stock (2009) reports superintendents may be among the least likely of K-12 educators to see the benefits of using social networking, blogging, or other social media tools. This study examined how superintendent leadership and decision making is being impacted by the presence of social media and social networking.

One of the most evident outcomes of this study was the connection between a superintendent's personal use of social media and their likelihood to use these tools for professional use. The Pearson Correlation between personal and professional use was calculated at .820 with a significance of .000. Clearly those superintendents who are comfortable with the use and application of social media and social networking on a personal note are finding ways to use these tools for professional purposes. While this is not an unexpected result, it does speak to the importance of school leaders being familiar with the tools at their disposal and why more traditional methods of communication may still be preferred even while the general public is increasingly using hand-held devices as a sign of the mobility available in accessing or generating information and opinions. (Venters, Green and Lopez, 2012, pp. 85).

The study also demonstrates that superintendents are encountering the public's use of social media and social networking to express their opinions regarding district or school decisions. Over fifty percent of superintendents who responded to the survey noted at least two or more incidents where they had knowledge of parents using social media to oppose their decisions. A statistically significant connection was also found between these experiences and the impact superintendents report social media is having on their leadership practices. The impact of these experiences appears to be connected to superintendents' perception of the increased expectations for the speed of information sharing. Superintendents participating in the survey spoke of the speed of social media impacting their leadership practices, the way they share information, the time available to make decisions, and the way their use their time. One superintendent noted social media has made it "increasingly difficult to find enough time in the day to do all the things that need to be done." These results indicate that when superintendents do discover social media or social networking are being used as a form of opposition it is causing them to change their leadership practices.

There was no statistically significant relationship between the number of times a superintendent dealt with social media as a tool for opposition and the perceived reduction in time to make decisions. It appears it is less important as to how many times a superintendent deals with social media in this context but rather their reaction when it does occur. Given that thirty five of the participants noted at least one incident with either parents or district staff, this appears to be a new reality for district leaders.

Participants described the influence of social media on their leadership in terms of changing patterns of behavior. Examples of this included responses such as being "more

proactive", creating "more urgency in sending messages and getting ahead of the curve", and affecting their priority of community contacts. Participants also described a need to stay ahead of information sharing, with one participant commenting that his leadership team monitors sites to look for potential controversy.

Additional areas found to have statistically significant relationships included the connection between a superintendent's experience and the perceived increase for the speed with which information should be shared as well as the decreased time for decision making due to social media. Given that district enrollment and district setting did not appear to have a significant statistical relationship to the time available for decision making and the speed of information sharing, it appears social media's impact on superintendent decision making is consistent across all settings and independent from these two variables.

Superintendents now lead in an environment where power is no longer positional, but shared due to the greatly expanded ability to access and spread information (Norris et al., 2011); however superintendents appear to fall into two distinct camps in regards to their perspectives toward social media and social networking. Some superintendents respond to questions regarding social media use with negative phrases such as "it creates more problems than it solves", and descriptive words including "misinformation", "rumors", "falsehoods" and "discordant". Yet, there are district leaders who reported that social media has made them more "transparent", "sensitive", and that it "allows us to tell our own story" and "share celebrations." Social media is clearly changing superintendent practices, even if as a result of negative opinions due to actual or perceived conflicts involving these tools.

Implications

Superintendents are working in a world where the decentralization of power and information caused by social media and social networking are impacting their approach to leadership, yet appear to be having only a limited impact on their communication practices. The results of this survey speak to several key implications for the superintendency and leadership practices including the importance and effectiveness of internal and external messaging, the ability of district leaders to advocate for needs of a district or the profession, and the training that superintendents undergo prior to taking leadership positions.

A common thread among superintendents, who did not use social media or social networking to a moderate or significant level, was the fear and concern about the negative or inflammatory outcomes. Certainly there are numerous examples of social media being used by superintendents with negative consequences; however the ability to use tools like Twitter for the advocacy of district needs or the needs of the profession cannot be overlooked. As one superintendent from Michigan put it in a recent article, "people can follow along and kind of see it through your eyes, which is pretty powerful… they understand what I do" (Higgins, 2014, pp.2). Another superintendent in the same article further explained the power of social media tools such as Twitter stating "some people haven't recognized the power of using it[Twitter] as a way to listen and get feedback, not just pump out your message" (Higgins, 2014, pp.2).

Advocacy and communication require a two-way method of communication. The current leadership practices identified in this survey still rely primarily on one-way methods of communication, even when social media or social networking is being used. If district leaders are going to be effective in crafting and distributing a message of the importance of

public schools then there must be a realization that messaging now is a two-way street. Superintendents will need practice, time for peer-to-peer conversations, and specific training in the strategic use and application of social media tools to gather and receive information in order to move from one-way communicative practices to two-way practices.

The North Carolina Superintendent's Evaluation Instrument provides multiple examples of the practices Woods put forth in terms of democratic leadership. Together they create a framework which provides reasons for the importance of multiple means of communication, participation in decision making, and the use of 21st century tools. Social media and social networking tools can provide a means to meeting these expectations and standards but the ability of current superintendents to use these tools appears to be limited in nature. While some superintendents are beginning to see the potential, most still see a limited role for these tools.

A final area of focus for this study was on actual leadership practices. The study demonstrates those superintendents that are comfortable with social media and social networking on a personal level are more likely to use these tools in the professional practices. Superintendents made it clear, through their responses, that the prevalence of social media and the access to information it provides their constituencies impacts the way they lead. Sometimes superintendents describe the impact as a negative, others perceive it as a potential positive, but all describe these tools as becoming a regular part of their professional world. However; superintendents are not as consistent in identifying if and how they are changing their own leadership practices. One noticeable implication of this study is that communication with district employees does not appear to be changing at nearly the rate communication with parents and the general community is. If superintendents are going to be

democratic leaders, the dispensing and gathering information must change both within and outside of the district organizational structure. This gap between superintendent self-perception and practice may catch superintendents being unable to respond when social media or social networking are used by others to create and broadcast messages, ideas, and opinions that run counter to a superintendent's daily decisions or longer term vision.

Ultimately, this study demonstrates that current superintendents do not appear to be using social media and social networking tools to develop the two-way communication practices that are going to be increasingly required. The disconnect, between superintendent use of social media and the public's use, has ramifications for future reform efforts, professional advocacy, and access to resources in an increasingly competitive environment pitting public schools against charter schools, virtual schools, home-schools grants, and private schools. Superintendent leadership now has to account for the fact that information can and will spread faster than they can control and if superintendents do not get to a place where they are comfortable using these tools to tell their story "someone else will and it might not be the story they'd want to be told" (Gordon, 2012, pp. 59).

Future Research

Research is needed in effective ways to design and provide currently serving superintendents the time, professional development, and practice needed to learn how to strategically apply these tools. An additional potential area of research would be in examining the perspectives of superintendents who are trained in Broad Academy or similar settings that rely on "business" practices to see if these superintendents are any more successful in their use of social media tools.

Additional research is also needed in determining how school boards and related governing bodies are applying the standards contained within the NC Superintendent's Evaluation Instrument. It is not clear to what degree those who are evaluating superintendents understand the meaning behind the standards outlined in the evaluation instrument, nor is it clear what expectations are being placed on superintendents. Without a real understanding of the intent behind the standards and what it is really meant by democratic leadership superintendents cannot be expected to alter their current practices to any large degree. It will also be important to learn more about how superintendents interpret the expectations put forth in evaluation, specifically in regards to the use of collaborative decision making and the utilization of 21st century tools.

Further research is needed across various states in order to examine for how regional differences may impact access to social media, cultural and social views toward social media, and regional expectations toward district leadership. Research across different states may also provide information in the leadership training programs and the possible presence of additional approaches to developing superintendent capacity for using social media and social networking.

One area this study did not greatly investigate is the overall process superintendents use to develop a communication strategy. Questions such as how each tool is utilized, why certain tools are chosen over others, what outcomes are intended with each tool, and whether there is a preconceived intention to generate one or two-way information would be helpful in determining how to help superintendents make greater use of social media and social networking. It is unclear from this research to what degree superintendents are aware of the growth and expansion of social media. It is also unclear if superintendents are aware of the

changes occurring, in terms of social behavior, that research indicates these tools are having. While district size and setting were not found to have statistically significant relationships with the impact superintendents reported social media having on their leadership, it may important for superintendents to receive this information tailored to their district so they can create district specific communication plans that account for the uniqueness of each district.

A final area for future research would be to examine the role of additional district level staff as it relates to implementing a strategic communication plan involving social media. Several other district level roles beyond superintendent often play key roles in gathering and dispensing information including Chief Technology Officers and Public Information Officers. This particular study focused on the involvement of superintendents in using social media and social networking; however, it did not examine the roles of additional personnel in potentially utilizing social media as part of a superintendent's communication strategy. An exploration of what a superintendent does directly with social media in comparison to what they direct others to do would serve in better understanding how communication strategies are created and applied. Evidence of how this happens may be especially helpful in creating additional supports for pre-service, new, or experienced superintendents.

Recommendations

Based on the results of this study the researcher puts forth the following recommendations in support of superintendents as they encounter increasing expectations for the use of social media and social networking.

1) <u>Superintendent Professional Development</u> – The research results from this study make it clear that superintendents are unaware of the rising societal expectations for two-way communication practices. Superintendents, both current and pre-service, need to learn, and be provided opportunities to practice, using social media tools to establish two-way communication practices. This training needs to acknowledge the fears and concerns that exist due to the often reported news stories relative to teachers or district officials. At the same time, superintendents cannot be left to themselves to identify and implement researched effective social media strategies.

2) <u>Technology Education</u> – Training today on Twitter, Facebook, Instagram or any other social media tools is likely to be ineffective or too late as these tools are constantly evolving. Current and pre-service superintendent training needs to focus on the why and how of creating two-way communication practices. While training in specific tools serves a valuable purpose, it limits the imagination and creative application of communication strategies that are necessarily designed for specific communities. Helping superintendents learn purposes and potential outcomes for two-way communication and how to process the various way to dispense and collect information is critical to helping superintendents incorporate current and future technologies.

3) <u>Superintendent Evaluation</u> – Superintendents overwhelmingly see themselves as democratic leaders, yet they are relying on communication tools and practices that no longer match the public's definition of democratic leadership. The two-way relationship that employees, parents, and the community now expect from private

business, government, and their school officials is the new definition of democratic participation. Additional conversations and training are needed for both superintendents, and those who supervise or evaluate them, to create a common language and set of expectations to describe what democratic leadership is and what measurable examples could be provided to support any rating given using the rubric within the NC Superintendent's Evaluation Instrument.

Conclusion

Social media and social networking have exploded in popularity in the past ten years. These tools provide their users with an increased capacity to access information, to dispense or forward on information to others, and a growing ability to create information. These technologies are changing the expectations of the general public for how they interact with organizations and organizational leaders. This study focused on how superintendents, as organizational leaders, are being affected by these new tools. The research specifically looked at the ways that superintendent leadership practices and their communication strategies were being impacted by social media and social networking. The study was conducted using a framework forged by the North Carolina Superintendent's Evaluation Instrument and the Democratic Leadership described by Philip Woods for educational leaders. Together these provided a description of democratic leadership and a rubric for how these principles should be applied by superintendents in North Carolina.

An online survey was utilized to gather data from superintendents across North Carolina seeking information regarding their perspectives and experiences with using, and responding, to social media and social networking with both district staff members and the

parent community. Results from the survey indicate superintendents are noticing a decrease in the time available to process information. At the same time, superintendents describe an increased expectation for the speed with which they must share information. However; the data indicates superintendents do not see social media or social networking as viable or reliable means for distributing and gathering information and are reluctant to use these tools as major pieces of their communication practices. Further, superintendents appear to be focusing on social media and social networking as a matter for external communication with parents, while attempting to limit its use by employees.

Current and future superintendents will need support in learning and applying the strategic capabilities of social media and social networking in order to take advantage of the benefits they offer. Being able to effectively craft, frame, and broadcast messages related to the near-term and future needs of a district has been an essential part of a superintendent's role. Social media and social networking have greatly increased the capacity to do that, and equally magnified the potential pitfalls.

References

Albion, Peter and Gutke, Hannah J. (2010) Successful succession through shared leadership: preparing a new generation of educational leaders. In: 2010 Sydney Symposium The Future of Teacher Education and School Leader Education: Creating the Vision, 26-29 Jul 2010, Sydney, Australia. (Unpublished)

Al-Momani, M. (2011). The Arab 'Youth Quake': Implications on Democratization and Stability. Middle Eastern Law & Governance, 3(1/2), 159-170. doi:10.1163/187633711X591521

Auer, M. R. (2011). The Policy Sciences of Social Media. Policy Studies Journal, 39(4), 709-736. doi:10.1111/j.1541-0072.2011.00428.x

Boyd, D. M., & Ellison, N. B. (2008). Social Network Sites: Definition, History, and Scholarship. Journal Of Computer-Mediated Communication, 13(1), 210-230. doi:10.1111/j.1083-6101.2007.00393.x

Brenner, J., & Smith A. (2013). 72% of Online Adults are Social Networking Site User. Retrieved from http://pewinternet.org/Reports/2013/social-networking-sites.aspx

Candace Deans, P. P. (2011). The Impact of Social Media on C-level. MIS Quarterly Executive, 10(4), 187-200.

Ciccatelli, Amanda (2014, May 8). How Social Media has Influenced Corporate Governance: Is social media an opportunity or a risk for business today? Retrieved from: http://www.insidecounsel.com/2014/05/08/how-social-media-has-influenced-corporate-governan

Clark, L., & Roberts, S. (2010). Employer's Use of Social Networking Sites: A Socially Irresponsible Practice. *Journal Of Business Ethics*, *95*(4), 507-525.

Cox, D. (2013). School communications 2.0: A social media strategy for k--12 principals and superintendents. Dissertation Abstracts International Section A, 73,

Creswell, John. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research 4th Ed.* University of Nebraska-Lincoln: Pearson

Davis, M. R. (2010). Social Networking Goes to School. *Education Digest*, *76*(3), 14.

Decman, J. M., Badgett, K. W., Randall, A. M., Parmer, R., Sanchez, J., & Coryat, D. (2010). Superintendent Practices and ISLLC Standard 1. AASA Journal Of Scholarship & Practice, 7(3), 16-36.

Dretzin, R. (Writer) & Dretzin R. & Maggio, J. (Directors). (2008). Growing Up On-line (Frontline) In R. Dretzin (Producer), Boston, Ma.: WBGH Boston

EdWeb.net, iESD, MCH Strategic Data, MMS Education. (2010) *School Principals and Social Networking in Education: Practices, Policies, and Realities in 2010*. Retrieved from http://www.edweb.net/fimages/op/PrincipalsandSocial NetworkingReport.pdf

Esposito, J. (2009). Social Media Connects Administrators. District Administration, 45(9), 22.

Facebook (2013) *Facebook Statistics*. Retrieved from www.facebook.com/press/ info.php ?statistics

Gall, M.D., Gall, J.P., & Borg, W.R. (2007). Educational Research: An introduction (8th ed.). Boston: Allyn and Bacon.

Gonzales, L. (2011). Leadership 2.0 Social media in advocacy. Leadership, 41(1), 18.

Gordon, D. (2012). Districts Create Community Connections with Social Media. Education Digest: Essential Readings Condensed For Quick Review, 78(3), 59-62.

Grill, H. (2011). Does Social Media Technology Promote Democracy?. New Presence: The Prague Journal Of Central European Affairs, 27-33.

Hartshorn, S. (2010, May 4). 5 Differences Between Social Media and Social Networking. *Social Media Today*. Retrieved from http://socialmediatoday.com/smc/194754

Higgins, Lori. (2014, October 28). Budgets, curriculum and… Twitter? *Detroit Free Press*. Retrieved from http://www.freep.com/story/news/local/michigan/2014/10/27 /michigan-superintendents-increasingly-tweet/17972851/

Hinson, M. D. (2012). Examining how social and emerging media have been used in public relations between 2006 and 2012: A longitudinal analysis. Public Relations Review.

History of YouTube (2013). In *Wikipedia*. Retrieved September 7, 2013 from http://en.wikipedia.org/wiki/History_of_YouTube

Hughes, Brad. (2010, April) Twittering in the hands of school leaders. School Administrator. Retrieved from http://www.aasa.org.libproxy.lib.unc.edu/SchoolAdministratorArticle .aspx?id=12884&terms=twittering+in+the+hands+of+school+leaders

Kaplan, L. (2013, August 19th). CEO's Must Embrace Social Media… Finally. West Virginia State Journal. Retrieved from: http://www.nonprofitquarterly.org/ policysocial-context/22767-ceos-must-embrace-social-media-finally.html

Kennedy, N., & Macko, M. (2009) Social Networking Privacy and Its Effects on Employment Opportunities. In Larsen K.R., & Voronovich, Z. (Eds.), *Convenient or Invasive – The Information Age* (pp. 111-123). Retrieved from http://www.ethicapublishing.com/inconvenientorinvasive/2CH12.pdf

Kremelberg, David (2011). Chapter 4: Pearson's *r*, Chi-square, t-Test, and ANOVA. In Sage Publications. *Practical Statistics: A Quick and Easy Guide to SPSS, Stata, and other Statistical Software*, (pp. 120-124), Retrieved from http://www.sagepub.com/upm-data/33663_Chapter4.pdf

Larkin, P. (2013). Tweeting the Good News. Educational Leadership, 70(7), 70. Retreived from http://www.ascd.org/publications/educational-leadership/apr13/vol70/num07/Tweeting-the-Good-News%E2%80%94and-Other-Ways-to-Use-Social-Media.aspx

Li, C. (2011). Book Reviews. Public Integrity, 13(3), 287-294. doi:10.2753/PIN1099-9922130308

LinkedIn (2013). *What is LinkedIn.* Retrieved from http://press.linkedin.com/

MacArthur, A (2013). The Real History of Twitter, In Brief. How the micro-messaging wars were won. Retrieved from http://twitter.about.com/od/Twitter-Basics/a/The-Real-History-Of-Twitter-In-Brief.htm

Marbella, Winston A. (2013, August 28th). Social Media: Where Hearbeats echo drumbeats. Retrieved from http://www.rappler.com/thought-leaders/37493-social-media-where-heartbeats-echo-drumbeats

Marshall, C. & Rossman , G.B. (2011) *Designing Qualitative Research 5th Ed.* California: Sage Publications

McREL & North Carolina Department of Public Instruction. (2010) North Carolina Superintendent Process. Retrieved http://www.ncpublicschools.org/docs/profdev/training/principal/ evaluationprocess.pdf

Norris, S. E., & Porter, T. H. (2011). The changing face of leadership: Making an impression in the technically mediated landscape. Journal Of Leadership Studies, 4(4), 69-73. doi:10.1002/jls.20199

Sayed, N. (2011). Towards the Egyptian Revolution: Activists' perceptions of social media for mobilization. Journal Of Arab & Muslim Media Research, 4(2&3), 273-298. doi:10.1386/jammr.4.2-3.273_1

SCHOOLS AND SOCIAL MEDIA: PASS OR FAIL. (2010). CRM Magazine, 14(11), 14-15.

Stock, M. J. (2009). Superintendent Blogging. School Administrator, 66(7), 10-16.

Takaragawa, S., & Carty, V. (2012). The 2008 U.S. Presidential Election and New Digital Technologies: Political Campaigns as Social Movements and the Significance of Collective Identity. Tamara Journal For Critical Organization Inquiry, 10(4), 73-89.

Venters, J. W., Green, M. T., & Lopez, D. M. (2012). SOCIAL MEDIA: A LEADERSHIP CHALLENGE. Business Studies Journal, 485-93.

Veil, S. R., Buehner, T., & Palenchar, M. J. (2011). A Work-In-Process Literature Review: Incorporating Social Media in Risk and Crisis Communication. Journal Of Contingencies & Crisis Management, 19(2), 110-122. doi:10.1111/j.1468-5973.2011.00639.x

Williamson, R., & Education Partnerships, I. (2012). Social Media for School Communication. Research into Practice. Education Partnerships, Inc,

Wright, D. K., & Hinson, M. D. (2009). An updated look at the impact of social media on public relations practice. Public Relations Journal, 3(2), 1-27.

Woods, P. A. (2005). *Democratic leadership in education*. London: Paul Chapman.

Appendix A
Email Recruitment and Consent Letter

Dear _____,

As a doctoral candidate at the University of North Carolina at Chapel Hill and an aspiring public school superintendent, I am inviting you to participate in an important study on North Carolina Superintendent Stress and Turnover. I am conducting this study for my dissertation under the supervision of Dr. Fenwick English, Professor of Education at the University of North Carolina at Chapel Hill. All public school superintendents in North Carolina are being invited to participate in this **anonymous** survey.

My research focuses on the impact social media and social networking tools are having on the superintendency. The survey seeks to gather your perspectives and experiences as a superintendent with social networking and social media tools such as Twitter or Facebook. The results will be used to analyze the impact of social networking/media on superintendent leadership and share innovative strategies for which superintendents are currently using these tools. It is my goal that this research helps shape the training of future school and district leaders. I would be glad to share the results of my research with you.

As a former principal and current central office administrator, I understand that your time is extremely valuable. The survey normally takes between **approximately 15 and 20 minutes** to complete. Participation in this study is voluntary, and the information you provide will be completely anonymous. The results will be reported only in aggregate form; survey responses are anonymous, so your name could never be associated with your responses. You can choose not to respond to questions you do not wish to answer and you can stop at any time.

I hope to include the responses from as many of the NC public school superintendents as possible and your input is important. I hope you are willing to spend a few minutes to complete the online survey.

If you have any questions about the research project or the survey itself, please feel free to contact me at caiken@chatham.k12.nc.us or (919) 548-9914. If you have any questions about your rights as a research participant, you may contact the University of North Carolina Institutional Review Board at (919) 966-3113 or at IRB_subjects@unc.edu and refer to IRB Study #13-3494.

Please use the link below to begin the survey. Responding to the survey will be considered your consent to participate.

Appendix B

District Leadership in the Age of Social Media and Social Networking – Survey Instrument

Q1 Please indicate which best describes your District:
- ○ Rural
- ○ Urban
- ○ Suburban

Q2 Please indicate the student enrollment of your district:
- ○ 500-2,000
- ○ 2,001-4,000
- ○ 4,001-8,000
- ○ 8,001-20,000
- ○ 20,001+

Q3 Please indicate the total number of years you have served as a superintendent:

Q4 To the best of your knowledge, please indicate to what degree Internet access is available for the community at the locations listed below within your district.

	Rarely available	Somewhat Available	Often Available
Student Home	○	○	○
Parent/Family workplace	○	○	○
Public libraries	○	○	○
Restaurants/coffee shops	○	○	○
other public gathering spaces	○	○	○

Q5 How often in the past year have you used any of the following social media or social networking tools in your personal life?

	Never	About Once a Month	About Every Two Weeks	About Every Week	Almost Daily	Multiple Times a Day
Twitter	○	○	○	○	○	○
YouTube	○	○	○	○	○	○
Facebook	○	○	○	○	○	○
Instagram	○	○	○	○	○	○
LinkedIn	○	○	○	○	○	○

Q6 How often do you use the following social media or social networking tools as part of your professional duties in your current position?

	Never	About Once a Month	About Every Two Weeks	About Once a Week	Almost Daily	Multiple Times A Day
Twitter	○	○	○	○	○	○
YouTube	○	○	○	○	○	○
Facebook	○	○	○	○	○	○
Instagram	○	○	○	○	○	○
LinkedIn	○	○	○	○	○	○

Q11 Please rate how strongly you agree or disagree with the following statements.

	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Collaboration among district leaders is important for effective decision making.	❍	❍	❍	❍
My leadership style is best described as a democratic.	❍	❍	❍	❍
A sense of community among district leaders is important for effective decision making.	❍	❍	❍	❍
Independence should be encouraged among district leaders.	❍	❍	❍	❍
Independence should be fostered among principals.	❍	❍	❍	❍
A sense of community among principals is important for district reform efforts.	❍	❍	❍	❍
Organizations are best structured when they are hierarchical in nature.	❍	❍	❍	❍
Participation is most effective when all participants speak with an equal voice regardless of position, title, or role.	❍	❍	❍	❍
Effective district leadership comes through inspiring cooperation, participation in decision making.	❍	❍	❍	❍
A democratic leadership style is likely to be more effective in an age of social media/networking.	❍	❍	❍	❍

Q7 To your knowledge, how many times has social media or social networking been used by staff in your district to express or organize opposition to a proposed policy?

❍ Never
❍ Once
❍ Twice
❍ Three or More

Q8 If you have experienced such a situation, please describe one instance including the nature of the policy, which social media/networking tools the staff used, how you became aware of the opposition and steps you took in response.

Q9 To your knowledge, how many times has social media or social networking been used by parents in your district to express or organize opposition to a proposed policy?

❍ Never
❍ Once
❍ Twice
❍ Three or More

Q10 If you have experienced such a situation, please describe one instance including the nature of the policy, which social media/networking tools the parents used, how you became aware of the opposition and steps you took in response.

Q12 From your experience as a superintendent, how effective is each of the social media/networking tools listed below as methods for basic information (weather delays, general good news, calendar events etc.) as well as providing information on more complex matters (student assignment issues, schools bonds, new curriculum or report cards etc.).

	Basic Information					Complex Information				
	Not Effective At All	Minimally Effective	Moderately Effective	Very Effective	Do Not Know	Not Effective At All	Minimally Effective	Moderately Effective	Very Effective	Do Not Know
Facebook	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Instagram	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
YouTube	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Twitter	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
LinkedIn	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Texting	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍

Q13 In your opinion, how effective is each of the social media/networking tools listed below as methods for receiving information from district staff members (teachers, teacher assistants, central office personnel, etc.) as well as parents/community members?

	District Staff Members				Parents and Community Members			
	Not Effective At All	Minimally Effective	Moderately Effective	Very Effective	Not Effective At All	Minimally Effective	Moderately Effective	Very Effective
Facebook	❍	❍	❍	❍	❍	❍	❍	❍
Instagram	❍	❍	❍	❍	❍	❍	❍	❍
YouTube	❍	❍	❍	❍	❍	❍	❍	❍
Twitter	❍	❍	❍	❍	❍	❍	❍	❍
LinkedIn	❍	❍	❍	❍	❍	❍	❍	❍
Texting	❍	❍	❍	❍	❍	❍	❍	❍

Q14 How frequently does your district rely on the following tools to gather input from district staff members (teachers, teacher assistants, central office personnel, etc.) as well as parents/community members?

	District Staff Members				Parents/Families/Community Members			
	Not Used	Rely On It Minimally	Rely On It A Moderate Amount	Rely On It Heavily	Not Used	Rely On It Minimally	Rely On It A Moderate Amount	Rely In It Heavily
Telephone Surveys	❍	❍	❍	❍	❍	❍	❍	❍
Community Meetings	❍	❍	❍	❍	❍	❍	❍	❍
PTA Events	❍	❍	❍	❍	❍	❍	❍	❍
Paper-Pencil Surveys	❍	❍	❍	❍	❍	❍	❍	❍
Posts to District Facebook pages	❍	❍	❍	❍	❍	❍	❍	❍
Tweets to District Twitter Feeds	❍	❍	❍	❍	❍	❍	❍	❍
On-line surveys (ex. Survey Monkey)	❍	❍	❍	❍	❍	❍	❍	❍
Other	❍	❍	❍	❍	❍	❍	❍	❍

Q15 If you indicated using a tool other than those listed above, please describe that tool here.

Q16 How frequently does your district rely on the following tools to dispense information from district staff members (teachers, teacher assistants, central office personnel, etc.) as well as parents/community members?

	District Staff Members				Parent/Families/Community Members			
	Not Used	Rely On It Minimally	Rely On It A Moderate Amount	Rely On It Heavily	Not Used	Rely On It Minimally	Rely On It A Moderate Amount	Rely On It Heavily
Telephone Messages	○	○	○	○	○	○	○	○
Community Meetings	○	○	○	○	○	○	○	○
PTA Events	○	○	○	○	○	○	○	○
Posts on District Facebook pages	○	○	○	○	○	○	○	○
Tweets from District Twitter Accounts	○	○	○	○	○	○	○	○
Radio	○	○	○	○	○	○	○	○
Television	○	○	○	○	○	○	○	○
YouTube Messages	○	○	○	○	○	○	○	○
Newspaper	○	○	○	○	○	○	○	○
Traditional District Web page(s)	○	○	○	○	○	○	○	○
Other	○	○	○	○	○	○	○	○

Q17 Please describe how you determine which communication tools, including social media/networking tools, you or the district use to dispense information?

Q18 With the rise Facebook, Twitter and similar tools in the past five years, to what degree has the expectation for the speed with which information is shared increased for you as a Superintendent? 0 to 4 with 4 being a significant increase and 0 being no difference.

❍ 0 - No Difference	❍ 1	❍ 2- Some Increase	❍ 3	❍ 4 - Significant Difference

Q19 To what degree has the speed with which social media and social networking spread information impacted the time you have to make decisions in responding to community, parent or staff concerns?

❍ 0 - No change	❍ 1	❍ 2 - Somewhat Less	❍ 3	❍ 4 - Significantly less time

Q20 Please describe what impact social media/networking tools have had on your leadership style.

Q21 Please rate how strongly you agree or disagree with the following statements as they relate to your district

	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
The district maintains clear, two-way communication with the community.	❍	❍	❍	❍
The district maintains clear, two-way communication with the schools.	❍	❍	❍	❍
The district successfully obtains the input of parents/guardian from under-represented groups.	❍	❍	❍	❍
The district values the input of parents/guardian from under-represented groups.	❍	❍	❍	❍
The district utilizes multiple methods for communicating with parents/guardians.	❍	❍	❍	❍
The district utilizes multiple methods for communicating with staff members.	❍	❍	❍	❍
Eliminating barriers to parent participation is an emphasis for schools.	❍	❍	❍	❍
Eliminating barriers to participation by staff members is an emphasis for schools.	❍	❍	❍	❍