ABSTRACT

Title of Dissertation:

HOW SCHOOL PRINCIPALS USE TWITTER TO SUPPORT LEADERSHIP PRACTICES: A MIXED METHODS DESIGN

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In the past ten years, Internet-based communication mediums have eclipsed print and television media. Digital communications allow for information to be shared rapidly, in real-time, and with little mediation. The pervasive integration of digital platforms has changed the values, norms, and expectations of today's society. This has profound implications for how school leaders interact with all stakeholders.

School leaders are charged with executing three main roles: setting directions, developing organizations, and developing people (Leithwood & Riehl, 2003). Communication serves as a critical element that supports the effective execution of these roles. In a predominantly digital society, leaders may benefit from the integration of digital platforms to create a comprehensive communication profile. Despite a robust body of literature on leadership practices, there is little research on how K-12 school principals are using digital communication platforms to execute leadership roles and responsibilities. This study contributes to the literature by exploring how school leaders are using the popular digital platform Twitter.

This research employed a sequential mixed methods design, utilizing both descriptive quantitative data and interview qualitative data to answer the question "who" is tweeting and explore the deeper questions of "why" and "how" school leaders use Twitter. This study moved through six phases with prior phases informing subsequent phases to construct a comprehensive profile of Twitter use and leadership practices. This research demonstrates that school principals primarily use Twitter as a promotional tool to excite and engage an expanded stakeholder base around a common vision. Both informational and promotional tweets served to build relationships, provide information, and satiate the intense informational needs of an expanded stakeholder base, now firmly situated in the digital generation. School leaders used Twitter to project information that serves to support their leadership roles of setting a vision and developing an organization. To a lesser extent, they used Twitter to consume and collect information that supports their leadership role of developing people.

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by

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Chapter 1

Introduction

In August of 2012, a young up-and-coming superintendent was appointed leader of a large public school system on the east coast. This leader, part of the "digital generation," quickly took to Twitter and other digital communication platforms. The young leader overhauled the digital information system for the entire district, bringing one-to-one devices to students and digitalizing the curriculum. Over the course of five years, this superintendent digitalized both communication and learning platforms within the system. These actions forced the district into the national spotlight with both acclaim and criticism. Some lauded the district and its superintendent for improving access to information and building globally competitive skills for students while others wrote scathing reports about the negative financial, social, emotional, and learning effects of these bold moves.

In the past ten years, Internet-based communication mediums have eclipsed print and television media. This has profound implications for how school leaders like this young superintendent and his school principals integrate digital mediums in both learning and leadership practices. Many leaders, like this superintendent, find it challenging to effectively merge new systems with existing structures. As the internal constituency of schools becomes younger and more deeply entrenched in the digital generation, external constituencies often remain skeptical and critical of the aggressive digitalization of traditional schooling. School leaders who find themselves situated between these two competing viewpoints must exercise excellent communication skills in an effort to bridge

divides, disseminate information, project a vision, and communicate with all stakeholders.

As superintendents around the country integrate digital technology, they have been both praised and criticized (Bennett, 2018; Clark, 2017; McCausland, 2018); at the same time, the national conversation has largely ignored how school principals are making sense of how this digital integration impacts their communication roles and responsibilities. It is therefore a ripe area of study to evaluate how school principals are incorporating digital communication platforms into a comprehensive communication profile in order to support school-based leadership roles and responsibilities. Given that 168 out of 173 schools in the district of study have a Twitter account and given that the superintendent of the school district was considered a trailblazer for digital communications, this suburban public school district provides a unique opportunity to study the social media communication patterns of school principals.

In order to gain a deeper understanding of why the integration of social media by school-based leaders should be evaluated and studied, the rest of this chapter will explore current communication mediums, demographics and values of the digitally oriented public, and implications of how these tools and publics impact the communication patterns of educational leaders. The chapter will close with an overview of my research that adds to a scant body of literature on how educational leaders integrate new communication mediums when disseminating information and communicating with the public.

The Current State of Communication

Communication between leaders and their public have changed over time, moving from highly mediated forms of communication such as newspapers and journals to completely unmediated forms of communication such as Twitter. The launch of newspapers allowed the public to receive information in regular intervals, often called news cycles. With the advent of the Internet, weekly, monthly, or quarterly news cycles have been condensed to daily and even minute-by-minute cycles. Further, the Internet has given birth to unmediated channels of communication. These channels utilize a weblike model of multi-way communications as opposed to the more traditional one-to-many mode of communication of print or television. These new forms of communication have changed the way the public consumes and interacts with news and information. It has also changed the way in which leaders gather and disseminate information (Moon & Hadley, 2013).

According to the Pew Research Center's Project for Excellence in Journalism, 39% of Americans access news information using mobile technology (Sasseen, Olmstead, & Mitchell, n.d). In response, news outlets are moving towards digital options, with over 250 publications today offering digital formats. Many print publications are moving to digital only formats, with *Newsweek Magazine* leading the movement by using a digital only format in 2013. Today, over 50% of Facebook users rely on Facebook for news information and comment on or repost news information (Sasseen et al., n.d).

In May 2017, Twitter logged over 330 million monthly active Twitter users and reported a total of over 1.3 billion Twitter accounts worldwide. Eighty-three percent

(83%) of world leaders are on Twitter, including past and current U.S. presidents. In January 2017, the United States inaugurated a new president whose preferred communication method is Twitter because he can communicate directly with the public without mediation by the mainstream media. In a world in which social media has become the primary source of news and entertainment, educational institutions are exploring social media forums, including Twitter, as part of a comprehensive media communications profile.

The Digital Generation

The Internet has not only changed the way leaders communicate with their public, it has also changed the rate and speed at which the public demands information. The instant gratification and speed at which the public can obtain information has resulted in an increased demand for new information at more rapid rates. Thirty-one percent (31%) of news stories from 1998 to 2002 were over a minute in length as compared to less than 20% in 2012. Over 50% of news stories in 2012 were less than 30 seconds long (Jurkowitz, Mitchell, Santhanam, Adams, Anderson, & Vogt, 2013.). Today's digital generation demands that information is presented through multiple social media forms to satiate the new demand for transparency and speed. The digital generation pervasively uses social media for communication and information seeking practices. This new digitalization has influenced the way leaders are expected to communicate with their stakeholders. The new mobile and digital society expects higher levels of transparency, vision, authenticity, and collaboration from leaders (Tapscott, 2009).

The digital age has brought a new level of transparency, speed, and fluency in information transmission between organizations and stakeholders (Worner, 2010). Greater access and interaction with information has changed the way organizations build relationships with their publics. Organizations, both for profit and nonprofit, have found success building relationships with their publics using Twitter and other social media websites (Briones, Kuch, Liu, & Jin, 2011; Smitko, 2012; Yang & Kang, 2009), largely because of the interactive and social nature of the tools (Men & Tsai, 2012). These social media tools allow organizations to provide faster service to the community, generate more media coverage, and build relationships with their publics (Briones et al., 2011; Tapscott, 2009). In addition, social media websites allow organizations to educate and communicate with a large stakeholder base (Waters, Burnett, Lamm & Lucas, 2009).

The pervasive integration of technology into the public's search for information has resulted in a reshaping of cultural values and societal norms. According to Dan Tapscott (2009), a leading researcher on the *digital generation* (which he coins the *net generation*), there are eight cultural norms of this generation: freedom, personalization, scrutiny, integrity and openness, integration of play and work, collaboration and relationships, speed, and innovation. This digitally oriented public desires instantaneous, constant, and transparent communication focused on innovation and collaboration.

This new digital generation permeates the education field. Today's parents, teachers, superintendents, students, and stakeholders are predominantly part of the "digital generation." Americans born after 1965 are part of a new digital generation defined as "aggressive communicators who are extremely media centered" (Tapscott, 2009, Gen X-The Baby Bust, para. 3). Those in the digital generation have grown up in

an era of information saturation and have an increased thirst for knowledge, an expectation for instantaneous communication, and a requirement of transparency in communication. The average age of parents of children attending K-12 schools is 30 to 48 years old (Mathews & Hamilton, 2002). Sixty-nine percent (69%) of teachers fall below 49 years of age and the number of young teachers increases each year as the rate of senior teachers declines (Feistritzer, 2011). The number of superintendents falling within the digital generation has grown by 50% in 10 years and is expected to continue to grow (Kowalski & American Association of School Administrators, 2011).

Changing Communication Expectations for Educational Leaders

As Leithwood and Reihl (2003) and Kowalski and the American Association of School Administrators (2011) illustrate, communication is the essence of educational leadership. The challenge for today's educational leader is how to communicate effectively in an increasing digital world and with publics that hold new information expectations precipitated by the digital age.

Given that the digital generation holds a new set of values and beliefs, school leaders must be able to reflect these values and beliefs in daily practice and incorporate these beliefs in a common vision. A school leader must move the public towards a common vision; they must "assist the community in creating a system of schools that is in line with community values and beliefs, and one in which the community becomes a part of the school and the school becomes a part of the community" (Edwards, 2006, p. 230). In addition, school leaders must be able to adopt the communication technologies and tools used by the majority of his or her public in order to be able to carry out the required complex roles and responsibilities of the position.

The current national education agenda requires that today's school leader expand accountability measures for both teachers and students, implement fiscally conservative policies, and bring technology and innovation to every classroom in a way that increases the global competitiveness of American students. School leaders must do so with limited resources and they must do so while collaborating with their public and leading their public towards a common vision. School leaders are expected to strike a delicate balance between the needs of the community and the responsibility to promote the values of a larger education community. In addition, school leaders are expected to fulfill the communication needs of the public by integrating multiple communication techniques in order to provide high volumes of transparent and instantaneous communication.

Many of today's school leaders are integrating new communication mediums, including social media, into daily communication practices (Day, 2013; Frazier, 2012; Satullo, 2013). School leaders are using social media to improve transparency, communicate with parents and students, provide information on daily practices, disseminate information quickly in a crisis, and project their leadership and educational philosophies to the public (Frazier, 2012; Satullo, 2013).

In an article published in the *School Administrator*, Josh Starr, former superintendent of Montgomery County Public Schools, was quoted as saying,

If I am visiting a school and see a powerful lesson or an effective teaching strategy, I can take a picture and send out a Tweet...It takes 30 seconds and not only lets people know I'm visiting schools, but gives them a glimpse into my educational philosophy and what I value in teaching and learning. (Frazier, 2012, p. 11).

Starr indicates that school leaders and publics should adopt Twitter because, "There is an important conversation happening about education right now, and much of it is happening on Twitter" (Frazier, 2012, p. 11). According to Starr, Twitter is an effective tool that can be used to disseminate personal reflections about leadership philosophies and values while also engaging others, informing the public, providing professional development suggestions to teachers, and reinforcing strong instructional practices.

Defining the Research Problem and Study

The digital era has caused a flattening of hierarchies, a reshaping of communication systems, a refocus on relationships, and a shift in public thinking and public behaviors (Tapscott, 2009). School leaders must meet complex and often competing needs of their constituents while simultaneously satisfying the needs of an information hungry public who subscribes to a set of newly emerging communication norms (Dixon, 2012; Gunther, McGowan, & Donegan, 2011; Porterfield & Carnes, 2012; Porterfield & Carnes, 2014).

The literature clearly outlines how school leaders today are charged with effectively implementing multiple roles simultaneously and how these roles require effective communication (e.g., see Bjork & Kowalski, 2011; Edwards, 2006; Kowalski, 2005; Leithwood & Reihl, 2003). However, there is scant literature on how school leaders are incorporating social media tools as part of that communication. There is little peer-reviewed research on the adoption of social media by school leaders.

The little research that has been conducted in the field on the use of Twitter demonstrates that social media adopters do so primarily to disseminate information (Aharoney, 2012), build relationships (Java, Song, Finin, & Tseng, 2007), share ideas and opinions (Gillen & Merchant, 2013; Jansen, Zhang, Sobel, & Chowdury, 2009; Java et al., 2007;), gather professional information (Zao & Rosson, 2009), and increase visibility in a social network (Zao & Rosson, 2009). Leaders have also used social media to disseminate information quickly in a crisis (Hughes & Palen, 2009), increase perceptions of transparency (Aharoney, 2012), strengthen corporate identity, gather information about the public, and strengthen public relations (Newland-Hill & White, 2000). Many leadership and education trade books indicate that by integrating social media into communication profiles, school leaders can more efficiently carry out their multiple roles and engage in positive public relations (Donovan, 2010; Ferriter, Ramsden & Sheninger, 2011; Worner, 2010). In May 2012, an article in Edutopia listed some of the reasons that school districts should be incorporating Twitter into daily practice. Major reasons included collaborating and communicating with the public, promoting life-long learner qualities, adapting to changing technologies, improving professional development, improving family involvement, and integrating the smaller school community into a larger global community.

While research suggests a broad possibility for how school leaders *may use* social media, it offers no definitive data on how school leaders *are using* social media in daily

practice. This study will use theories in organizational communication and school leadership to explore how school leaders are using social media.

Research Purposes

School leaders must engage in a process of communication with their public (Porterfield & Carnes, 2014, Gunther et al., 2011). In a world in which people increasingly prefer to receive information through online communication channels, school leaders are challenged to present a coherent and timely message within the confines of digital media restrictions. Twitter, as an example, restricted the user to posting information to 140 characters or less up until quite recently. Despite the extremely limited amount of information that can be shared on any one post, in 2013 Twitter became the "largest growing social platform on the planet" (Hedencrona, 2013, np). Given the increasing prevalence and use of Twitter as a means for leaders to share information with their publics, this study aims to describe how school leaders are incorporating Twitter in their daily communication practices.

Rationale for Selecting Twitter

Twitter has been selected as the social media communication tool to explore in this study because it is one of the top three social media platforms used today and one of the most popular platforms used by business (Beeholve, 2012). Further, it is the one of the only social media platforms used in the field of education in which school leaders communicate directly with their public without mediation. While Facebook and YouTube also offer unmediated communication, these sites are often co-managed by

other school employees. As such, it is impossible to identify true ownership of information posted on these forums.

Twitter posts allow the school leader to communicate in real-time with quick conversational statements. The stream of tweets that are prompted by the question "what's happening?" presents a picture of the school leader's thoughts, activities, attention, and actions throughout the course of the day and week. As such, it offers an unprecedented look into the largely unfiltered thoughts and behaviors of a school leader. Given that a pattern of posting is effective in developing an identity or brand, the pattern of posts by an educational leader on Twitter offers insight in the leadership practices and behaviors of the leader. Further, leaders who use Twitter have been rated higher in transformational leadership qualities and are viewed more positively by the public (Hwang, 2012).

In 2012, Eric Sheninger, a principal in New Jersey, published an article in *Education World* outlining his use of social media to build an organization brand. He wrote:

As a high school principal, one of the greatest benefits of using social media has been connecting with stakeholders by delivering real-time information on student achievements, staff innovations, athletic scores, meetings and important updates to our school Website. Additionally, the school has benefited from an impactful public relations platform by delivering news and content through tools that our students, parents, and community members use on a routine basis at home. This powerful combination has led to the establishment of a positive brand presence. (np)

While Mr. Sheninger does not speak specifically to Twitter use, he argues persuasively that social media can be an important platform from which to create a school brand, an identity with which to connect and mobilize students, parents, and community members.

Organizational leaders that have an online presence have also reported that social media enhances the positive image of the organization, promotes organizational transparency, provides feedback, and supports outreach to unique populations that have been previously unavailable (Aula, 2011; Rybalko & Seltzer, 2010; Strauss, Glassman, Shogan, & Smelcer, 2013). School leaders like Mr. Sheninger have demonstrated how to use social media to make their professional identities public, engage in self-promotion of their leadership brand, persuade others to take action, and connect their leadership identity with a larger professional field (Page, 2012). As a result, social media platforms like Twitter provides a powerful new platform from which school leaders can augment and leverage their leadership functions, especially those associated with effective communications with stakeholders.

Although digital and mobile mediums of communication are the preferred methods of communication in a newly digital society, many school leaders continue to lag behind the private sector in the adoption of these tools. While there are school leaders who are leading the way in the implementation of social media in their school systems, there is little to no research on how those in the vanguard are using social media to engage stakeholders and leverage their leadership. What are they tweeting and how are they using Twitter to support their leadership roles? These are the central questions for this research study.

Research Questions

The following research questions have been drawn from gaps in the literature and have the potential to inform theories within the fields of organizational communication and school leadership:

- Who uses Twitter? What are the patterns of Twitter usage by school principals and the schools they serve?
- What are school leaders communicating through Twitter? and
- Why are school leaders using Twitter? How do school leaders use Twitter to support the execution of their leadership roles and responsibilities?

By answering these questions, this research offers the potential to add important information to the current literature on how school leaders are navigating a digital society and integrating digital tools into daily leadership practices.

Significance

This study will add to existing scholarship related to communication practices and school leadership. Extensive research has been conducted on how organizations and leaders engage in public relations (Botan & Taylor, 2004; Dozier, Grunig & Grunig, 1995; Goffman, 1974; Grunig, 1992; Jahansoozi, 2007; Kupritz & Cowell, 2011; Ledingham & Bruning, 2000) but "scholars have paid little attention to online public relations research" (Ye & Ki, 2012, p. 412). Ye and Ki's (2012) research showed that in 2009 only 17 articles regarding online public relations had been published. While research has increased since that time, the populations that have been researched

generally have not included the field of education. A search using the Web of Science search engine found only one article (Cho, 2016) related to school principals use of social media. This article reviewed how principals were using social media for information consumption, not information dissemination. Kim and Weaver (2002) notes that most research regarding online public relations communications involves evaluating the medium itself and not the content or the effectiveness of these communications. Ye and Ki (2012) note that in their review of 115 articles, "researchers pointed to a need for more qualitative research" (p. 423) in order to provide more information regarding multiple perspectives and to research social networks as they impact "interactions between organizations and their publics" (p. 425).

The Internet, and more recently social media, are "central feature[s] of contemporary social life," thereby making these structures "ripe for study" (Marshall & Rossman, 2011, p. 25). While the number of trade books related to social media and school leadership is growing (Dixon, 2012; Porterfield & Carnes, 2012; Porterfield & Carnes, 2014), there is significantly less peer reviewed research on how school leaders are conceptualizing their use of social media. At the time of this research, an exhaustive search for peer-reviewed research was completed using the Web of Science search engine. A search using key terms such as "principal," "administrators," "school leaders," "Twitter," "social media," "online communications," "online public relations," "digital media," and "digital communications" revealed no evidence of peer-reviewed research regarding how school leaders are using social media in practice. Therefore, this study aims to add to the body of scholarship about leadership and communication within the fields of education and social media.

Organization of the Dissertation Research

This dissertation research is organized in six chapters. Chapter 1 provides a general context for the study along with an overview of the research problem, research questions, and significance of the study. Chapter 2 provides a framework for the study utilizing relevant research related to school-based leadership, communication, and social media. This framework informed the study on the role and associated behaviors of school leadership. Chapter 3 outlines the methodology for the study. Chapter 4 describes the findings for the quantitative phase of the research while Chapter 5 describes the qualitative findings. Chapter 6 provides a synthesis of the data along with limitations and implications for practice and research.

Summary

The pervasive adoption of social media by the public has changed the expectations and norms of communication for society. Public education institutions are situated firmly within the larger society and are therefore strongly impacted by these rapidly changing norms and expectations. There is little research on how this newly constructed digital generation and the associated communication demands are impacting school leadership practices. This study examined the research genres of leadership and communication practices in education. Given that there is little empirically reviewed research on social media use in education, I used a sequential mixed methods design to explore who is using Twitter in a K-12 public education setting and what those leaders

communicated through Twitter. Further, I explored why school leaders are using Twitter and how leaders are using Twitter to support leadership practices.

Chapter 2

Literature Review

As Americans continue to lag behind other countries in the areas of reading, science, and mathematics (National Center for Education Statistics, 2010), experts search for levers to push within the educational institution that will propel students forward. One of those levers is school leadership and the pivotal role of communications in leading successfully educational organizations. In the following sections, I discuss the growing recognition of the intersection between communications and effective leadership. Then I present an integrated conceptual framework that describes key leadership roles, practices, and behaviors drawn from the literature. I close the chapter with a brief discussion about social media, public relations, and communication to discuss the influences of a digital society in performing these role, practices, and behaviors.

Intersection of Leadership and Communications

In 2003 Leithwood and Riehl were commissioned by The American Education Research Association to complete a comprehensive evaluation of existing educational leadership literature in order to inform a task force entitled Developing Research on Educational Leadership. The researchers were tasked with exploring the literature to determine the roles of school leaders and to determine the impact, if any, of leadership on student outcomes. The results of this seminal meta-analysis were that school leadership was determined to be the second most influential factor on student outcomes, situated

closely behind teacher and curricular efficacy. This study, now a cornerstone of most educational leadership research, has been referenced in over 2,000 professional research articles. As part of the meta-analysis, Leithwood and Riehl defined three transformational leadership roles: setting a vision, developing organizations, and developing people. According to them, research shows that the effective execution of these roles has positive impacts on student achievement.

As Leithwood and Riehl were evaluating transformational leadership practices in education, Kouzes and Posner (1995) were researching transformational leadership practices in business. Kouzes and Posner studied over 75,000 leaders for 20 years and developed a set of leadership behaviors organized into five components: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart. Their research, similar to Leithwood's and Riehl's research, found that leaders set a vision and use a variety of strategies to strengthen individual and organizational competencies in order to fulfill the vision. Kouzes and Posner argue that while the context of leadership may change, these five components remain consistent. In 1995 they wrote about the launch of the internet as a major change in context for leaders. They penned,

with access to information only a keystroke away, power has shifted from those with titles to those with technology and the skills to use it. More than any other force, this power shift is responsible for the flattening of hierarchies and the movement of the center or organizational gravity away from the powerful boss to empowered people (p.xviii).

In the digital age, according to Kouzes and Posner, leaders can no longer rely on title or power; effective leaders are using communication and relationship building strategies to persuade, influence, and move others to action.

The importance of communication as a cornerstone of transformational leadership is echoed in the field of educational leadership research. Just one year after Leithwood and Riehl first published their meta-analysis for AERA, the Wallace Foundation commissioned a series of professional papers to explore the role of leadership in improving student outcomes. In the first publication of the series, Leithwood, Louis, Anderson and Walhlstrom (2004) wrote that,

Much of the success of district and school leaders in building high performance organizations (organizations which make significantly greater than-expected contributions to student learning) depends on how well these leaders interact with the larger social and organizational context in which they find themselves (p. 23).

At the same time, Bjork and Kowalski (2005) – lead researchers on the roles of school superintendents – were also identifying the critical importance of these social and organizational interactions. These researchers found that school leaders must interact with internal and external stakeholders in order to implement a vision, engage in professional development, persuade others to action, and present information; for this reason, they redefined *communication* from a skillset to a "pervasive role characterization" (Kowalski et al., 2011, p.11). All three sets of prominent researchers have identified the critical importance of communication as a foundation for the successful execution of all other leadership roles and responsibilities.

These researchers argue that communication is an essential function that supports the daily integration of all leadership roles, thereby, "gaining community support for change, providing an essential framework for information management, providing marketing programs, and keeping the public informed about education" (Bjork & Kowalski, 2005, p.13). In addition, communication is necessary to secure school funding (Worner, 2010), improve student achievement, change the school culture (Schein, 2004), and defend practices and achievement levels (Hoyle et al., 2005). "In schools," Bjork and Kowalski (2005) argue, "communication gives meaning to work and forges the perceptions of reality" (p. 13).

Despite the research that supports the importance of good communication for leadership, the body of literature related to school communication is scant. Amazon lists over 14,000 books on *leadership communication*; however, a similar keyword search for *school leader communication* identifies only 135 books of the 14,000 books directly related to communication in education. K-12 school leaders looking for scholarly work related to school leadership communication will find only 9 articles in the peer reviewed professional journal database Web of Science. As Porterfield and Carnes (2014) note, "School leaders have been slower than their colleagues in industry to take a look at [communication] issues" (p. xvi).

As noted above, leaders are charged with communicating within societal and organizational contexts. The advent of web-based and mobile technologies has dramatically changed the context within which leaders are communicating. Kouzes and Posner (1995) first identified this shift in reference to the launch of the internet. In *Grown Up Digital: How the Net Generation is Changing your World* (2009), Tapscott

outlines how the internet, mobile technology, and social media have given rise to a new set of societal norms and expectations; further, his research asserts that the communication demands of leaders have changed as the societal and organizational contexts have adapted to meet new digital demands. Most Americans today use the internet and personal/social media as their primary source of communication and information (Shearer & Gottfried, 2017).

Schools have traditionally lagged in the adoption of these new mediums due to differences in leadership philosophies as well as economic, legal, and technological constraints (Levin & Arafeh, 2002; Pacher, Bachmair, & Cook, 2010). This lag in adoption creates a divide between values and norms of schools and their stakeholders. In 2002, Internet and American Life Project commissioned The American Institutes for Research to explore the relationship between teen adoption of internet use and the integration of these technologies in school. The study found that students were eager and competent in adopting internet-based applications to support schoolwork; but they were frustrated by the lack of school integration of these technologies.

Students are not alone in their expectation of digital integration. The digital generation has been identified by Tapscott as those born after 1965. As such, today's parents, teachers, superintendents, students, and related publics are largely comprised of those falling within the digital generation. This shift in the population has implications for how school leaders are communicating given that individuals in digital generation are "aggressive communicators who are extremely media centered" (Tapscott, 2009, Gen X-The Baby Bust, para.3). The new digital society expects higher levels of transparency, vision, authenticity, and collaboration from leaders (Tapscott, 2009).

Although some seminal literature has illustrated the role of communication in educational leadership, there is little peer reviewed research on communication within the field of educational leadership at the K-12 level. There is even less peer reviewed research on how school leaders at the K-12 level are adapting communications to meet the changing norms, expectation and communication mediums of a digital society. This study enters the field of school leader communication research by exploring how K-12 school leaders use social media tools to communicate with stakeholders.

Integrated Conceptual Framework

In order to effectively inform this study, I integrate scholarship from the fields of organizational leadership, educational leadership, public relations, communications, and media. This study merges two conceptual frameworks of leadership by overlaying the educational *leadership roles* according to Leithwood and Riehl (2003) with effective *leadership practices* and *leadership behaviors* as defined by Kouzes and Posner (1995) in order to develop a comprehensive framework of roles, practices, and behaviors of effective school leaders (see Table 2.1). This conceptual framework was used to study the relationship between educational leadership and communication in a digital age. For example, using this framework, I ask questions like, to what extent do principals' Twitter practices and beliefs reflect the roles, practices and behaviors of effective leaders identified by the literature? How does it help them set a direction for their organization, develop their organization, and develop the people in their organization?

Leadership Roles	Leadership Practices	Leadership Behaviors
(Leithwood & Riehl, 2003)	(Kouzes & Posner, 1995)	(Kouzes & Posner, 1995)
Setting Directions	Inspire a Shared	• Envision the future by imagining exciting and ennobling possibilities.
	Vision	 Enlist others in a common vision by appealing to shared aspirations.
	Model the Way	• Clarifying values by finding your voice and affirming shared values.
		• Setting the example by aligning actions with shared values.
Developing an	Challenge the Process	 Search for opportunities by seizing the initiative and looking outward
Organization		for innovative ways to improve.
		• Experiment and take risks by constantly generating small wins and learning from experience.
Developing People	Encourage the Heart	• Recognize contributions by
		showing appreciation for individual excellence.
		• Celebrate the values and victories by creating a spirit of community.
	Enable Others to Act	• Foster collaboration by building trust and facilitating relationships.
		• Strengthen others by increasing self-determination and developing
		competence.

Table 2.1: The Roles, Practices, and Behaviors of Transformational School Leaders

Setting a Direction

Setting a direction, or vision, is almost always the first chapter in leadership books; the topics generally cover both setting and communicating a vision. Visioning is the process by which leaders set the direction or goal for an organization and then construct a pathway for the organization to follow in order to achieve that goal. *Setting a direction* is accomplished when leaders communicate with stakeholders to identify and articulate a vision that creates shared meanings, creates high performance expectations, fosters the acceptance of group goals, monitors organizational performance, and effectively communicates the vision (Leithwood & Riehl, 2003). At the onset, a vision appears to be merely a finish line; however, a successful vision is the creation of a future that has not yet been conceptualized by others. It is *inspiring the vision*, or creating the possibility of greatness, that serves to motivate and engage stakeholders (Mendez-Morse, 1993). A well-defined vision inspires and demands commitment from all stakeholders (Goleman, Boyatzis, & McKee, 2002; Kouzes & Pozner, 2012).

Leaders are charged with executing the complex tasks of creating a vision and inspiring others to act on a vision. Highly successful business leaders have three central themes when *inspiring a vision*: high performance standards, a caring attitude towards people, and a sense of uniqueness and pride (Kouzes & Posner, 2012). Communication is the key to developing, articulating, and implementing that vision (Bjork & Kowalksi, 2005; Edwards, 2006; Hoyle, Bjork, Collier, & Glass, 2005; Wilmore, 2008). This communication is more complex than selecting a message and medium; it is a relationship building process in which each stakeholder, including the leader, seeks to fully understand the values, needs, and strengths of each other. It is the process of co-constructing the three above mentioned central themes to *inspire a vision* and then distilling the information to create a concise and meaningful message (Kotter, 1996; Kouzes & Posner, 2012).

Once a co-constructed vision has been established, leaders *model the way* by "affirming the shared values of the group...and by aligning actions with the shared vision" (Kouzes & Posner, 2012, p.17). The visioning process can only occur if each

party informally agrees to enter a relationship and make compromises in order to move towards this co-constructed vision, or set of goals (Kouzes & Posner, 1995). Trust – the confidence in another person's or organization's actions, thoughts, and behaviors – is necessary in establishing this relationship (Covey, S.M.R, 2016; Sinek, S, 2014). Trust can help leaders achieve their goals by "creating opportunities for stakeholders to have a voice in decisions that affect them; communicating openly and honestly; and valuing and acting upon feedback" (Gunther et al., 2011, p. 16). As Kouzes and Posner note, a leader builds trust by *modeling the way* and ensuring that the leader's actions and initiatives are commensurate with the vision being communicated.

Trust doesn't happen through one communication; it is established by a pattern of small but consistent actions that align with a larger mission, vision, or identity (Jahansoozi, 2007). In other words, trust is formed when a leader consistently presents communications that aligns with intent and actions. According to Covey (2006), "As we move rapidly into an even more transparent interdependent global reality, trust is more career critical than it has ever been" (p. xxv). Small and consistent actions by a leader demonstrate the leader is *modeling the way*; they serve to reinforce the relationship, influence the actions of others, and celebrate movement towards the common vision. These actions create momentum and reinforce commitment to the shared vision (Kouzes & Posner, 2012).

Social media, therefore, presents unique opportunities and challenges for leaders to build trust. The rapid-fire, frequent communications offered by social media allows leaders to build a pattern of interactions that can build trust, reinforce the vision, influence others to action, and celebrate small wins in a condensed time frame. In

contrast, the transparency offered by social media also poses risks to leaders. Any perception of inconsistency between actions and words can be transmitted quickly by one person to many, thereby multiplying and amplifying the rate of trust erosion. "Unfortunately," Porterfield and Carnes (2014) note, "one of the most common barriers to developing and maintaining trust is ineffective communication" (p. ix).

How might social media and the communication expectations of a digital public influence a school leader's ability to *set a direction*? The public's pervasive integration of technology into daily life has resulted in a reshaping of many cultural values and societal norms. According to Tapscott (2009), the digital generation values freedom, personalization, scrutiny, integrity and openness, integration of play and work, collaboration and relationships, speed, and innovation. According to Tapscott's research, the digital generation does not want to be bound by time, geography, space, or hierarchy. This observation mirror's Kouzes and Posner's research about the impact of the internet on organizational structures. Both researchers found that the digital generation wants to have the openness to share ideas with little regard for organizational charts or precedent. This digitally oriented public desires instantaneous, constant, and transparent communication focused on innovation and collaboration.

To the extent that the digital generation holds a new set of values and beliefs, school leaders are charged with reflecting these values and beliefs in daily practice, incorporating these beliefs in a common vision, and communicating in accordance with these new values and norms. In addition, in order to effectively reach the public, school leaders may benefit from using communication technologies and tools used by the majority of his or her public in order to be able to carry out the complex roles and

responsibilities of the position. By encapsulating these values within the vision, and by *modeling the way* by using digital communication mediums preferred by the public, school leaders may be able to enhance their leadership practices (Kent & Taylor, 1998).

Educational stakeholders fall largely within the digital generation and have new communication needs that have eclipsed print and television media (Feistritzer, 2011; Kowalski et al., 2011). According to the Pew Research Center's Project for Excellence in Journalism, 39% of people access news information using mobile technology (Sasseen et al., n.d). Today, news outlets are moving towards digital options, with over 250 publications offering digital formats. Today's digital generation receives much of their information through digital and mobile formats. Selecting the appropriate communication medium is germane to the communication process; this new communication phenomenon poses new opportunities and challenges for school leaders.

Kouzes and Posner (2012) indicate that successful leaders carefully select the communication channels as well as the symbols and artifacts that will articulate and reinforce the vision. Social media has been proven to be a successful tool for moving the public towards a common vision; it has been found to have more influence – for good or bad – than traditional media on influencing the attitudes and behaviors of people (Bae & Lee, 2012; Thakeray, Neiger, Hanson, & McKenzie, 2008). Online social media sites may assist school leaders in the communication and relationship building process needed to create a common vision by "connect[ing] individuals and groups to the goals of producing, transferring, simplifying, and exchanging cultural norms, values and ideologies" (Gilpin, 2009; as stated in Smitko, 2012, p. 633). As such, social media may

be a powerful tool for today's educational leader in developing, transmitting, and executing a common vision – for *setting a direction*.

Developing an Organization

Effective leaders *develop an organization* by developing an innovative, risk taking, and adaptive culture. Leaders who effectively develop an organization *challenge the process* by searching for new opportunities and taking risks. Some of this role overlaps or is connected to the role of developing people; in both roles the leader seeks to strengthen the overall culture and climate. While *developing people* is about creating individual strengths of employees and stakeholders, *developing an organization* is about creating organizational hardiness – an organizational mindset that can weather setbacks and stress that will be encountered as the organization pushes the boundaries and takes risks.

Culture and climate surveys are popular in both private and public organizations because there is a full body of research demonstrating the strength of these tools in measuring the internal health of an organization (Harter, Schmidt, & Keyes, 2002; Walker & Smither, 1999). These studies have found a strong correlation between a positive culture and organizational outcomes (Harter, Schmidt, & Keyes, 2002; Kouzes & Posner, 2012). A healthy organizational culture encourages risk-taking, accountability, professional growth, and appreciation (Kouzes & Posner, 1995).

Effective leaders that develop a healthy organizational culture *challenge the process* by constantly seeking new opportunities and ideas. This includes seeking new talent, tapping into the existing strengths and ideas of stakeholders, creating an

organizational brand that exudes confidence and competence, and creating an internal climate that embraces risks and manages setbacks. Simon Sinek is a prominent marketing consultant, author, and presenter of the third most popular Ted Talk. In his latest book *Leaders Eat Last: Why Some Teams Pull it Together and Others Don't*, Sinek (2014) writes, "If certain conditions are met and the people inside an organization feel safe among each other, they will work together to achieve things none of them could have ever achieved alone" (p.15). To this end, effective leaders develop a culture in which collaboration, communication, and trust are the foundational supports for individual and organizational outcomes.

Challenging the process requires that leaders effectively communicate with internal and external stakeholders to bring resources, support, and new ideas to the school; therefore, *developing an organization* requires both internal and external communication that enhances organizational development (Leithwood & Riehl, 2003). In many ways, these same forms of communications also enhance a school leader's capacity to set direction and develop people, thereby developing organizational capacity.

In the past, school leaders have been charged with communicating with an internal public, including parents, students, and staff. This constituency was largely static and predictable. However, in the digital age, school leaders are expected to effectively communicate with an expanded stakeholder base, including business partners, community members, politicians, and other constituents who may or may not have a direct connection to the school (Bjork & Kowalski, 2005). This public is dynamic and flexible, shifting and changing depending on the information and engagement needs of

individuals (Grunig, 1984; Kent & Taylor, 1998). A shifting, and at times, passive public, poses both unique opportunities and challenges.

In an interview with the *Carroll County Times* (Clarke, E., 2015), Dr. Dallas Dance, Baltimore County Public School superintendent, noted that more than 60% of constituents paying taxes do not have school-age children. However, these constituents hold tremendous voting power when it comes to decision making about public education. While these latent publics are not actively engaged in the daily operation of schools, they wield both power and opportunity. It is therefore important for leaders to find new methods to not only communicate within the school house, but to extend communications to the surrounding public. Social media is alluring to many leaders because of its potential to reach new publics, including the latent public of taxpayers and other people who do not have access to traditional school communications (Aharoney, 2011; Kelleher & Sweetser, 2012; Taniguchi, 2011). Social media, therefore, has the potential to be a tool as leaders *develop organizations* and *challenge the process*.

Social media has also been shown to help leaders and organizations achieve positive branding and community outreach in a digital age (Briones et al., 2011; Ellison, Steinfield, & Lampe, 2007; Smitko, 2011). Part of the branding process is building a sense of trust and satisfaction that results in increased support and resources, both fiscal and non-fiscal (O'Neil, 2007). As an example, colleges using social media and websites to communicate with the public have higher rates of student retention and alumni giving (Gordon & Berhow, 2008). In other words, as leaders build their organizations, they need to build and communicate a positive brand that will bring support to the school; social media may be a tool in those efforts.

Many school leaders are currently utilizing social media to manage a public identity, engage in promotion of an organizational and professional brand, persuade others to action, and connect their personal identity with a larger professional field (Page, 2012). Leaders that have an online presence report that social media enhances the positive image of the organization, promotes organizational transparency, provides feedback, and supports outreach to unique population that have been previously unavailable (Aula, 2011; Strauss et al., 2013; Taniguchi, 2011). As such, social media holds the potential for school-based leaders to fulfill multiple communication needs within one platform.

Developing People

While *developing an organization* focuses on the collective group, *developing people* focuses on the development of individual stakeholders. Leaders cannot set a vision or move an organization forward without the support of individuals. When developing people, leaders do so by offering intellectual stimulation, providing individualized support, and providing appropriate behavioral models relevant to a person's role and responsibility (Leithwood & Riehl, 2003). *Developing people* is the process of providing education, feedback, modeling, support, opportunity, and recognition – *encouraging the heart* and *enabling others to act* (Kouzes & Posner, 2012).

People need encouragement and "emotional fuel" to move them forward. When leaders create a culture that celebrates victories, recognizes the individual contributions of employees, and shows appreciation for all stakeholders, they *encourage the heart*. According to Kouzes and Posner (2012), leaders who encourage the heart establish regular celebrations to build collaboration, appreciation, and encouragement. These leaders encourage the best performance in their employees because they expect the best and have a "deep abiding faith in their capacities" (p.276). "The expectations you hold as a leader," Kouzes and Posner write, "provide the framework into which people fit their own realities" (p.278). Therefore, a leader can influence how an employee thinks, feels, and acts based upon the way the leader communicates with the employee. To this end, social media has the potential to be a powerful communication tool to *encourage the heart* and influence employee outcomes.

Leaders who use social media to praise employees *encourage the heart* by providing public recognition to address the satisfaction needs of employees. In a study published in 2013, psychologists found that 83% of employees report that recognition for contributions is the most salient and desirable reward (Lipman, 2013). When social media is used to acknowledge employee contributions, it can also create a positive brand - both within and outside of an organization - and attract new, talented employees, thereby strengthening a pool of employee candidates. With a stronger selection of potential employees, leaders are able to build a higher quality workforce and enhance their organization's capacity (Kouzes & Posner, 2012). Consequently, social media has the potential to communicate a dual framework; one in which the employee views their role within the organization and one within which the organization is viewed by the general public. Favorable expectations communicated from the leader to the employee yields positive employee actions, which yields better organizational results, which yields a more positive public perception of the organization, which reinforces favorable expectations, and the cycle continues.

Feedback loops like the one described above to *encourage the heart* are also powerful tools when *enabling others to act*. Consistent and clear feedback loops rooted in trusting and positive relationships are critical to the growth of individuals and the growth of organizations as well (Kouzes & Posner, 2012). Leaders *enable others to act* when they develop the competence and self-determination of all stakeholders, foster collaboration, and increase self-determination (Kouzes & Posner, 2012). A school leader supports this critical feedback loop by effectively communicating knowledge and competence, articulating goals, motivating staff to implement and take appropriate action, providing timely performance feedback, and then communicating new information and expectations (Katz & Kahn, 1966; Northouse, 2004).

Feedback loops and associated outcomes can be enhanced through the appropriate selection of communication mediums (Kupritz, 2011). To this end, social media offers unique opportunities to create professional development feedback loops by providing information and feedback quickly, efficiently, and cheaply. In addition, social media has the potential to tap into the values of the digital society by allowing for professional collaboration across societal and organizational boundaries. Social media supports this collaboration by opening communication lines with other professionals at all levels of the system and across geographic boundaries (Takhteyev, Gruzd, & Wellman, 2012).

The potential for social media to support and enhance the feedback loops mentioned above have been identified in the literature by several prominent studies. Collins and Hide (2010) conducted a study of over 1,500 professors and scholars in the United Kingdom who use social media. The study concluded that scholars using social media had the highest levels of positive relationships with fellow researchers and

supporting institutions, which facilitated greater opportunities for scholarship. In another study by Koch, Gonzalez, and Leidner (2012), results showed that by implementing social media in workplace practices, employees had more positive views of the company while also having higher levels of engagement. In addition, employee turnover decreased, which created additional incentives to invest in developing current employees. Therefore, social media has the potential to amplify favorable expectations and outcomes of an individual, which yields improved organizational outcomes and brands, which in turn yields more favorable expectations and outcomes for both the individual and the organization.

Social media also has the potential to amplify efforts to *encourage the heart* by communicating individual recognition and a larger positive culture to a larger audience instantaneously. Bersin (2012) found that organizations that focus on building a pervasive culture of recognition had lower turnover rates and higher rates of productivity than other organizations. He determined that peer-to-peer recognition and recognition in public communications were consistent behaviors of high achieving organizations. The final point of the study was that individual recognition within these high achieving organizations aligned with the vision of the company; it incentivized actions that support the vision, cementing the vision in the internal culture of the organization while communicating the vision to external stakeholders. Social media, therefore, has the potential to help leaders simultaneously set a vision, develop an organization, and develop people.

Social Media: A Tool for Leaders as Communicators?

The effective and comprehensive communication profile of a leader utilizes a variety of communication tools including newsletters, emails, websites, media outlets, social media, face to face interactions, telephone communications, and other oral and print formats. Social media is increasingly the preferred method of communication for many situated within the digital society. It is also a fairly new phenomenon, especially to more traditional educational communication behaviors of school leaders. Effective use of social media has the opportunity to tap into the values of the digital public and to expand the stakeholder base if done well. It also has the potential to erode trust and create confusion if done poorly.

In today's digital age, in order to be an effective leader, it is not enough to simply communicate a message. Communication is inextricably intertwined with leadership in a more open, interactive environment. The speed and transparency of social media affords school leaders opportunities to increase the speed and frequency with which they communicate with stakeholders, thereby accelerating – at least potentially – the collaborative and relationship building process associated with effective leadership. Nonetheless, while educational organizations may be interested in incorporating social media in their practices, most are still failing to incorporate fully social media *to build relationships* (Waters et al., 2009).

One example of social media that has been used by some school leaders to develop productive relationships and people is Twitter. These leaders view Twitter as an effective tool to disseminate personal reflections of leadership philosophies and values

while also engaging others, informing the public, providing professional development suggestions to teachers, and reinforcing strong instructional practices (Frazier, 2011). In addition, Twitter, when used by other school leaders and teachers, allows professionals to communicate with leaders in the field and other prominent figures. It is not uncommon to tweet an author or leader in the field and receive a tweet back within minutes, bypassing communications directors, publicists, managers, secretaries, and other mediators. This level of intimacy and access to prominent leaders in the field is a new phenomenon promulgated by social media.

At the same time, the internet and social media, including Twitter, provides unfettered access to endless amounts of information with varying levels of credibility. It is a challenge for school leaders to ensure that employees seek credible professional development resources that are aligned with the school vision. In addition, due to the plethora of information that individuals can access through social media, roughly 20% of people report some form of "information overload" (Horrigan, 2016). Individuals can become so overwhelmed by both the massive volume of information and the conflicting nature of the information that they end up refusing to seek any type of information through digital sources. Due to the societal movement towards digitalization, information overload can seriously diminish the power of social media to positively influence employees and publics, so as to enhance organizational capacity to strive toward its vision.

While many studies have demonstrated the positive benefits for adopting social media, including Twitter, constraints have been noted also due to barriers associated with time, technology, policy, and privacy. The American Red Cross found that while using

social media tools provided significant benefits, it also required a lot of time to manage (Briones et al., 2011). Organizations also cited concerns with privacy and hacking as a reason to avoid social media adoption (Takhteyev et al., 2012). One of the main drawbacks of adopting social media in the field of education is that education technology within school systems and education policies addressing technology use have not supported the use social media by education employees (Ayris, 2009; Horwedel, 2006; Kirkup, 2010; Takhteyev et al., 2012).

Moreover, some scholars question the authenticity of interactions on social media. For example, most relationships on Twitter are not two-way. In fact, 78% of Twitter connections are one-way, indicating that most people who follow someone on Twitter are not experiencing a reciprocal relationship in the traditional sense (Kwak et al., 2010). Critics argue that this imbalance in reciprocal communications creates a one-way relationship of influence instead of co-constructed relationship for collaboration. Menzies and Newson (2007) challenge the assumption that the amount of interactions between the organization and the company increases or strengthens relationships between companies and publics. They found social media communication provided an increase in shallow connections across larger geographic areas, but a decrease in deeper, geographically close, relationships. In other words, while Twitter is identified as a social media platform that supports dialogic conversation, in practice very little dialogue is exchanged between participating parties (Reinhardt, Ebner, Beham, & Costa, 2009).

Counter arguments, however, suggest that a two-way or reciprocal relationship may not be necessary to build positive relationships based on trust and transparency (Ki & Hon, 2008). Although not explicitly linked to social media use by organizational

leaders, Grunig and Hunt (1984) identify four behavioral attributes associated with information exchanges between a stakeholder and an organization or leader: active, aware, latent, and nonpublic. In this application, an individual's level of interest and perception of the need to communicate impacts his/her level of communication and level of involvement in an exchange of information. Only when the person feels compelled to act does that person move from a latent or passive member of the public to an active member of the public. In other words, it may not be necessary for the exchange of information to be equal or the number of connections to be equal as long as the exchange of information meets the needs of each party.

Even when acting as a latent or passive participant in a communicative exchange, stakeholders continue to receive and interpret information. Communication leaders understand that although communication may not be fully reciprocal, the pattern of interactions has the power to build trust, transparency, and relationships. Further, social media has the potential to engage publics that may not otherwise be engaged in the learning environment, but, who nonetheless, may influence organizational goals (Honeycutt & Herring, 2009; Jansen et al., 2009). Done well, these communications have the potential to expand the stakeholder base of the school. Done poorly, these communications have the potential to compel passive or latent publics to transform into active publics in opposition of the leader or organization.

While there are many potential benefits and challenges of using social media as listed above, there remains little research on how educational leaders are actually integrating social media into their communication profiles. In addition, because the education sector lags behind the public sector in the adoption of social media, the

exploration of how early adopters are utilizing social media to support leadership activities offers potential insight into how social media can be appropriately adopted by more educational leaders. Such a study also may help us understand whether the use of social media by education leaders actually leverages the potential of the platform or merely is a thin shadow of the purported benefits.

Summary

Although school leaders lag behind the private sector in the use of social media, there is growing evidence that social media could be an important communications tool for school leaders. Social media adoption has been shown to improve public relations and organizational outcomes for educational organizations (Donovan, 2010; Ferriter et al., 2011; Worner, 2010), in part because social media allows school leaders to align their values and behaviors with their publics as well as to extend and engage their publics (Briones et al., 2011; Men & Tsai, 2012; Tapscott, 2009). School leaders have noted also how social media tools are being increasingly used to communicate and build relationships with their publics and the adoption of these practices improves organizational outcomes (Men & Tsai, 2012).

As reviewed so far, school leaders are immersed and operating within a fully digital society. As such, they must navigate a new set of societal norms and values, which influence their ability to fulfill three interrelated roles – setting direction, developing organizations, and developing people. The literature suggests that school leaders who understand the need to build trust, transparency, and relationships will be more successful in promoting the vision and goals of the school. Only when reflecting

and building upon the values of the internal and external stakeholders will leaders be able to align stakeholder interests and motivate most towards a common goal.

Effective communication is a core element of developing, projecting and executing a successful vision. Principals must assess the implementation of a vision and represent progress towards the goal. Principals must also ensure that all staff have the appropriate training needed in order to support the successful execution of the vision. All of these major roles of the principal require effective communication practices. The need for communication and information is so insatiable in today's society that the role of school leader has been transformed to that of a *chief communications leader*. Yet, there is little research on how school leaders navigate this new role and integrate new digital communication mediums into their daily leadership practices.

Chapter 3

Methods

This chapter outlines the methodology for the current study, which answered the following set of research questions:

- Who uses Twitter? What are the patterns of Twitter usage by school principals and the schools they serve?
- What are school leaders communicating through Twitter? and
- Why are school leaders using Twitter? How do school leaders use Twitter to support the execution of their leadership roles and responsibilities?

This research employs a sequential mixed methods design, utilizing both descriptive quantitative data and case study qualitative data in order to answer the question of "who" is tweeting and explore the deeper questions of "why" and "how" school leaders use Twitter (Yin, 2004).

This chapter begins by providing a rationale for site selection followed by a rationale for using a mixed methods design. Then I provide an overview of the study, which includes data collection techniques that have been used in the quantitative portion of the study. Next I outline the data collection techniques and analysis methods for the qualitative portion of the study. The chapter closes with a description of the quality checks that were used throughout this research.

Rationale for Site Selection

The district of study is a large public school district in the suburbs of a large urban city. The district includes roughly 170 schools, programs, and centers and employees over 18,000 people. Out of the approximately 112,000 students, 40% of the students are white and 39% are black. Hispanic and Asian students account for approximately 18% of the student population with a small diverse mixture rounding out the demographics of the remaining student population (3%). Approximately 45% of students are eligible for free and reduced-price meals, while 12% of students receive special education services. English Language Learners comprise 5% of the student population.

I chose a large public suburban school district as the site of study for several reasons. First, the district is large and encompasses a rich diversity in economic and racial/ethnic representation. Similar to the state in which it is located and the country as a whole, economic and racial/ethnic groups are not evenly distributed across the school system. While many schools serve a diversity of students, school communities vary in their economic and racial/ethnic composition. Second, there are approximately 170 school principals within the district. As a result, the district provides a diversity of organizational and community characteristics that might influence principals' use of Twitter. Third, and most salient, is that the district was led by a young superintendent with a strong focus on communication. During this superintendent's five-year tenure, the district's use of digital media, and social media in particular, exploded. A large proportion of leaders within the district followed this lead and also integrated social media in school level communication profiles. As such, this district offers a substantial sample of digital media leaders communicating with diverse communities of

stakeholders. Twitter has been chosen as the digital media to be studied in the research because it is the first social media platform that was adopted by the superintendent, and it is the platform that was most readily adopted by many of the school leaders within the district.

Rationale for a Mixed Methods Research Design

Educational leadership is a complex phenomenon that is situated within a larger societal context and impacted by the interpretations of leadership by individuals. This study focuses on how school leaders in a large, diverse, and fully digital school system are conceptualizing their roles as leaders and using new digital mediums to support and communicate their leadership responsibilities and philosophies. In order to fully understand this phenomenon, I executed an explanatory sequential mixed methods design (Cresswell, 2015). I opened my research by using quantitative data to understand the demographic and organizational patterns of Twitter use by school principals within this district. This data was used to identify a purposeful sample of principals who demonstrated the consistent integration of Twitter into their communication profiles. Next I analyzed a sample of the individual tweets posted by those principals. I then constructed a smaller sample of principals to participate in in-depth interviews about their use of Twitter. Finally, I integrated the results of the quantitative and qualitative data analyses to make generalizations to a larger population, discuss limitations, and propose potential areas of future study.

The integration of two research methodologies can be cumbersome and complex. However, a mixed methodology allows researchers to conduct a more thorough, multi-

dimensional exploration of phenomenon in order to "gain a deeper understanding of the phenomenon of interest" (Hanson, Cresswell, Clark, Peetska, & Cresswell, 2005, p. 224). To this end, I chose a mixed methodology for this research because it allows for a broad quantitative analysis of Twitter use in the district, which then I used to inform a more refined qualitative analysis of the personal experiences and reflections of individual school principals about their Twitter use. This set of analyses provided a deeper understanding of the statistical trends in the district, as well an in-depth understanding of Twitter use from the perspective of school leaders (Cresswell, 2015).

In this study, quantitative analyses provided a descriptive overview of the demographics and organizational characteristics of Twitter users in the school district. This information not only provided general patterns of usage (e.g., number of tweets), but it also provided insight into both individual school settings and the larger district setting within which school leaders are situated (e.g., elementary, middle and high school leaders). This information was used to identify a sample of adopters in the district that frequently use Twitter as part of their communication strategy. The quantitative analysis also provided contextual information helpful when exploring the nuances of environmental influences on school leaders' use of Twitter and how these influences impact their decision-making processes about the content and frequency of Tweets.

While quantitative statistics have the ability to stand alone, these findings were not sufficient to fully explain the phenomenon studied in this research – the questions about "why" and "how" school leaders use Twitter (Berg, 2009; Maxwell, 2005; Saldana, 2009). The quantitative statistics utilized in this study are strengthened and deepened, or, as Greene (2005) might argue *extended*, with the integration of qualitative measures. The

qualitative data provided a nuanced and contextualized exploration of the reasons behind the quantitative data patterns (Hallinger, 2011). Utilizing quantitative data alone would have limited the full exploration of how individual leaders are interpreting and implementing their role as a leader in a digital world (Hallinger & Heck, 2011; Hallinger & Murphy, 2005).

This study is primarily situated within leadership theory. As such, the qualitative portion of this study was necessary in order to inform the research as to *how* leaders are defining their roles and responsibilities within a newly digital world. While quantitative data provides the necessary contextual backdrop for the study, particularly about potential environmental influences that may impact the decision-making of leaders, it was insufficient to use quantitative methods alone to explore the intersection of leadership, communication, and digital media. Therefore, the qualitative portion of this research provided a deeper understanding of the quantitative data. Because both quantitative and qualitative methodologies were essential in order to appropriately answer the research questions put forth in this study, I describe my mixed methods design, using Creswell's (2015) terminology, as balanced. Each data stream played an important role in my investigation of Twitter use in the school district.

This mixed methods study began with an in-depth analysis of the quantitative data of school leaders and the schools they lead. This data was used to identify a set of school leaders who participated in the qualitative phase of the study. In addition, the patterns identified by the quantitative analysis informed data analysis of the qualitative portion of the study. The qualitative portion of the study provided a more finite analyses of leadership practices and Twitter use as a communication method (Yin, 2004). The study

concluded with an integration of data from both quantitative and qualitative streams in order to identify strengths and limitations of the current study and identify future areas of research. The following section provides a more in-depth overview of the study, including data collection methods and analysis techniques.

Overview of the Study

This study has six phases, as presented in Figure 3.1. The phases are mostly linear, with prior phases informing subsequent phases. The final phase of the study culminates with a comprehensive data analysis that integrates the data from both the quantitative and qualitative analyses to answer the research questions, evaluate the limitations of the study and make recommendations for future research.

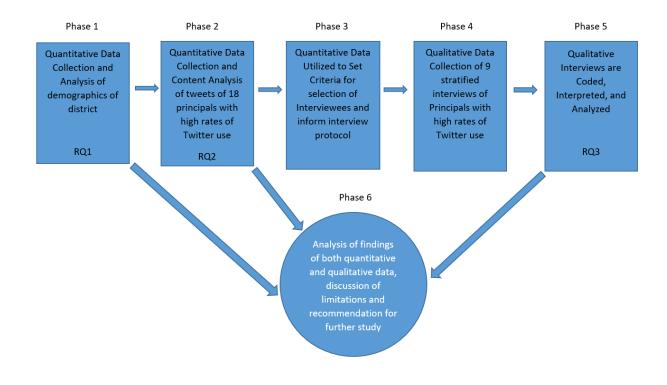


Figure 3.1 Map of Research Design and Phases

Phase One

In the first phase of the study I utilized descriptive statistics to evaluate demographic and organizational patterns of Twitter use by school principals. I organized the descriptive statistics by Twitter information, school information, and principal information. Although these analyses were preliminary, they answered, in part, the first research question, "Who uses Twitter?", and provided a framework for selecting a sample of participants for examining the content of Tweets and individual school leader's rationale for using Twitter.

In order to establish a comprehensive list of all schools and school principals, I used the district website. Demographic information on the website hyperlinks to the state's Department of Education website. I used these websites to collect school data regarding Title I eligibility and information about student enrollment.

Once I established a list of all schools and basic demographic information about each school, I matched these schools with corresponding Twitter accounts. In order to establish a credible and authentic list of Twitter accounts, I first identified school accounts currently being followed by the district's Chief Communications Officer. I also identified schools with accounts utilizing search features of both Twitter and Google. In order to identify minimal levels of usage, I reviewed the twitter profiles, followers of the account, and Twitter posts. Accounts that had little to no activity, followers that did not appear to be a typical distribution of students, parents, fellow schools, and district central offices were omitted. I then examined each account to determine if a) the Twitter account first and foremost represented the school and b) the Twitter account was managed primarily by the school principal. Such ownership and management were

necessary in order to ensure that the data collected reflected accurately the actions and potential insights of the principals being studied (Marshall & Rossman, 2011).

Out of the roughly 170 possible schools and centers in the district, I identified 145 schools as having active Twitter accounts owned by the school. Out of those schools, 64% (95 schools) were elementary schools; 18%, (27 schools) were middle schools; 17% (23 schools) were high schools. Upon further analysis, I determined that a much smaller portion of those accounts were managed solely by the principal. At the elementary school level, only 31 of the 95 schools, or 33%, were managed by the principal. At the middle school level, 14 of the 27 schools, or approximately 50% of the Twitter accounts, were managed by the principal. At the high school level, 11 out of 23 schools, or 47%, of Twitter accounts were managed by the principal.

Next, in order to establish a baseline of tweets necessary for sufficient study, I used several business studies to establish a criterion for usage (e.g., see Hibma, 2015; Nolou, 2014; Smith, 2015). Generally a minimum of 5-7 tweets per week (Nolou, 2014), or at least one tweet per day is considered consistent enough to create a social media presence to engage the public. I defined active adopters or pervasive Twitter users as school principals who averaged at least one tweet per day. I analyzed the data against this set of parameters for the second phase of the study. According to this analysis, 18 principals (n=18) could be identified as active adopters or pervasive Twitter users. Eight (8) were elementary school leaders, four (4) were middle school leaders and six (6) were high school leaders.

Phase Two

In this phase, I performed a general analysis from the 18 Twitter accounts identified by the first phase to answer the question, "What are school leaders communicating through Twitter?" According to Berg (2009), content analysis is a way of "listening to the words of the text and understanding better the perspective(s) of the producer of these words" (p. 343). Consistent with this philosophy, my analysis of tweets in this study offered insight into the leadership philosophies of the principals responsible for posting the tweets.

In order to gain a deeper understanding of these leadership philosophies, I examined the information being transmitted via Twitter by randomly selecting four tweets per month for twelve months for each of the qualifying 18 principals identified as pervasive Twitter users. The unit of analysis for this phase was each tweet produced by a principal. Retweets were included in the analysis because the messages represent information the principal deliberately selected to share with others. In addition, pictures, URL links, hashtags and tags that were included in the tweets were also evaluated to determine tweet themes.

A typical school year begins in September; however, I had to adjust the bounded year in this study due to the limitations of Twitter data access. Twitter archives up to 3,000 tweets. As a result of this limit, I adjusted the bounded year of study to accommodate the highest Twitter user (LE). The bounded year of student was determined by identifying a one-year time span that could accommodate the accurate capturing of a full year of tweets from this user.

A one-year data collection window allowed for tweets to be collected throughout an academic year. There is a natural ebb and flow of information throughout a school year. Some topics are more prevalent during certain times of the school year. As an example, principals may communicate more frequently about test preparation in the spring as students prepare for standardized testing or may tweet more about student achievements during graduation season; these messages may be less prevalent during other times of the school year. In order to prevent an unintended skew of data, four tweets per month were collected to provide a balanced sample of communication. Because online content has the ability to be altered, changed, or deleted, I collected and download all tweets for one year using an online service called Tweetology, www.tweetology.com.

The number of tweets per school for each month were totaled and recorded in Table 3.1 below.

	Nov	Dec	Jan	Feb	Ma	Apri	Ma	Jun	Jul	Au	Sep	Oct
					r	1	у	e	у	g	t	
Elementary												
AE	40	32	41	36	21	36	29	24	9	16	108	29
CE	254	59	21	25	48	14	26	10	4	22	109	52
GE	42	41	34	53	32	12	43	119	105	16	23	37
LE	342	267	209	426	277	212	291	161	57	134	362	433
RE	52	49	53	38	50	50	72	27	30	49	57	64
WE	143	57	63	51	74	59	108	50	8	42	80	78
SE	44	34	22	34	58	26	55	14	28	20	70	124
ME	70	48	71	64	59	43	72	40	5	65	138	55
Middle												
CM	79	63	65	64	84	197	54	23	9	23	36	12
HM	67	42	32	38	31	44	23	25	8	8	24	41
BM	40	31	28	37	56	44	90	20	16	17	0	0
MM	51	57	53	34	62	17	29	23	21	48	43	57
High												
СН	64	55	66	77	106	77	41	25	8	15	64	35
DH	107	89	75	67	68	50	29	17	17	14	35	26
FH	39	30	68	51	109	76	76	48	28	37	69	43
RH	51	56	19	79	70	85	150	71	18	37	75	78
SH	60	51	56	84	76	57	70	24	34	64	73	106
NH	51	35	31	22	31	58	25	61	28	6	38	52
Tota	159	109	100	128	131	1067	128	782	433	633	140	131
1	6	6	7	0	2		3				4	3

Table 3.1 Total Tweets per Month by User

The information in Table 3.1 shows that for one year, these eighteen principals posted a total of 13,206 tweets. June, July, and August had the least tweets with July ranking as the lowest month logging a total of 433 tweets. September, October, and November mark the beginning of the school year and had the highest tweet rates. Elementary schools ranged from 412 to 3,171 tweets per year; middle schools ranged from 379 to 619 tweets per year; high schools ranged from 438 to 789 tweets per year. One school, BM, did not log any tweets for a period of two months. This appears to be related to a change in administration. The school was included because the tweets prior to September reflect a pattern commensurate with other schools. Because the analysis in

this study did not include explicitly an evaluation of monthly patterns, the lack of tweets from two months for the school was not expected to significantly alter the findings.

In order to construct a consistent data pool for each school, I randomly selected four tweets per month from each school to be analyzed in the quantitative portion of the study. The randomization feature in Excel was used to randomly select the tweets.

There is much debate in the field whether content analysis should be quantitative or qualitative (Berg, 2009, p.341). Smith (1975) argues that both qualitative and quantitative data should be used to assess both the intricacies within the text and the prevalence of themes across texts. Berg (2009) concurs, indicating that counts provide a means for "identifying, organizing, indexing, and retrieving data" (p.343). Consequently, I use quantitative and qualitative techniques to identify themes. Tweets were coded utilizing Dedoose. I analyzed these codes using a variety of quantitative measures including raw counts and percentages.

At first, I attempted to code the tweets utilizing broad codes created from the literature – setting a direction (VISION), developing an organization (ORG), and developing people (HR). As I used these codes, I referred to the theoretical framework presented in Chapter 3. However, I abandoned this approach due to a lack of clear boundaries between the codes when applied to Twitter messages. Most tweets held multiple codes and did not present the refinement and insight I was hoping to obtain. I hypothesized that perhaps the theoretical framework could be applied after I identified the key themes from the content analysis.

As a result of this hypothesis, I abandoned theoretical coding and used open coding to inductively code tweets, thereby allowing for new themes to be captured

(Maxwell, 2005). At first I reviewed the data pool to gain an understanding of the broad patterns of information shared. This review revealed two broad themes: principals tweet to inform or to promote. All tweets were coded with one of these two codes. Informational tweets included event times, dates, locations, general information, and other factual information. These tweets were for informative purposes only and did not include any persuasive language, punctuation, or Twitter features.

Promotional/celebrational tweets had the purpose to persuade or evoke a positive emotional response through the use of grammar, punctuation, language, and Twitter features.

I then posed the following question to align my data analysis with my research question: *what are principals informing their audience about and what are principals promoting?* Using this guiding question, I openly coded all tweets. Some of my codes identified themes related to academics, athletics, fun, culture building, relationship building, staff appreciation, the arts, technology, wellness, and many more. When I completed my first round of coding, I had several categories that had few codes (wellness, technology, philanthropy, equity, literacy). I then reviewed my codes, grouped like codes together, deleted superfluous codes, and refined my code definitions.

When the second round of coding was complete, I again reviewed the codes and associated tweets to look for outliers or incongruencies in the coding. By identifying the frequency and distribution of these themes I was able to gain insight that deserved closer examination in subsequent phases (Reese, 2003). I then grouped liked codes together and constructed a broad theme that encapsulated the finer grained codes. Finally, I returned

to the literature to determine if the theoretical framework could be used to inform the analysis of the data.

The final code organization is reflected in Table 3.2, including the relationship of the codes to the broader theoretical framework for leadership. The code organization reflected in Table 3.2 also includes refinements that occurred after the analysis of the qualitative interviews, as these qualitative interviews suggested minor changes in wording and some additional collapsing of codes. The first column identified the three broad leadership roles identified by the literature review, the second column the broad themes that I linked to these roles, the third column the finer-grained codes associated with the themes, and the final column a description of the themes, many of which reflect the wording of principals in describing their use of Twitter.

Theoretical Construct	Code Theme	Codes	Description of Theme
Setting Direction	Culture Building	 Culture Fun Relationship Building Staff Appreciation Business relations Community Participation 	 Affirming shared values Aligning students and staff actions with values and vision Highlighting others engaged in the common vision Building connections Creating a spirit of community "Telling a Story" Highlighting collaborative partnerships between the school and community Encouraging community engagement
Developing Organizations	Student Events	 Athletics Achievement Activities Arts Academics 	 Sharing opportunities for growth and development of students across disciplines Celebrating successes Highlighting rigorous instruction and diverse opportunities
Developing People	Staff Development	 Professional Development Instructional Practices 	 Providing opportunities to develop competence Connecting staff with professionals Recognizing contribution of staff engaging in effective practices

Table 3.2 Themes and Codes for Tweet Analysis

Finally, Twitter offers unique communication tools, many of which are not available in any other communication platform. These features included pictures and still graphics, videos, URL links, hashtags (#), tags (@), and retweets. In order to explore what school principals are tweeting and how they are using Twitter to support their communication practices, all tweets were coded to identify the Twitter features used.

Phase Three

In the third phase of the study, I determined the criteria for selecting principals to be included in individual interviews. Using the quantitative data from phase one, I selected nine (9) of the 18 principals for in-depth, semi-structured interviews about their use of Twitter, their communication strategy and their beliefs about how Twitter promotes their leadership functions. In selecting principals for more in-depth discussions, I created a sample that includes all grade levels, Title I and non-Title I schools, representation from all administrative areas, and schools with varying student populations. In order to determine which principals would be invited to be interviewed, I ranked the principals according to the average number of tweets per day. I then selected the top 50%, or four (4) users at the elementary school level and the top 50%, or five (5) principals at the intermediate level (middle and high school). Initially I separated middle and high school levels and attempted to contact the top 50% of principals at each level. However, two of the principals at the middle school level retired and were unable to be reached. The third middle school principal did not respond to requests for interviews. Given that the middle and high schools have consistent organizational structures, I

determined that these levels could be grouped together to provide a more robust data sample that offers comparable comparison with the elementary level.

Table 3.3 presents information about these principals, their schools and the communities that they serve. The selected sample has a diverse representation of characteristics at the individual leader level, school level, and virtual site level. The sample includes a representation of both female (n=6) and male (n=3) principals ranging from three to thirteen years of principal experience. The principals selected have served his or her respective schools from two to fifteen years and tweet at least an average of once per day. One principal included in the study is an avid tweeter, averaging over eight tweets per day.

The schools represented in the data sample are just as diverse as the principals leading the schools. Schools within the sample include a representation of each administrative area; three schools represent administrative area one, one school represents administrative area two, two schools represent administrative area three, and two schools represent administrative area four. The sample includes both Title I and Non-Title I schools at the elementary level. The sample also includes school variability in both the size and racial composition of the student body. At the elementary school level, schools range in size from 422 students to 744 students. The racial composition at the elementary school level ranges from 39% minority to 84% minority. At the middle school level, there is greater variability in student population with the smaller school enrolling 475 students and the larger school enrolling 1,002 students. The minority population of students in the middle school sample ranges from 46% to 82% of the total

student population. The intermediate sample of schools also has diversity in the minority composition of the study body ranging from 13% minority representation to 97% minority representation.

Just as there is diverse representation of participants at the principal and school level, there is also diversity at the virtual site level. The virtual community includes individuals and organizations who follow the school on Twitter as well as individuals and organizations followed by the school. The sample includes virtual communities ranging from 146 followers to 1,137 followers. Overall, there is a diverse representation of participant and site characteristics within the selected sample identified in Table 3.3.

Level	Code	Twitter Characteristics			School Characteristics				Principal Characteristics		
		Average Tweets	Followers	Following	Title I	Admn Area	Enrollment	% Minority	M /F	Yrs Exp.	Yrs at Sch.
Elem.	LE	8.73	712	168	Υ	3	718	82%	F	13	2
	WE	2.23	546	426	Ν	1	422	67%	Μ	7	2
	ME	2.22	742	93	Ν	1	744	46%	Μ	9	3
	RE	1.62	483	472	Υ	4	597	71%	F	10	6
Mid./	MM	1.36	391	85	n/a	3	825	60%	F	4	4
High	RH	2.18	146	81	n/a	1	965	97%	Μ	3	2
	СН	1.71	986	144	n/a	4	878	48%	F	11	11
	SH	2.1	1137	164	n/a	2	889	13%	F	3	1
	DH	1.61	926	274	n/a	4	1496	55%	F	5	2

Table 3.3 Twitter, School, and Principal Characteristics of Selected Participants

One advantage of an explanatory sequential mixed methods design is the ability to use results from one stage of the study to develop and inform subsequent data collection and analysis (Creswell, 2015). While the interview protocol and qualitative data collection occurred in isolation of quantitative data collection and results, the analysis of qualitative data was conducted in light of quantitative data analysis and results. These analyses provided a useful organizational context for the interviews, as well as a sample of tweets that I used to facilitate discussion about Twitter use and leadership with the principals.

Phase Four

In order to strengthen, extend and complement the quantitative findings of this study, I collected qualitative data in the form of in-depth principal interviews. As noted in phase three, nine principals were interviewed using a semi-structured interview protocol (see appendix) in order to further investigate how leaders are using Twitter to support leadership roles. Individual in-person interviews lasted for approximately twenty to forty minutes in length. All interviews were recorded via audio recording methods and were transcribed and captured using an online transcription service, Veralink, at www.veralink.com.

The interview protocol was developed utilizing the leadership framework from Leithwood and Reihl (2003) as a guide. Questions included a general probe about the leadership goals and philosophies of the principal and the principal's use of Twitter as a communication tool. The interview included a reflection from the principal using a selection of tweets captured in earlier phases of the study. The semi-structured interview protocol was reviewed with input from research professionals. The protocol was first piloted with two principals not within the study and adjustments to the language of interview questions was modified for clarity.

Phase Five

In the fifth phase of the study, I analyzed the data collected from the interviews conducted in the prior phase to answer the questions, *"Why are school leaders communicating through Twitter?"* and *"How do school leaders use Twitter to support the execution of their leadership roles and responsibilities?"*

In order to construct a comprehensive qualitative case study as part of this mixedmethods design, I coded and analyzed the interview transcripts using Berg's (2009) stages of qualitative coding as a loose guide. Transcriptions were first reviewed for accuracy, general themes, quotes, and ideas; the transcriptions were then entered into the data management system Dedoose for a more in-depth analysis. I started with an open coding process and then used a recursive process to refine codes, link codes and themes consistent with phase two, and identify new themes that emerged. Then, I utilized the code themes constructed in the quantitative data analysis in Table 3.2. All interviews were reviewed in a recursive progress to ensure complete coding and appropriate categorization of information. Once information was coded, I refined the code themes in Table 3.2 to reflect a comprehensive understanding of the data. I constructed tables highlighting excerpts along common themes. This compilation of excerpts allowed me to expand upon and explain the quantitative data findings as well as highlight findings unique to the qualitative data.

Phase Six

Phase six is the culmination of the study. During this phase of the study I conducted a complete analysis of both the quantitative and qualitative data, integrating

both streams of data in answering the research questions and drawing conclusions for the study. I integrated both quantitative and qualitative findings to identify patterns about Twitter usage and school leadership within the school district of study. As a culmination of the study, I discussed the situation of the findings of this study within the theoretical underpinnings of the study and the larger body of evidence. I reviewed limitations and implications of the study as well as identified areas for future research.

Ensuring Validity and Credibility

Validity is the relationship between reality and the findings of the study (Maxwell, 2005). Threats to validity are those elements that threaten to misrepresent reality. Maxwell warns against using boilerplate terms like *triangulation* and *member checks* to indicate that issues of validity have been addressed. Instead, Maxwell suggests that the researcher think critically about what may impact the results of the study and what strategies can be used to minimize bias and error. Maxwell encourages researchers to think critically about these strategies and incorporate them into the study's design.

In this study, I employed three major strategies to enhance the validity and credibility of my findings. Those strategies included a) having sufficient time in the field, b) ensuring rich data collection, and c) employing systematic checks to mitigate researcher bias (Berg, 2009; Marshall & Rossman, 2011). This section will explore temporal and data collection validity concerns. The following section, "Personal Stance", will further explore potential researcher bias and the checks that I used to address potential bias.

This study evaluated a sample of data for one full academic school year. I selected this time frame carefully to ensure that data analyzed is not unduly skewed by external influences such as news cycles or natural fluctuations in school principal responsibilities throughout the school year.

In this mixed methods study, I utilized both quantitative and qualitative data. While at the time of this study, Twitter restricted participants to communicate in 140 characters or less, the compilation of these tweets and the analysis of posted content within these tweets (i.e. url links and photos) provided the opportunity for rich data analysis. Further, triangulating the data with individual interviews ensured that my interpretation of the data was checked against the perception of the participants. I used qualitative data collected from interviews to provide deep and rich descriptions about Twitter use that extended and complemented the analyses of quantitative data.

When analyzing the data collected, I used both open and theoretical coding. The use of these different techniques allowed for checks and balance systems to evaluate data from several perspectives and question whether the data was appropriately coded and analyzed. In addition, I used memos and notes throughout the data collection and analysis process. In part, these memos identified my thoughts related to themes, organization of information, and examination of discrepant evidence. As themes began to emerge in the data, I created hypotheses and then looked for non-examples. As a result, codes were refined and regrouped by larger themes.

Personal Stance

I am a school principal, parent, and community member; a student within the field of educational leadership; and an avid Twitter user. I am aware of the complex interplay of my private roles with my role as lead researcher within this study. I am also aware that as both an insider in the education community and as a parent, my interpretation may be skewed by my background knowledge, experiences, world views, and philosophies.

In addition, I interviewed fellow principals. Although I do not have personal relationships with the principals in the sample, I am aware of the potential that principal participants filtered and presented information differently because I am also a principal. Conversely, because I share a common professional language and experience with the participants, I believe I had insights and interpretations of information that allowed me to better interpret the intent of the participant.

This study emerged from my interest in the relationship between communication and leadership. Further, I have a personal interest in how leaders are utilizing social media. I hold a deep belief in the importance of consistent communication with all stakeholders. I also believe that communication helps a leader project a vision, provide professional development, share pertinent information, and persuade others to action. This study holds personal interest and allowed me to develop a deeper understanding of effective (and ineffective) leadership and communication practices. At the same time, this personal interest may have skewed my interpretation of information. As Maxwell (2005) writes, researchers must be aware of how this bias may influence data collection and interpretation, and develop strategies to minimize bias. As a result, I utilized

reflexive note-taking and consultation with both other administrators and research professionals throughout the data collection and analysis process.

Although holding multiple roles within an education community and within a research community has the potential for bias, it is not uncommon. Many educators, parents, and community members also hold multiple roles, so the fundamental challenge is being aware of the potential influence of these roles. In addition to minimizing bias through a reflexive and recursive memoing and consultation process, I used a mixed methods approach to provide multiple perspectives on Twitter use by principals. I used quantitative data findings to inform, support, and enhance qualitative findings, and I used the qualitative data to check and enhance my interpretation of the quantitative data.

Summary

This study is situated within the context of digital communication and grounded in leadership theory and the study of school principal roles and responsibilities. A large suburban/urban public school district was selected as the site of this case study as it is a large school system that has a substantial pool of potential candidates for study. Further, this school district is at the forefront of digital integration and use of social media in particular. As such, leaders within this public school district can bring new information about how principals are integrating social media into daily leadership practices. This research employed a mixed methods design, using both qualitative and quantitative data to create a comprehensive and descriptive account of the phenomenon explored.

Chapter 4

What is in a Tweet?

The previous chapter partially answered the question *who uses Twitter* by identifying the demographic characteristics of high rate Twitter users. This chapter develops a more robust answer to that question and answers the second part of the research question, *what are the patterns of Twitter usage* by linking themes and patterns to previously established inclusion criteria. In addition, this chapter explores the content of tweets to answer the question, *what are school leaders communicating*?

In order to effectively answer the questions above, I evaluated the Twitter accounts of principals at eighteen (18) schools for the period of one year from November 2016 to October 2017. Principals were selected to be studied if their associated school Twitter accounts averaged more than one tweet per day for the determined time frame. The sample included eight (8) elementary school principals, four (4) middle school principals, and six (6) high school principals. From the total pool of tweets – just over 13,000 tweets (see Table 3.1in Chapter 3) – I randomly selected four tweets per month using the randomization feature available in Microsoft Excel. While I was able to code forty-eight (48) tweets for seventeen principals, one principal did not have any tweets for a period of two months; forty tweets (40) were coded for that principal. In total, I analyzed 856 separate tweets.

I coded the tweets using an online analytic program, Dedoose. At first, I attempted theoretical coding but abandoned this method due to the lack of clear alignment between the content and the codes. Instead, I utilized open coding using a recursive process of coding, grouping like codes, evaluating similar or duplicate codes,

refining the codes, and recoding. Each tweet often had multiple codes, indicating that tweets serve multiple, and often overlapping, purposes. Once I finished developing the final codes I grouped them into categories and aligned the categories with the theoretical framework that I presented in Chapter 2. In order to analyze the collected data, I utilized several methods including raw counts and unweighted percentages to investigate broad themes evident in the full body of data.

This chapter opens with an exploration of the content themes that emerge from Twitter messages followed by an exploration of the structural components school principals use to enhance the message. I close the chapter by synthesizing both content and structure.

Content Themes

The leaders in this study find value in using Twitter as part of a larger communication profile. Even though during the time of this research Twitter messages were limited to 140 characters in length, the principals in the study found value in using the medium to communicate with stakeholders. So what themes did principals communicate to stakeholders between November 2016 and October 2017?

Despite substantial text limitations, principals were able to effectively communicate specific themes. Principals tweeted messages that fell within two broad categories – a) to inform and b) to promote or celebrate. Informational tweets included event times, dates, locations, general information, and other factual information. These tweets were for informative purposes only and did not include any persuasive language or punctuation. Promotional tweets had the purpose to persuade or evoke a positive

emotional response through the use of grammar, punctuation, language, and Twitter features. Figure 4.1 provides an example of an informational tweet while Figure 4.2 provides an example of a promotional tweet.

Figure 4.1 Example of an Informational Tweet

Due to impending inclement weather, all after school and evening activities are cancelled Thursday, Jan. 5, 2017.

Figure 4.2 Example of a Promotional Tweet



Promotional tweets accounted for 79% of all tweets (675 out of 856 total tweets) while informational tweets represented a much smaller percentage of tweets (21%, or 181 out of 856 tweets). Interestingly, high school principals were more likely to tweet for informational purposes, with approximately half (50%) of all informational tweets generated at the high school level. Promotional tweets were more evenly distributed by school and principal characteristics with no noticeable patterns.

While these two general themes can be used to characterize the tweets analyzed, more fine-grained themes can be identified about the content of tweets as well. In this next section, I explore the content of tweets to identify leadership themes embedded in the messages being distributed through Twitter. The communicated themes are discussed in the order of the prevalence of these themes in the data – first, developing organizations (51% or 437 out of 856 tweets), followed by setting a direction (31% or 265 out of 856 tweets) and developing people (18% or 154 out of 856 tweets).

While I have aligned the themes with the theoretical framework using the finergrained codes I developed, some tweets were more difficult to categorize than others. While tweets associated with developing people were relatively straightforward to categorize, tweets distinguishing between developing organizations and setting direction were less easily categorized (a topic that I will discuss later). For the purpose of this analysis, I used the finer-grained codes to determine the best fit for a tweet. If the preponderance of the codes associated with a tweet fell under a particular category, even though a few codes might be associated with a different category, I placed the tweet and its codes under that category.

Developing an Organization

Developing an organization is the creation of a collective culture that works together to meet common goals. Leaders develop an organization by using a common language around positive outcomes, highlighting the successes of individuals, and relating those successes to the collective whole. Leaders strive for excellence and look for ways to grow the organization. In a public school setting, the health and strength of the organization is determined by the success and engagement of students. Therefore, a primary way that school principals reflect the growth of their organization is by

highlighting student engagement and achievement as the metric of organizational success.

Table 4.1 highlights the themes and open-ended codes that I categorized under the theoretical construct for *developing an organization*. The code categories included academics, athletics, the arts, achievements, and general activities. The achievement code was dually coded with another student event code to describe the type of achievement (e.g., academic achievement v. athletic achievement). However, there was no significant data pattern that emerged around the types of achievement highlighted by principals.

Table 4.2 indicates the raw code counts associated with each of these themes. With over fifty-one percent (51%) of all tweets highlighting student opportunities and successes, developing an organization was the most common use of Twitter by school principals. These tweets generated a total of 521 codes, largely due to the co-occurrence of achievement with the other codes.

Theoretical	Code Theme	Codes	Description of Theme
Construct			
Developing	Student Events	Athletics	• Sharing opportunities
Organizations			for growth and
		Achievement	development of students
			across disciplines
		Activities	Celebrating successes
			• Highlighting rigorous
		Arts	instruction and diverse
			opportunities
		Academics	

Table 4.1 Developing an Organization Themes and Codes

Code Count of Tweets Highlighting Students							
	Elementary	Middle	High				
	School	School	School	Total			
Athletics	3	4	71	78			
Achievement	24	24	36	84			
Activities	98	39	68	205			
Arts	21	11	32	64			
Academics	56	24	10	90			
Total Code							
Counts	202	102	217	521			

Table 4.2 Code Count of Tweets Highlighting Student Opportunities and Successes

As indicated in Table 4.2, the largest number of codes highlighted student activities that were not directly tied to the curriculum; these codes occurred at more than a two to one ratio compared to other types of codes about students and represented almost one quarter of all tweets (24% or 205 of 856 tweets). Figure 4.3 provides an example of a tweet that highlights a student activity that occurs during the day that is not classified as an academic, arts, athletic event, or achievement event.

Figure 4.3 Examples of a Student Activities Tweet



Student events, like the one featured in Figure 4.3, included extra-curricular activities, field trips, assemblies, field days and fun days, and other miscellaneous activities. These tweets promoted and supported school programs by demonstrating the breadth and diversity of the opportunities offered to students by the school.

Principals also communicated about student participation in academic work (10% of all tweets), athletics (9% of all tweets), and the arts (7% of all tweets) with approximately equal frequency. Expectedly, themes related to the arts and athletics were more commonly represented at the high school level where there is a larger variety of both within school and after school opportunities. Ninety percent (90%) of all athletics tweets were generated at the high school level. Many of these tweets were also dually identified as highlighting student achievement. Figure 4.4 provides an example of a tweet that communicates athletic achievement at the high school level.

Figure 4.4 Example of a Tweet Highlighting Athletics and Achievement

Congrats, athlete on your Crab Bowl selection. was a All-County WR last year and 200m/55m track champion



The literature suggests that leaders develop an organization by highlighting success. Tweets that were coded as highlighting student achievement communicated students winning competitions, earning awards, participating in graduations or promotions, or receiving other accolades such as the "Crab Bowl selection" depicted in Figure 4.4. Although highlighting student success was present in the data, only about 10% of all tweets specifically reference some type of student achievement. The majority of tweets coded as highlighting students featured student engagement in curricular and extra-curricular activities as noteworthy in and of itself (41% or 353 of 856 tweets).

Gauged by the content of the tweets that I analyzed, principals promote their school to stakeholders by highlighting opportunities afforded to students and student successes in their programs. A successful school organization, according to Leithwood and Riehl (2003), is determined by a leader's ability to create a competitive school organization that keeps students at the center of the decision-making process (Leithwood & Reihl, 2003). Tweets that highlight students reinforce the importance of student wellbeing to the school as an organization. Creating a competitive and strong school organization, however, also requires a strong vision that is embraced by all stakeholders. The next section will explore how school principals communicate a common vision and encourage stakeholder engagement and alignment with the vision.

Setting a Direction

As principals develop an organization, they must set a path for development and then encourage all stakeholders to set forth on that path. As Kouzes and Posner (2012) wrote, "Leaders must get others to see the exciting future possibilities. They breathe life into visions. They communicate hopes and dreams so that others clearly understand and share them as their own" (p. 100). Sinek (2014) adds to this perspective by stating that, "Customers will never love a company until the employees love it first" (p.177). These quotes, together, illustrate that leaders set a direction by architecting an ideal future and then creating an enthusiasm and energy that encourages others to participate in the construction of that future.

According Wagner and O'Phalan (1998), an organization's culture is the foundation of its vision for the future. Pawlas (1997) argues further that communicating a vision depends upon leaders promoting a positive organizational culture. Table 4.3 provides an outline of how the principal's role of setting a direction is represented in tweeted messages associated with building a positive school culture. I grouped the open codes of culture, fun, relationship building, staff appreciation, and community involvement together under the larger code theme of culture building. This larger code theme was then aligned with the conceptual framework's leadership role of *setting a direction*.

Table 4.4 shows the prevalence of each of the codes and their respective raw code counts. Overall, 31% of all tweets (265 of 856 tweets) were characterized as setting a direction. These 265 tweets generated 779 codes, as principals tended to incorporate multiple messages into their tweets (e.g., culture building and relationship building, 115 co-occurrences, or culture building and fun, 77 co-occurrences).

Theoretical Construct	Code Theme	Codes	Description of Theme
Setting Direction	Culture Building	Culture Fun Relationship Building Staff Appreciation	 Affirming shared values Aligning students and staff actions with values and vision Highlighting others engaged in the common vision Building connections Creating a spirit of community "Telling a Story"

Table 4.3 Setting a Direction Code Themes and Descriptions

Table 4.4 Code Counts of all codes associated with Setting a Direction

Raw Counts of Codes Associated with Building Culture							
	High	Total					
Culture Building	115	45	49	209			
Fun	118	43	36	197			
Relationship Building	110	41	30	181			
Staff Appreciation	27	18	17	62			
Community Relations	73	27	30	130			
Total Code Count	443	174	162	779			

As indicated by Table 4.4, a majority of codes associated with setting a direction were generated by elementary school principals (57% or 443 of 779 codes), followed by middle school principals (22% or 174 of 779 codes) and high school principals (21% or 162 of 779 codes). These tweets served to communicate a positive school community utilizing themes of togetherness, equity, and pride. Culture building tweets utilized language that suggested a proud ownership of members of the community using words such as "we" and "our(s)" and used repeated language that portrayed themes of togetherness, common values, vision, and equity. Figure 4.5 demonstrates an example of a culture building tweet, a message included in approximately one quarter of all tweets (24% or 209 of 856 tweets). This tweet referred to "our" students using the school's mascot name followed by a collective expectation for the way students will think and act as "doers". This tweet also served to illustrate the principal's appreciation for a teacher involved in the organization of this kickoff event. The action of being a "doer" was further solidified as a culture building event by the inclusion of a nationwide hashtag used to define positive school culture across the nation.

Figure 4.5 Example of Culture Building Theme and Staff Appreciation



While culture building events build a sense of positivity, the theme of "fun" utilized language of enjoyment related to the sharing of a common experience with another person in the school community *outside* of any educationally related role and responsibilities. An example included a group of teachers tweeting a picture while running a race together or a group of students enjoying a baseball game, as evidenced in Figure 4.6. Nearly one quarter of tweets (23% or 197 of 856 tweets) described a culture of fun shared by students and staff, the second most common theme for setting a direction.

Figure 4.6 Example of Fun Theme



While culture building and fun are similar to relationship building, relationship building tweets included activities that were *specific* to each person's role in the school community. Relationship building tweets included themes of mutual respect; appreciation for collaborative and cooperative interactions; thankfulness for help, support, guidance, or additional support of the school's vision and mission. Tweets that reflected relationship building focused on building positive connections between two or more members of the school community. Principals emphasized relationship building in roughly one fifth of their tweets (21% or 181 of 856 tweets).

Relatedly, school principals also used Twitter to highlight relationships and partnerships with community entities. A body of research supports the use of social media to build new relationships and strengthen existing relationships with stakeholders (Briones et al., 2011; Ellison, Steinfield, & Lampe, 2007; Smitko, 2011). This subtheme emerged in 15% of all tweets (130 of 856 tweets). Tweets included celebrating the

involvement of parents and community members as well as thanking businesses for collaborating with and investing in the school.

While staff appreciation themes were the fewest in this category, accounting for 7% of all tweets (62 of 856 tweets), they still played an important role in emphasizing "togetherness" and staff commitment to vision. Staff appreciation messages highlighted the individual or group successes of teachers, and often included a specific thank you message to a staff member.

While the codes above have been discussed separately, very few tweets were identified as having only one message regarding a school's vision. In fact, 67% of the tweets identified within this category held multiple codes associated with setting a direction. Figure 4.7 provides an example of a tweet with multiple messages.

Figure 4.7 Example of a multiple message tweet



The tweet highlighted in Figure 4.7 is an example of a tweet that incorporates messages about culture building, relationship building, and staff appreciation. These themes work together to support the overarching theme of setting a direction by

showcasing staff members as they participated in student activities. The tweet first appreciates a teacher by thanking a teacher for participating in an event through both language and a pictorial representation of hands clapping. The message is strengthened by showing the fun both students and staff are having together as they engage in this school-based activity on the school campus; one picture shows students cheering. The compilation of pictures shows smiling staff members and students side by side, running and engaging in physical activities. These photos show students and staff members building relationships while the language encourages other staff members to build relationships as well. The tweet ends by encouraging other staff to participate in the next event, promoting a continued dedication to culture building activities.

When evaluating the high rate of co-occurrence of finer grained themes within the broader theme of setting a direction, it is evident that school leaders use multiple layers of meaning to construct a comprehensive message about a vision. The co-occurrence of themes suggests that that themes, such as culture building, fun, relationship building or staff appreciation, complement each other and work in tandem to strengthen the overall message about a school's vision and direction.

Setting a Direction or Developing an Organization?

A pattern of tweets over times forms a common language, provides excitement and momentum for the execution of the vision, provides a concrete model for the principal's expectations around the execution of the vision, and serves to reinforce others for engaging in behaviors consistent with the vision. Further, these communications serve to highlight the success of the vision and demonstrate how the *vision serves to*

strengthen an organization. Setting a vision, in other words, is a function performed by leaders that is intertwined with developing an organization.

While Figure 4.7 has been categorized as an example of a principal setting a direction, it could also be argued that this tweet provides evidence of developing an organization because it shows students engaged in an activity at school. For the purposes of this research, tweets were determined to be either predominantly setting a vision, developing an organization, or developing people. However, setting a direction and developing an organization comprised the majority of all tweets by school principals (82% or 702 of 856 tweets). The differences between these two categories was often nuanced given the strong interconnection between designing and executing a vision and developing an organization.

Figure 4.5 provides another example of a tweet that could be viewed through multiple lenses. I determined this tweet to be more reflective of a principal setting a vision because it highlighted the role of staff in creating a positive environment for students. Although the picture alone suggested that this tweet may be identified as a student activity, the language of the tweet reflects themes of building relationships and engaging others around a vision, one embraced nationally with the hashtag "ForWhatIStand". The focus of the tweet was not about the students but about the adults supporting students and working alongside students as a team.

While these distinctions are important to this study, which explores how principal use Twitter in support of their leadership roles, it is possible that the typical Twitter audience would simply view the above tweets as promotional and would not consider the nuanced language differences that I have used here. It is likely that a typical Twitter user

would view all tweets relating to building a vision and developing an organization as one and the same theme, so the distinctions that I have made may be more theoretical than practical. The next section will explore how Twitter is used by principals to perform the third leadership role – developing people.

Developing People

In 2015, Carpenter and Krutka reported that teachers responded positively to using Twitter as a professional development medium. Although teachers report enjoying Twitter as a professional development medium, this theme was not widely applied by principals in this study. Less than one fifth of all tweets (18% or 154 of 856 tweets) evaluated in this study displayed themes of professional development or highlighted specific instructional practices. Elementary school principals (65% or 105 of 162 codes) were more likely to use Twitter as a professional development medium than middle principals (27% or 43 of 162 codes) or high school principals (9% or 14 of 162 codes).

Table 4.5 and 4.6 outline the themes, descriptions, and raw counts of the codes collected through the research. Tweets for this leadership role were relatively easy to distinguish compared to the leadership roles for developing organizations and setting a direction; tweets categorized as developing people generated a total of 162 codes.

Theoretical Construct	Code Theme	Codes	Description of Theme
Developing People	Staff Development	Professional Development Instructional Practices	 Providing opportunities to develop competence Connecting staff with professionals Recognizing contribution of staff engaging in effective practice

Table 4.5 Developing People Code Theme and Descriptions

Table 4.6 Code	Count of 7	Tweets Ass	ociated wi	ith Develo	ping People
14010 1.0 0040	Count of	1 110000 1100	ociacea m		phig i copie

Code Count for Tweets Associated with Developing People							
Elementary Middle High							
	School	School	School	Total			
Professional Development	30	16	5	51			
Instructional Practices	75	27	9	111			
Total Code Count	105	43	14	162			

Tweets that displayed themes of professional development, as evidenced in Figure 4.8, included text and/or visuals highlighting teachers engaged in professional development activities. Six percent of all tweets (6% or 51 of 856 tweets) included a message from principals about professional development. Tweets highlighting instructional practices showed teachers implementing instructional practices in the natural setting, as evidenced in Figure 4.9. Thirteen percent of all tweets (13% or 111 of 856 tweets) highlighted teachers engaged in instructional practice with students. The most common terms used in tweets that promoted developing people were "rigor" and "differentiation."

URL links were observed in seven percent (7%) of all tweets and were almost exclusively linked to professional development tweets. Principals generally utilized URL links to connect audiences with professional development articles for teachers; parenting articles; and links to services and supplies. To a lesser extent, principals used URLs for general informational purposes.



Figure 4.8 Example of Professional Development Tweet

Figure 4.9 Example of Instructional Practices Tweet



The relative infrequency with which Twitter was used to support the development of teaching practices suggests that principals do not view this as an effective communication method to support the professional development needs of their school. This may be because promoting professional development often suggests areas for growth or organizational need. Therefore, highlighting areas for development may contradict the carefully constructed virtual school identity of competence, existing diverse experiences, and excellence. In contrast, the virtual image of the school may be enhanced through tweets that highlight instructional practices associated with rigor and engaging all students. This distinction may help to explain why principals were twice as likely to feature instructional practices than professional development opportunities in their tweets.

Promotional v. Informational Tweets

In total, school principals utilize Twitter to disseminate positive information about the school organization. There was no evidence of negative language or visuals in any of the tweets. The majority (79%) of all tweets were determined to be promotional, which allowed principals to fulfill important leadership roles. These tweets all used emotional language, punctuation, and visuals to project one of the three main leadership roles.

To a lesser extent (21%), principals used informational tweets to share basic information. Some of these informational tweets did not have any apparent link to the three main leadership roles of setting a direction, developing an organization, or developing people. These isolated tweets provided information about school closings, late buses, and other basic information.

Nonetheless, a few information tweets were classified as fulfilling a leadership role because while the tweets provided information only, the information directly related to student activities, graduations, instructional practices and professional development opportunities. Figure 4.10 provides an example of an informational tweet that supports the leadership role of developing people.

Figure 4.10 Example of Informational Tweet Projecting Leadership Roles



Second grade abc order rotation stations

This tweet was categorized as an informational tweet because it did not present evidence of promotional or endorsement or exclamatory punctuation; further, there was no evidence of students smiling or other positive emotions projected in the tweet. However, while the tweet was determined to be informational, it also featured photos about instructional practices (developing people). The tweet identified that students were engaged in a literacy small group activity. This is an example of a less typically used informational tweet that also projected one of the three main leadership roles of the school principal.

Collectively principals used both informational and promotional tweets to primarily foster a vision and develop an organization (82%). Principals also used Twitter, although to a lesser extent, to develop people (18%). As evidenced above, many principals also enhanced and extended messages by including media and Twitter features unique to the platform including hashtags, tweets, tags, and retweets as communication tools. The next section will explore these enhancements.

Enhancement Features

When composing a tweet, users may include a variety of features that are designed to enhance a tweet. Some of these components, such as pictures and videos, are tools that may also be used in more traditional communication mediums. A hashtag is an enhancement that can be used across several social media platforms while the use of a tag or retweet is unique to Twitter. Crawford (2009) writes that Twitter contains many layers of information. This layering of information occurs both within the content of tweet and across tweets. It is therefore useful to study the use of these enhancements to determine how principals use these features to convey information. Most tweets observed in this study used one or more of these features. Figure 4.11 provides an example of a tweet with a media enhancement (picture of students), tag (@user), and hashtag (#BLC17 or #ProudTeacher).

Figure 4.11 Example of a tweet with multiple enhancement features



The next subsections will explore the prevalence of some of the most common Twitter features used – media attachments, retweets, hashtags, and tags.

Media Attachments

The inclusion of digital media in social media posts has been touted to have a variety of benefits including enhancing emotional responses and creating attention

grabbers for users. Pittman and Reich (2016) found that the use of pictures in social media increases feelings of belonging and happiness. In the section above, I outlined that principals predominantly use Twitter to set a direction and develop an organization. One of the critical leadership responsibilities within these two leadership roles is to excite and engage stakeholders around the vision. It is therefore no surprise that 71% of all tweets included some type media feature in order to promote a positive emotional response to the message. Overall, the use of pictures or still graphics was the preferred media choice among all schools (65% of all tweets); in contrast, significantly fewer tweets included video clips (6% of all tweets).

The inclusion of media was generally commensurate across demographic distributions of students at the schools and did not highlight any distinct patterns. However, the inclusion of media was associated by the school's placement within the district's organizational structure. Administrative areas are a subgroup of schools that include schools at the elementary, middle, and high school level. Each administrative areas are has a separate set of leaders who supervise the schools. The administrative areas are designed to provide an equitable distribution of schools along geographic, racial, and socioeconomic characteristics.

According to the data represented in Figure 4.12, the tweets in administrative area 1 utilized more media attachments than other administrative areas compared to its proportionate rate of tweets in the school district. The chart below demonstrates that administrative areas 3 and 4 included media at proportionally lower rates. Administrative area 2 included media at roughly the same proportionate rate compared to its overall distribution of tweets.

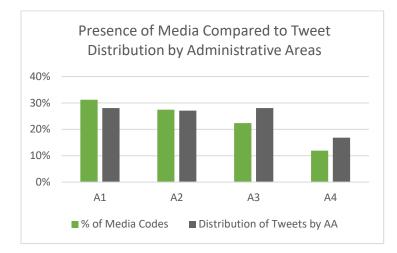


Figure 4.12 Presence of Media by Administrative Area

Administrative areas separate the district into four equal groups of schools and have no clear demographic parameters. It is likely that the higher rate of media inclusion in one area is a representation of situational or supervisory differences unique to that administrative area – that is, supervisors in some areas may include media more than supervisors in other areas, modeling behavior that they promote and reward amongst the principals in their area.

Retweets

A retweet is the reposting of a tweet from another user. When a user reposts a tweet, the user has the option of adding new text to the original tweet. Retweeting provides a feedback loop that reinforces the credibility of the message and of the sender (Shi, Lai, Hu, & Chen, 2017). In this study, nearly two thirds of all tweets (61% or 523 out of 856 total tweets) were retweets from another user. Most commonly principals retweeted a tweet by a school or district employee or office (81% of all retweets). Principals less frequently retweeted the post from another school, a thought leader, or a

professional organization. School principals were more likely to communicate information specific to his/her school community, reinforcing observations of school community members, and were less likely to communicate information from a larger educational community.

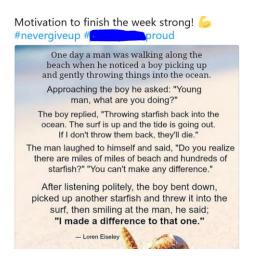
Tags

Another popular connection feature is the use of a tag. A tag begins with the @ sign followed by the Twitter handle of another user. When another Twitter user is tagged, the user receives an alert. It is a way of identifying a connection between another user and the content being shared. The use of a tag is also highly popular; 45% of all tweets studied included a tag. Principals appear to most frequently tag staff members, district leaders and offices, and educational thought leaders. Further, principals often retweeted tweets from others if the school was tagged in the tweet. Although Twitter is predominantly a one-way communication form, a tag appeared to be a way for a principal to link a specific person to the information being shared.

Hashtags

A hashtag (#) is used before a keyword; these keywords can be searched by any Twitter user and associated tweets with the hashtag will be collated in a list form. Hashtags also provide a summarizing theme for the tweet. While the use of hashtags was observed in the data, hashtags were used to a lesser extent than other connection features (20% of all tweets used hashtags). Figure 4.13 provides an example of using a hashtag to summarize content. Although the tweet includes a long passage, the hashtag includes the words "never give up" and "[the redacted school name] proud". These two simple phrases provide a summary of the longer passage.

Figure 4.13 Example of the Use of a Hashtag



Typical hashtags included words such as happy, pride, excellence, rigor, the district's name, the school's name, team, kind, wins, and goals. Although hashtags were less prevalent, they appeared to be very effective in underscoring the message of the tweet.

Summary

Despite the character limitation of only 140 characters, leaders were able to clearly set forth a pattern of communications that aligned with their main leadership roles and responsibilities. The most common use of Twitter was to create excitement and engagement around developing the organization and setting a direction. Tweets were carefully constructed to project positive messages and largely showcased student activities and accomplishments. Despite the fact that developing people is a critical leadership responsibility, and despite the fact that the literature suggests that teachers use Twitter to gain professional development information, school principals infrequently used Twitter for this purpose.

Overall, the use of media attachments, hashtags, tags, and retweets were used to create, enhance, and extend the communicated message. The most common Twitter feature used by all schools was the use of photographs or still graphics (65% of all tweets). These features can provide information beyond the 140 character limitation while simultaneously evoking a positive emotional response to the material being communicated. Principals used retweets (61% of all tweets) and tags (45% of all tweets) to create feedback loops. They utilized hashtags (20% of all tweets) to create connected themes. These features provided stronger connections between information and people, and they created feedback loops in a predominantly one-way communication system.

This chapter provided an initial scaffold by which to understand how Twitter use by school principals can be evaluated. The next chapter will enhance these findings and will provide insight about the patterns that emerged from the quantitative dat in this chapter. School principals explain how and why they use Twitter as a communication tool. These answers provide qualitative richness that helps to explain and to further define how school principals use Twitter to enhance their leadership roles and responsibilities.

Chapter 5

Telling Your Story Through Twitter

While the quantitative data in Chapter 4 provided a framework for understanding patterns of Twitter use by principals, the information is incomplete without gaining insight from the principals responsible for those tweets. The previous chapters partially answered the questions *who uses Twitter* and *what are leaders tweeting* by evaluated demographic and archived data; this chapter develops a more robust answer to these questions and also examines the question, *why do leaders use Twitter*. Together, the answers to these questions provide a full exploration of how school leaders use Twitter to support leadership practices.

I open this chapter by setting the context of the study with a review of why principals started using Twitter. I then discuss why school leaders continue to use Twitter and explore how they link Twitter use to their leadership roles – specifically, setting a direction, developing an organization, and developing people. I close the chapter by exploring how these principals conceptualize the limitations and restraints of the medium.

Twitter Introduced

Six years ago a young superintendent was hired to lead a very large public school district. At just thirty-one years old, this superintendent brought with him a fresh enthusiasm and a millennial penchant for technology. Prior to this superintendent's tenure, classrooms in the district housed five to six desktop computers that were loaded with word processing software, simple educational intervention software, and

accommodation programs; teachers were provided a desktop computer that sat on the teacher's desk and did not have projection capabilities. Most computers were antiquated and slow with limited access to the internet. Social media platforms like Twitter and Facebook were filtered and prohibited from any school computer.

The superintendent quickly set his new vision, which included one-to-one laptops and increased internet access for all students and teachers. Within a short amount of time, the district rolled out a plan to provide laptops for every student and teacher. In addition, schools received 3-D printers and programmable robotics. Desktop computers were replaced with laptop devices and flat screen monitors. Document cameras and updated smartboard projection tools were encouraged and print management systems became streamlined and networked. In an effort to increase the global competitiveness of all students, the superintendent argued both students and teachers needed access to cutting edge technology.

This vision was communicated through an aggressive media campaign on Twitter, Facebook, the district's website, weekly bulletins, newsletters, and the district's television station. Prior superintendents, like many superintendents around the country (Porterfield & Carnes, 2012), blocked and prohibited social media tools on school grounds and cautioned employees not to use these mediums at home. In contrast, the new superintendent shattered traditional norms and communication hierarchies by encouraging students, teachers, and families to use Twitter to communicate directly with him. He frequently used Twitter to highlight school and district accomplishments, upcoming events, content and pedagogy, and trending topics in education; he encouraged

his principals to do the same. "When he started, he was a big tweeter and he wanted everybody to positively reflect their schools through social media" (DH Principal, 2018).

It was clear that integrating these mediums was an expectation of the new superintendent. At a large kick-off meeting that included all school leadership, local politicians, and critical stakeholders, the superintendent outlined his aggressive communication plan, specifically citing the use of social media. His goal was to increase the voice of all stakeholders and provide more timely, effective, and comprehensive twoway communication systems for all schools. As one principal remembers, shortly thereafter, "leadership was using Twitter extensively, and it was growing very quickly" (ME Principal, 2018).

Although the superintendent was an avid user and promoter of Twitter use, the principals interviewed for this study did not feel pressured by him to use Twitter. "I never felt like [the superintendent] said we were going be evaluated on it. It was about marketing your school and my school needed positive marketing" (DH Principal, 2018). Although the superintendent was the first leader to provide permission to use this platform, it was not perceived as a directive. Once introduced to the platform, many leaders began exploring and integrating Twitter into their communication practices. As one elementary school principal remembers,

I never felt that there were expectations that I would be using Twitter, because the reason that I used Twitter was so authentic. It really was purposeful for me. And then, as the community ended up growing, and teachers and parents were coming on board, they were following the interaction and action that was going on within our community [on Twitter]. (ME Prinipal, 2018)

According to these principals, the use of social media grew rapidly throughout the district, fueled by novelty, a growing recognition of its potential, and the superintendent's example.

While some administrative area supervisors did not discuss the use of social media with their principals, other supervisors were more avid adopters and promoters.

Our [area administrator] definitely loves Twitter, is on Twitter, messages all the time. And so, she set that expectation. We got a consistent message, which I think, is really powerful for people. And that's why more and more of our [administrative area] started to actually tweet and play with it." (CH Principal, 2018)

Some administrative area leaders were addressing Twitter use by offering trainings and feedback on how to improve Twitter visibility. "I would get commended occasionally on putting up some tweets" (DH Principal, 2018). Three principals who reported to these administrative area leaders remember being surprised when their social media use was included in their end of year performance review. As one principal reflected upon this time, "At end of year conferences, supervisors were commenting on how many times we were tweeting. We didn't know this was an expectation until it was" (WE Principal, 2018). He went on to share,

I felt like there was an expectation, for multiple reasons. I think there was some comments [about] how frequently [we used Twitter] – 'Look at how often your school does this. So, you could tell that people were expecting it. (WE Principal, 2018)

In other words, over time, the incorporation of social media became an expectation for principals, especially in administrative areas where supervisors encouraged and reward its use.

Regardless of the focus of upper leadership, many principals found that creating a digital presence had many benefits. For some principals, they focused on creating a, "digital footprint [that] helps to tell your story and paint the picture of your school" (MM Principal, 2018). Other principals were intrigued by the increased connections and information sharing opportunities offered through social media. One principal said,

I saw a lot of others jumping on. Leadership at the time was using it pretty frequently and it felt like this was a way that [principals] needed to stay in tune with what was going on. Leadership was staying in tune with what was going on at [my] school, because – like parents – they can't be in every school every day. So, it was a nice way for them to see instruction, what was going on with our learner centered environments at the time, the staff program – there was just kind of a buzz around [it]. (ME Principal, 2018)

That "buzz" led many principals to adopt Twitter as an important component of their communications strategy.

This study explores the perceptions and beliefs of principals who adopted, and continue to use, Twitter. At the time of this research, the superintendent was no longer leading the district and many administrative area leaders stopped having conversations about social media use with principals, and after the superintendent's departure, the Twitter use of many principals has waned. Nonetheless, 145 schools continue to have active school Twitter accounts. For the eighteen schools and nine principals included in

this study, social media has remained a critical part of their overall communication package.

The nine principals interviewed for this study have continued to use Twitter as part of their overall communication profile. These leaders were selected because they were ranked as the highest Twitter users in their school level category (elementary and secondary) and because they maintained control over the school Twitter account. Schools were ranked by the number of tweets per day and the principals of the top 50% of schools with the highest tweet rates were selected to be interviewed.

Table 5.1 identifies the school and characteristics of the leaders who were interviewed. A school code and principal alias were assigned to maintain anonymity of those interviewed, which will be used in the remainder of this chapter. These principals and their schools will be introduced in more depth in the subsequent sections of this chapter.

Level	School	Principal Alias	School Characteristics				Principal		
	Code					Cha	Characteristics		
			Title1	Admin Area	Enrollment	% Minority	M/F	Yrs Exp.	Yrs at Sch.
Elem.	LE	Ms. Cinderson	Y	3	718	82%	F	13	2
	WE	Mr. Booker	Ν	1	422	67%	Μ	7	2
	ME	Mr. Cook	Ν	1	744	46%	Μ	9	3
	RE	Mrs. Martin	Y	4	597	71%	F	10	6
Mid./	MM	Mrs. Sandlin	n/a	3	825	60%	F	4	4
High	RH	Mr. Barns	n/a	1	965	97%	Μ	3	2
	СН	Mrs. Sullivan	n/a	4	878	48%	F	11	11
	SH	Mrs. Chalk	n/a	2	889	13%	F	3	1
	DH	Mrs. Archer	n/a	4	1,496	55%	F	5	2

Table 5.1 Principal and School Characteristics of Interviewees

These nine leaders continue to use Twitter long after the district level initiative has faded and lost momentum. I interviewed these principals to explore why they continue to use Twitter and how they use Twitter to support their leadership roles and responsibilities. Each principal was initially recruited by email and a mutual interview time was set through email and phone communications. Most interviews lasted approximately thirty minutes. I met seven interviewees at their school; the other two interviewees asked to meet outside of their schools at a mutually convenient location.

As I interviewed principals, I became aware of recurring themes. As part of the analysis process, after each interview I documented key phrases or themes. In order to maintain consistency in the data, I asked all of the interviewees the same set of questions in the same order and conducted all interviews before beginning the coding and analysis process. The questions were purposefully broad in order to allow for the interviewees to share a wide perspective about their Twitter use. At the end of the interview, I engaged the interviewees in authentic conversation about their responses and my personal reflections about their answers. I later noted any important themes and thoughts that arose from these conversations.

All interviews were recorded and transcribed using a transcription service. I then coded the interviews by evaluating the themes I recorded throughout the process and then recursively refined the codes. I utilized tables to capture key phrases and patterns within themes.

This chapter will follow a progression by first exploring why school leaders continue to use Twitter followed by a discussion about how these leaders use Twitter to support their leadership roles and responsibilities. The chapter concludes by exploring how principals conceptualize the limitations of the medium. All quotes come from the 2018 interviews that I conducted with each principal.

Why Do Principals Use Twitter?

"Communication. Communication. Communication," Mr. Cook, principal at ME elementary school said. At the heart of all leadership is effective communication. In a newly digital age, principals must expand their communication repertoire to ensure they are meeting the communication needs and demands of all stakeholders. As I discussed in Chapter 1, today's school stakeholders are situated largely within the digital generation. As such, these stakeholders are voracious information consumers with high expectations of instantaneous and succinct communication.

Every school principal interviewed (9/9) indicated that they use Twitter because it is easy, fast, purposeful, and powerful. Further, Twitter engages stakeholders in a way that more

traditional mediums have been unable to accomplish. Mr. Barns, principal at RH high school argued,

It is the most accessible, the most frequent way that our parents and our students and all friends and stakeholders are able to access information quickly and to understand the activities, the events and significant information as the day unfolds, as the week unfolds, as the month unfolds, and as the year unfolds.

Not only is Twitter fast and easy, but it is the preferred communication medium many parents utilize for information. As Mrs. Martin, principal at RE elementary school explained, "If I send out a newsletter, it doesn't always get read. If I send out a call, parents don't listen to the message. I've become adept at posting on Twitter to communicate with parents."

Mr. Booker, principal of WE elementary school, shared that as the larger society changes and the demands of families change, the use of Twitter has helped him keep the school connected with the community.

I think a lot of households these days are not two parent households or households where a parent is working all the time, and it's very difficult to get to the school. Twitter provides a really nice opportunity for us to share pictures, quick snippets of what's happening in the classroom, important events that are happening at the school. It keeps parents connected in a way that we weren't able to 10 years ago. Like the other principals interviewed, Mr. Booker saw Twitter as a convenient medium for communicating with families and other stakeholders.

Mr. Booker also noted that in addition to the general increase in parental interest over educational matters, the current rash of school shootings has caused an increased need for parents to feel connected to the school. "Parents need to be reassured that their children are safe and thriving." Mr. Barns, principal of RH high shared similar reflections.

Safety doesn't mean that the doors are locked and we're keeping the intruders out, but it's a safe-conducive environment where students are thriving and teachers are teaching and growing in that way. And so, using Twitter was our way in which we wanted to showcase the talents of our teachers, students, administrators, parents, and other stakeholders who are interested in the community.

Both principals believed that Twitter use allowed them to communicate to parents that their children were safe and in a caring environment.

Expanding and Engaging Audiences

School leaders must engage existing stakeholder populations while also enticing new stakeholders to become invested in the school. Mrs. Archer, principal of DH high school, explains this by stating that principals need to,

Market our school in a positive way. Businesses need to be drawn to a community in order for it to thrive, and homeowners need to be drawn to a community in order for it to thrive. Homeowners will want their kids to go to a good school. And if I can change the culture and the reputation of [the community], then it's positive for everybody involved.

Indeed, all principals interviewed discussed the need to cast a broader communication signal to engage a community beyond their schoolhouse. They noted the importance of positively influencing the public perception of their school and of the entire school district. While some principals, like Mrs. Archer, were trying to change an existing negative perception, other principals were trying to use Twitter to construct a new digital identity. All principals were trying to combat an increasingly negative narrative about the school district.

In order to engage a broader public, principals discussed the types of stakeholders they aimed to influence through Twitter communications (see Table 5.2). All in all, principals identified seven distinct stakeholder groups that they targeted through Twitter. The most commonly identified stakeholders were parents, staff, and other educational partners. Principals also discussed engaging the larger community, business partners, students, politicians, and alumni.

Leve	School		Stakeholders Reached Through Twitter					
1	Code	Parents	Staff	Students	Alumni	Community	Politicians	Other
						Stakeholders /Business		Educational Partners
						Partners		Fatulets
Ele	LE	Х	Х	Х		Х		Х
m.	WE	х	Х				Х	Х
	ME	х	Х			Х		Х
	RE	х	Х			Х	Х	Х
Mid.	MM	Х	Х					Х
/	RH	Х	Х	Х	Х	Х		Х
High	СН	х	Х	Х	Х	Х	Х	Х
	SH	х	Х	Х	Х	Х		Х
	DH	х	Х	Х	Х	Х	Х	Х

Table 5.2 Stakeholders Reached through Twitter

All of the high school principals talked extensively about how Twitter had made students critical and vocal participants in social media communications with the school. "Twitter was not just for their own personal use to share information amongst family and friends," Mr. Barns, principal of RH high school said, "but they [students] also looked to it and were confident in the information that was shared." High school principals talked about how students often asked to be highlighted on Twitter. Students would ask why certain information wasn't shared or why a certain event wasn't highlighted while demanding better coverage of other information strands. Students tweeted questions, asked for general information, shared ideas, and sought recognition. They expected principals to use Twitter to share general information and in turn, they posted and shared information from their own Twitter accounts. Mr. Barns continued, "They would retweet, they would take [information] for themselves and place on their own pages, and they wanted to be featured." Students were not the only emergent stakeholder population engaged through Twitter. Principals at all academic levels were aware of the increasing political influences on public schools and the importance of having support from local politicians. Politicians can showcase a school and community, connect resources, and influence funding sources. "So for the people who have influence [politicians and community leaders], we want them to see us as that academically-oriented school, and an achievement-oriented school," noted Mrs. Martin, principal of RE elementary school. Principals found that having local politicians follow them and retweet their tweets significantly increased their positive visibility in the community. Further, at times, these tweets brought resources to the school. As an example, the ME elementary school principal noted that as a result of his tweets about a school production, he received financial support for new production lighting. Overall, all principals stated the importance of showcasing what was happening within the school to broad audiences.

Through Twitter, principals aimed to increase their communicative reach in order to increase engagement and excitement around a larger vision of the school. Once Twitter caught hold in the schools in this study, principals noticed that teachers and students were eager to be highlighted on Twitter. For some teachers, this meant asking the school principal to tweet. Mr. Barns, the principal at RH high school, mused,

[Teachers] would knock on my door or send me an e-mail and say, 'Hey. Can you come to my classroom?' Or, 'Can you see what we're doing?' I think this would be great for Twitter."

As Ms. Cinderson, the principal of LE elementary school noted, highlighting teachers on Twitter "is a great tool to increase your leadership capacity, show your teachers that you

care about them, and show your students that you're proud of what they're learning." According to the principals, teacher, students and other stakeholder groups pay close attention to who is retweeting and what is being retweeted, which expands and engages a broader audience. Many principals shared similar stories about connecting with a broader audience and moving others to action by retweeting a tweet or constructing a positive message on Twitter.

Adding Depth to a Communication Package

Mrs. Sullivan, principal of CH high school, captured the essence of what most principals said about the integration of Twitter in their communication profile.

We see it as part of our total messaging package. We have a YouTube page, we have an Instagram account, we have Twitter, we have our electronic newsletter, we have our website. We see it all as a consistent package to message what we're doing, what we think about, what's important to us.

Principals felt that Twitter provided another strategy to their communication package, and that it gave them access to audiences that had not been engaged previously with the school.

None of the school principals used Twitter exclusively, and most cautioned against weighting Twitter too heavily when disseminating information. Mrs. Chalk of SH high school remembers learning the shortfalls of using Twitter too heavily.

I [wasn't] capturing everyone. There have been times when I have shared something and not gotten that information to everyone. And people have said, 'I

didn't see that, I'm not on Twitter.' You have to be really mindful that it's one kind of communication. It can't be used standalone.

However, she also noted that her Twitter followers are almost double her total school population. As such, using Twitter has greatly expanded her communicative reach to new audiences.

When considering which communication medium to use, principals selected Twitter when they need a strong one-way communication option for promotional and informational purposes. While some principals felt the timeliness of posts was key to engaging audiences, others found that audiences were not looking to access information in real time. These leaders preferred the less invasive nature of providing information on a public forum as compared to phone or email technology. As Mr. Booker from WE elementary school said, "I like [Twitter] as a passive way that folks can get to it whenever they need it – it's not a phone call from me at 5:30 p.m. when they are trying to eat dinner."

Mr. Booker went on to explain that audiences can search for information on Twitter at their own convenience, which allows the user to consume only the information that is relevant to them. Mrs. Sandlin, at MM middle school added, "Twitter is there when they want to do it –before they go to bed, when they're waking up to go to work, whatever." According to these principals, because Twitter provides character limitations, information is presented in short snippets that provides the audience a time efficient means of receiving and consuming information.

Refining Communication Practices

At the time of this research Twitter had recently increased the number of characters from 140 to 280 characters. When interviewed, several principals joked about how thankful they were about the recent increase in character numbers. More traditional communication practices afford principals the ability to have lengthy explanations and information presentations. Twitter, on the other hand, has significant character limits.

While principals discussed the initial difficulty in refining their message, 5 of the 9 principals discussed the benefit of learning to say more with less. Mrs. Sullivan, principal of CH high school, talked about how Twitter helped her refine her messaging; she is now more thoughtful about language choice. She noted that using Twitter has helped refine her communication practices through all communication mediums.

I think it just helps me be consistent in messaging and what I'm messaging. So, getting information to people, communicating with people, and making sure that it's productive, useful information that they want. I feel like it narrowly focuses me better.

Another principal, Mr. Barns, principal at RH high school, discussed taking these refinement practices from his professional to personal life by "making an impression on an individual by saying the least but meaning the most."

Twitter has also increased the consistency with which principals share information. "If I go two or three days and I haven't posted something I feel like, 'I wonder if people are wondering what's going on at SH high school." Mrs. Chalk, the principal of SH high school, shared further that her Twitter patterns ebb and flow throughout the year, and while she doesn't feel consumed by the responsibility to tweet,

using Twitter has made her more conscious of the importance of consistent communication to the larger community.

She and other principals talked about becoming increasingly aware of not only how often they were tweeting, but what they were paying attention to in the school. As these principals used Twitter, they looked for celebrations within the school house. Many talked about searching for "the joy" or "the happy." They talked about using Twitter to highlight students and teachers in a unique way that is not often implemented in more traditional communication mediums. "I think it's had a more personal impact in that I find myself looking for the happy," Mrs. Sullivan, principal at CH high school told me. In other words, these highlighting practices through Twitter can influence the behaviors and emotions of both the sender and the receiver of the information.

Principals expressed the joy of celebrating teachers and students. One principal discussed how retweeting a tweet from a teacher energizes both him and his teachers. Mr. Cook, principal at ME elementary school, spoke of the reward of seeing his professional learning goals actualized while also reinforcing teacher behaviors. One of his colleagues, Mrs. Archer, principal at DH high school, shared a similar outlook. "It was fun for me to be able to do – to take five minutes out of my day and say something positive about the school." She finished by saying, "I feel like, 'Yay! I get to share good stuff.""

As demonstrated by the observations of these principals, Twitter use has refined their communication practices. It has helped them to be more succinct, conscious, and positive in their messaging to stakeholders. As they have gone beyond communicating for informational purposes only, Twitter has allowed these principals to focus on

highlighting positive activities that directly aligned with the school's vision. All principals (9/9) discussed the importance of using pictures, graphics, and other images to strengthen these promotional messages.

Creating an Archived History

While all principals discussed the value of Twitter in reflecting a typical school day, five of the nine principals specifically discussed the public archiving feature of Twitter. These principals noted that this feature allows potential families and interested stakeholders to gain a sense of the larger school culture. When principals make a phone call or send a postcard, those communications are not historically saved. Twitter, on the other hand, is both public and archived. This allows the school principals and all stakeholders to view a pattern of communications over time. Mr. Booker, principal of WE elementary school, likes this feature because prospective parents can use Twitter to, "take a look at the school events [and] have insight as to what the environment is like, what kind of things are we doing with children." He continued, it allows prospective parents to "answer the question, 'Is this the place where I would want to bring my child?""

Principals also used this feature to create communication alignment across time, to look for patterns and gaps in information being messaged, and to evaluate progress over time. Ms. Cinderson, principal at LE elementary school, shared, "If you look at our tweets from August through July, you will see what's happening in our school and you will see certain trends." She talked about watching teachers engage in professional development in the beginning of the year and growth in instructional delivery of

associated learning goals across the school year. After our interview closed, Mrs. Cinderson and I chatted informally as we left her building. She took me on a detour to show me her professional learning room. In this room she had printed out tweets from throughout the school year and posted them to create a progress timeline. She proudly showed me this timeline and said that next year she will start a new timeline. According to Mrs. Cinderson, posting these pictures engaged teachers, refined teacher communication practices, and kept them focused on the vision.

Ms. Chalk, principal at SH high school, also reviews her Twitter history to get a snapshot of the year's events. She noted that this archive helps refresh her memory about events from the beginning of the year and mark progress over time. Mrs. Sullivan, principal at CH high school, also enjoys this feature but wishes that tweets could be archived for longer periods of time to review patterns across multiple years.

Maintaining Ownership without Identity

The nine leaders interviewed report that Twitter is an effective communication tool that has enhanced and refined their communication practices. The previous section outlined why principals started to use Twitter and why they continue to use Twitter. This section explores a unique theme that emerged from the interviews – maintaining ownership without promoting personal identity.

Principals talked about the importance of creating a voice on Twitter that was independent from their voice as a person and identity. While many principals delegate some portion of the communication responsibilities, all principals interviewed for this study maintained control of the school's Twitter account. "It started with me to set the

momentum, to set the message, to set the expectations, and to provide consistency" said Mrs. Sullivan, principal of CH high school. "But, in terms of managing the interconnectedness of everything, and in terms of making sure that what we wanted out as a team was able to get out quickly, it [had] to be me." Every principal (9/9) included in this study had similar reflections as Mrs. Sullivan. They talked about the need to maintain control of the messaging in order to ensure that all information disseminated was consistent with their expectations as leaders and was reflective of their vision.

These leaders talked about their access to all systems within the school. They felt uniquely poised to communicate about the happenings within the school because they have the ability to visit classrooms, talk to alumni, observe a variety of activities, and meet with parents. Principals also expressed that communication is a delicate process that must highlight the important work of *all* stakeholders. Mr. Barns, principal at RH high school, explained,

Sometimes [stakeholders] have a narrow view of their place in it. But, as a principal, having a holistic view as to what is going on and who you come in contact with, you are able to use Twitter to make sure that everyone is encompassed, and no one is left behind or left out.

Principals used terms like, "the buck stops here" and "I am ultimately responsible" for all aspects of the functioning of the school. Consistent with the work of Leithwood and Reihl (2003), the principals in this research talked about the importance of maintaining control of the communicated message in order to develop consistency in all settings, coordinate multiple systems, and create environments that nurture the larger vision. In Chapter 2 I discussed the potential for social media to rapidly erode trust if the pattern of

communications is not consistent. This theme was repeated throughout the principal interviews, as they discussed the importance of creating consistency in the messaging from the school.

Principals discussed the need to maintain a high level of control over Twitter messages for several reasons. Nearly all expressed that the responsibility for the successful execution of all daily functions ultimately lands with them, so they needed to be responsible for the messages communicated through Twitter. They also argued that even the most savvy teachers and assistant principals don't always fully understand the communication expectations or parameters set forth by the principal. Mrs. Archer, principal at DH high school, explained,

I would have trusted a lot of people, but they don't always know exactly where your mind is going about what you're trying to do or what you want to highlight. It was so important to try to have a positive image of [the school] – it was just important for me to manage that.

While the responsibility for Twitter could be delegated to someone else, principals were reluctant to do so, perhaps because the medium itself can be so powerful, public, and far reaching.

Other principals talked about the deep work of constructing a vision prior to developing a communication package to disseminate that message. One principal felt that because he was the constructor of the vision, he was not only the communicator of the vision, but an inseparable part of the vision itself. Mr. Barns, principal at RH high school, explained to me,

I wanted to make sure that the story was being told was deliberate. I did research regarding the school, what it meant, and what it symbolized. I only receive one chance to tell a story. And part of the story was my story.

Principals desire to maintain control of the Twitter account was evidenced by the language that they used to describe it; throughout the interviews they used possessive language like "my vision", "my message", and "my responsibility" when describing the school's Twitter account and use.

Conversely, while they viewed the vision and message as theirs, it was also important to all leaders interviewed that the *principal as a person* was not revealed in the messaging. Principals talked about ensuring that the voice of the Twitter feed reflected the school and the larger vision, particularly students. "It's not about me. It's about [the students]," Mrs. Sullivan, principal at CH high school said. "It's about what they do. It's about who they are. It's about what they believe in. It's about what's important to them. And it's about connecting that to the rest of the world." Mrs. Chalk, principal of SH high school, expressed a similar sentiment, "I am representing a thousand students. [I am] mindful of that and mindful of how everything I share will be received by my community."

To many principals, remaining anonymous in the messaging was important to creating a sustainable message that would span time, space, and people. "And that was purposeful. Even if I disappeared, the message could be consistent. It could follow," said Mrs. Sullivan, principal at CH high school. Mrs. Martin, principal at RE elementary, expressed a similar sentiment by emphasizing the family identity she wished to convey. "Because we are a family, we want everyone to feel all about this in the same way."

Some principals even maintained two Twitter accounts – a private account to reflect their personal voice and the school account to reflect a more neutral and collective voice. Although the vision was set by the principal, these leaders wanted to ensure that the vision was communicated with neutrality and was linked to the school and not to a leader; neutrality, according to principals, ensured the sustainability of the vision and encouraged stakeholders to adopt the vision as their own.

Although principals wanted the overall voice to be neutral, they still wanted the message to reflect their leadership vision, beliefs, and practices. All principals identified an interdependence between the use of Twitter and their personal leadership roles and responsibilities. The previous sections reviewed how Twitter was first introduced to these principals, why they have continued to use Twitter, why they have maintained control of the school's Twitter feed, and why they constructed a specific communication voice projected through Twitter. The next sections will explore how school principals use Twitter to support their leadership practices.

Projecting Leadership Practices

The next three subsections will look at how principals use Twitter to support the three main leadership roles as defined in the seminal work of Leithwood and Riehl (2003) – setting direction, developing and organization, and developing people.

Setting a Direction

Leaders set a direction by developing a vision and by initiating and maintaining momentum around the execution of the vision. In Chapter 2, I defined a set of leadership behaviors associated with setting a direction by merging the research of Leithwood and Riehl (2003) and Kouzes and Posner (1995). In Chapter 3, I refined those leadership behaviors as represented in the quantitative data. Table 5.3 provides an overview of the leadership behaviors associated with setting a direction. It combines the work of Leithwood and Riehl (2003), Kouzes and Posner (1995), and the results of the quantitative portion of this study to develop a list of leadership behaviors associated setting a direction.

Table 5.3 Setting a Direction Leadership Behaviors

Setting a Direction Leadership Behaviors						
Affirming shared values.						
Aligning students and staff actions with values and vision						
Highlighting others engaged in the common vision						
Creating a spirit of community						
Building connections.						
Envision the future by imagining exciting and ennobling possibilities.						
Enlist others in a common vision by appealing to shared aspirations.						

• Celebrate the values and victories by creating a spirit of community

While these leadership behaviors are presented in list form, leaders do not exhibit these behaviors in isolation or in a specific order but instead exhibit these behaviors in complex and dynamic combinations to meet the shifting needs of the current environment. At the core of these behaviors is communication. As Mrs. Archer, the principal of DH high school, stated, "Our role as a principal is to communicate our vision and our mission in an effective way that helps others to buy into what [we're] doing." She went on to share that Twitter is an important tool that helps her communicate that vision. Interviews with principals consistently revealed the same sentiment of Mrs. Archer from DH high school. Mr. Cook, principal of WE elementary school, demonstrated the interconnection of these behaviors and communication when he stated, "telling a story allows me to impact my climate because it makes people feel good. If they've had something showcased, or something pushed out, they are a part of the vision." Twitter allows principals to actualize the leadership behaviors and show stakeholders the vision realized. Mr. Cook went on to say, further reinforcing the role of Twitter, "the proof is in the picture."

As I met with principals, this simple phrase, "*tell your story*", peppered the conversations. Crafting a story around the vision, or constructing a *visioning brand*, was a powerful theme woven through both the quantitative and qualitative data in this research. Twitter users create an online identity through both a process of intentionally communicating a brand as well as through patterns that emerge through a natural strand of posts (Page, 2012). The quantitative phase of this study explored the natural patterns that emerged over time and found that principals primarily use Twitter to project an image of a healthy and vibrant school that offers a rigorous and well-rounded education for all students. When each principal was interviewed, they specifically discussed using Twitter as a means to intentionally and carefully construct a positive identity and reinforce their vision for the school.

Mr. Barns is principal of RE high school, a large high school in a suppressed economic area with a predominantly minority population. He is one of the principals who felt deeply intertwined with the vision and mission of the school and talked extensively about *telling your story*. He talked at length about his role in creating a

positive message through Twitter. As a newcomer to both the principal position and the school, Mr. Barns looked for ways to positively impact the school. He spoke of creating a counter narrative to the historically negative perception of the school.

It was understood that we needed something to combat what the belief of the school was. And so, we can't wait until the end of the year for the yearbook to come out and see the great things that were going on...we needed to make sure that every day, every other day, every week that there was something that we could celebrate. Even when we weren't celebrated by others, we were going to celebrate ourselves.

Themes like these reverberated in interviews with principals. Whether it was elementary school principals trying to build an image of academic excellence, a middle school principal trying to separate the success of the school from the strife in the surrounding community, or high school principals trying to separate the school's identity from isolated acts of violence on campus, leaders turned to Twitter to communicate a positive school image. Some principals crafted a story to combat an existing public perception while others constructed and projected a new image.

Mrs. Chalk is principal of SH high school, a small school located in a secluded waterfront community. This tight knit working-class community experienced significant hardship fifteen years ago when a series of local factories closed in the wake of an economic recession. Recently the area experienced economic revitalization, which has resulted in an evolving community demographic and new challenges as old and new communities attempt to blend together.

We are a growing and changing community. We have a lot of new families, a lot of new properties, the size of our school is growing and I think there can be some concerns in any community where things grow and change. I use Twitter so people have a bird's eye view into what it's like to be a student here. I highlight the narrative and the story that this is an amazing community.

Mrs. Chalk crafts her story through a compilation of two types of tweets – informational and promotional. As she explains, she shares general information about "school events, activities that are coming up, even just kind of mundane things, schedules, bus routes" and, she uses "photo sharing, highlighting student activities, students who've received a certain honor, staff, just different things happening around the school so I can craft our story."

These two broad categories were echoed by other leaders; all leaders felt that these two types of tweets worked in conjunction to support the vision and mission of the school. Principals used terms like administrivia, informational, and managerial to describe tweets that included event times, dates, locations, general information, and other factual information. They used terms like celebration, promotion, highlighting, and "telling our story" to describe what Ms. Chalk called highlighting tweets and what I classified as promotional tweets in the previous chapter.

The quantitative data found that high schools held the largest proportion of informational tweets, with almost 50% of all informational tweets generating at the high school level. At first glance it may appear that principals at the high school level use Twitter uniquely from elementary school principals with a depressed focus on branding a vision. However, this is an inaccurate assumption. At the high school level, students

emerge as consumers of information and avid social media users. All high school principals corroborated the views of Mr. Barnes, the RH principal, who said, "students rely on [Twitter] for basic information and not to be entertained, but to be informed."

School alumni also emerge as a powerful consumer of information. Mrs. Archer is the principal of DH, a large diverse high school not far from Mrs. Chalk's school. While both schools border local waterways, Mrs. Archer's school pulls from a larger, more diverse community. This has, at times, created tensions within the school and the surrounding community.

However, football has always been a unifying force, and like many high schools in this district, sports provide a connection to the broader community. Long after graduating from their alma mater, alumni boosters continue to support athletic programs. At Mrs. Archer's school, the alumni have become accustomed to using Twitter to gain information about local football games. "The expectation is that they can check our tweet and find out what the score is or if we at least won," explained Mrs. Archer. Alumni expect to find information on Twitter about upcoming football games. "They wanted to come back and they wanted to meet up [with other alumni] and they wanted to buy shirts and they communicate with me through Twitter to do that," she further explained.

Mrs. Archer and other high school principals also use Twitter to connect parents with information that supports the school's vision and mission.

If they have Twitter, that's a very easy way to see whatever important information you're trying to communicate. If there is SAT prep classes, the SAT is coming

up, or some other deadline coming up, I try to get it on Twitter so that the parents see it.

Mrs. Sullivan, principal of an arts and technology magnet high school, uses Twitter similarly to connect parents, alumni, and students with information. Her school boasts magnet programs in media technology, dance, visual arts, theater, and literary arts. In addition to these specialty programs, her high school also offers the same programs offered in all comprehensive high schools, including general academics and athletics. In her interview, Mrs. Sullivan discussed the large amount of activities that occur on her campus daily. She values Twitter as a tool that can help her provide instantaneous information about scholarships, inclement weather, school performances and events, testing reminders, sporting events and scores, and other information.

Although high school principals like Mrs. Sullivan and Mrs. Archer were more likely to tweet for informational purposes, these leaders expressed that informational tweets were information service offered to digitally savvy stakeholders. Principals considered this service to support a larger vision of the school because they were building relationships with stakeholders, identifying the robust offerings within the school, and offering an informational service to stakeholders. "I really tried to accommodate them with that," Mrs. Sullivan explained, "Anything that fell in line with a positive image of the school was what I would focus on." These are examples of informational texts that often incorporate promotional messages, as described in the previous chapter.

These stories, like all the stories shared with me in this research, demonstrated how constructing and implementing a vision – that is, setting a direction – was at the heart of every decision a principal made. For the principals in this study, Twitter was a

powerful communication medium uniquely used to promote their vision of the school and what they hoped would become a common vision of stakeholders. Principals used the quick, visual format of Twitter to share basic information and to show their Twitter audience how their vision was being enacted in the building. Mr. Cook, the principal of ME elementary school, said that Twitter helps him bring his vision to life because, "when we can put a unique image in front of you that grabs your attention in a very quick way, [we can] show the world that we feel good about what is happening in our school."

As principals talked about how they used Twitter to set a direction, they often referred to the Twitter enhancement features discussed in Chapter 4. My quantitative data analysis revealed that the most common connection feature used by principals was to retweet a tweet of another person; sixty-one percent (61%) of all tweets analyzed in this study were retweets. When interviewing principals about their Twitter use, retweets emerged as an influential connection tool at multiple levels. Every principal (9/9) discussed retweeting as a powerful reinforcer of behavior, particularly behavior that embraced a school's vision. As I explored the Twitter patterns that emerged from a string of tweets, I found that principals heavily retweeted original tweets from their employees followed by tweets from representatives from the school district. As I interviewed principals, the same pattern emerged.

Hashtags were another way principals talked about supporting and promoting their vision by highlighting expectations and themes, bridging content, and creating a consistent pattern across tweets that supports the construction of a larger message. Three principals referred to specific hashtags in their interviews. Mrs. Chalk, the principal of SH high school, said, "So when you ask what's the story I'm trying to tell, a thread I'm

always weaving is that we're college and career ready so that's a hashtag I use a lot." The hashtags that I identified for these principals' tweets communicated themes of excellence, rigor, happiness or joy, student preparation for the future, or pride. Hashtags were closely related to the vision and goals identified by principals.

When interviewed, principals noted that hashtags were particularly useful tools in orienting the public to what they wanted to highlight in the tweet. As an example, Mrs. Martin, the principal of RE elementary school, discussed extensively improving the public's perception of academic excellence within her school. Throughout her interview she discussed several examples of tweets of students engaged in a variety of activities; these tweets all had one hashtag in common that held the theme of excellence. She discussed one example of how she used the hashtag:

We were using the work protocols that were introduced two months ago at a principals meeting. So I thought that was important to share that we're implementing those initiatives that are new to the county that will raise student achievement. And then, during that work protocol, we found an exemplary piece of student work that was amazing, and we shared that.

As we reviewed one of her tweets that included a picture of students engaged in a guided reading activity and an associated hashtag that reflected excellence, she said, "so we want people to know that our kids can do what all the kids [in the district] can do, because that's not always the perception."

Principals like Mrs. Martin develop and execute a vision, create a communication package to support the vision, and then measure the strength of their vision through student engagement. Leaders who are avid Twitter users not only use Twitter to project

and promote their vision but to reflect the successful implementation of the vision. This successful implementation ultimately promotes the health and development of the school as an educational organization. Principals aim to develop and grow their educational organization by enhancing opportunities offered to students. The next section evaluates how principals use Twitter as a resource to support the development of their organization.

Developing an Organization

"Effective leaders enable the school to function as a professional learning community to support and sustain the performance of all key workers, including teachers as well as students." (Leithwood & Riehl, 2003, p.4). In Chapter 4, my evaluation of tweets determined that school principals define the health of their educational organization by measuring the scope of opportunities offered to students and the engagement of students in those opportunities. Table 5.4 combines the work of Leithwood and Riehl (2003), Kouzes and Posner (1995), and the results of the quantitative portion of this study to develop a list of leadership behaviors associated with *developing an organization*.

Table 5.4 Developing an Organization Leadership Behaviors

	Developing an Organization Leadership Behaviors
•	Search for innovative ways to improve.
•	Experiment and take risks by constantly generating small wins and learning
	from experience.
•	Celebrating successes.
•	Sharing opportunities for growth and development of students across disciplines.
٠	Highlighting rigorous instruction and diverse opportunities.

Earlier in this chapter I shared that principals value the celebratory potential of Twitter. Further, principals shared that as they developed a voice and focus for Twitter communications, the students always remained at the center of their message. Principals talked extensively about highlighting student activities. They provided specific examples about athletic events, academic accomplishments, acts of kindness, experiments, and specialty events such as visits from therapy dogs and assemblies. As discussed above, principals focused on highlighting a broad spectrum of opportunities while always ensuring that activities highlighted support themes of excellence, citizenship, responsibility, diversity, and preparedness.

Principals spoke with almost equal frequency about highlighting teachers and staff members as they supported the vision and mission. LE elementary school is a recently constructed school. When the doors opened, LE elementary school pulled from several diverse neighborhoods with significant variability in community demographics. The school principal, Ms. Cinderson, spoke about using Twitter to build a community because everyone, including students, staff, parents, and administration, were new to the building. Ms. Cinderson has exceptionally high energy, which appeared contagious at her school. She talked rapidly and excitedly about highlighting both students and staff as they made gains towards a broader achievement goal. She shared that she often pops into her school on a Saturday to take pictures of classrooms so that teachers can be surprised by celebratory tweets over the weekend. "I'll take pictures of what I see, and it's a way to say I'm so proud of you and tell them that they're being recognized for their hard work. It is all about my appreciation."

Across town at a more homogenous and affluent school, the principal of ME elementary school, Mr. Cook, shared similar reflections about using Twitter to highlight students and teachers. He talked about reinforcing the hard work of the teachers and encouraging students to continue to strive towards excellence. He also described the importance of building his organization by situating his school within the larger district. This principal talked about ensuring that the community understand and value the school's alignment with district initiatives. In addition, he valued Twitter as a tool to, "bring a connectedness across the county. We want to make sure that we were showing our school spirit, and really our district spirit for the school system itself." He shared that by anchoring his school within a larger system, his teachers looked to fellow educators for ideas and defined a common standard for exceptional teaching.

As some principals where connecting their school to fellow educational organizations, other schools were connecting their school to support networks and future possibilities. One principal, Mr. Barnes of RH high school, noted in addition to highlighting students, he felt it was important to highlight the people and systems that support student achievement. "And though students are the most important population, the support network around the students is also something that we wanted to feature." Other principals, especially high school principals, talked about connecting students with a vision beyond the school. All high school principals discussed promoting scholarships, internships, business partnerships, successful alumni, and other activities that connected students with a vision of a successful future.

High school principals also more frequently talked about developing digital citizenship skills in students. According to these leaders, developing students is more

than just providing diverse opportunities and rigorous instruction. These leaders expressed that developing students also means developing responsible digital citizenship. While principals noted a pressing counter-narrative about social media that impacted their school and district, they were also aware of an equally powerful narrative that students were exposed to every day about social media use. Principals talked about the Twitter behaviors of politicians, musicians, athletes, and other celebrities. High school principals were particularly in tune to these influences and their need to counteract the negative digital environment enticing students. Ms. Chalk, principal from SP high school, echoed that sentiment when she said, "There's a lot of negative views of social media, a lot of negative uses of social media. I'm trying to [show]...look, we can use it appropriately." She went on to say that she tries to be a, "model for kids, hoping that kids get excited when they see themselves in a positive light through social media."

Thus far, this research has demonstrated the strong interconnection between the school principal's roles and responsibilities as defined by Leithwood and Riehl (2003). Principals develop and execute a vision that enhances the opportunities presented to students and then build systems around the vision to create sustainability and success. The success and health of an organization is supported by well-trained professionals. Principals in this study have used Twitter as a communication medium to support these complex and complimentary leadership roles, including supporting and developing students. The next section will explore how principals use Twitter to support professional learning needs of staff within the building.

Developing People

Mr. Booker, principal of WE elementary school, sat forward in his chair, shifting often with an excited energy as he talked with me about using Twitter for professional development purposes.

Just having more information at my fingertips and having a condensed or focused list of resources that [I] know align with the vision/mission of my school or the vision/mission of the school system or both combined, I think, helps me identify resources that would, I think, hopefully improve instructional leadership.

Mr. Booker, like his colleagues, finds Twitter to be particularly useful for professional development purposes. While the quantitative data from Chapter 4 suggests that principals do not frequently utilize Twitter for professional development purposes, interviews with principals suggest otherwise or a more indirect connection between Twitter use and developing people.

Although principals did not frequently post tweets to support the professional development of teachers, all principals consumed and shared information *offline* with their staff. As Mrs. Archer, principal of DH high school, explained, "I use Twitter to follow accounts of like ASCD or Learning Forward, think tanks. I send [articles] to my faculty, print the articles, and sometimes put them in the mailboxes; sometimes just gave them to our leadership team." Other principals used Twitter to observe what other schools were posting. They used Twitter as a forum to learn from fellow professionals and bring new ideas back to internal professionals.

As such, these principals engaged in leadership behaviors associated with developing people, as defined by the work of Leithwood and Riehl (2003), Kouzes and Posner (1995), and the results of the quantitative portion of this study (see Table 5.5).

 Table 5.5 Leadership Behaviors Associated with Developing People

Leadership Behaviors associated with Developing People
Providing opportunities to develop competence.
Connecting staff with professionals.
• Recognizing contribution of staff engaging in effective practice.

Mrs. Sandlin has been principal of MM middle school for many years. Due to a recent string of neighborhood fights that were posted on social media, the public perception of the school has declined significantly. Mrs. Sandlin prides herself in creating a buffer between the surrounding community perceptions and the actual experiences of students in the school. One of the main reasons that she likes using Twitter is to separate the actions in the community from the activities happening within the school. When asked if she used Twitter for professional development purposes, she responded that while she collects information, she never posts information.

Tweeting professional development for the staff, like *how do you reach the struggling student* wouldn't be appropriate to tweet from our [school] account that's going out to our community. I feel like that's not sending the right message about how we feel about our students.

In contrast, she talked about retweeting inspirational quotes or inspiring posts from educational leaders. In addition, she uses Twitter to find, print, and disseminate professional development information to teachers. Like Mrs. Sandlin, most principals were silent proponents of professional development information. They used Twitter to find and share information with staff but were careful about what information was shared with the larger public. One principal, however, utilized a variety of Twitter features to engage his staff professionally. At ME elementary school, the principal, Mr. Cook, encouraged teachers to engage in Twitter chats about a variety of professional development topics.

We host Twitter chats. We pose a topic and seven or eight questions and invite everyone to join. And it could be 8:00 at night when you can sit there and do other things at home and participate as you want to. We get a pretty good crowd of folks that will jump in and chat.

Mr. Cook collaborates with other principals and educational leaders to construct Twitter chats across schools and districts. Mr. Cook talks about how using Twitter in this format has helped teachers take ownership of their own learning. As he walks through the halls, he hears "the buzz about the Twitter chat from the night before."

Constraints

All high school principals as well as elementary and middle school principals interviewed for this study view Twitter as a powerful communication tool used to construct a positive school image through a pattern of consistent tweets over time. As Mrs. Sullivan from CH high school noted, "the real purpose is to construct and project our narrative." As principals explained their use of Twitter, they talked about the attention and thought they placed on the careful selection of language, pictures, and content they chose to post. They discussed making very purposeful decisions about when

they tweeted; which tweets received pictures, videos, or hashtags; which tweets were retweeted and which ones weren't; and which language would be used for each tweet.

Although principals talked about Twitter as being energizing and rewarding, they also noted several constraints to using Twitter. Constraints identified by principals included time demands, character limitations, messaging demands, audience coverage, reception issues, losing the meaning by focusing too extensively on messaging, and privacy. Of these constraints time demands were mentioned most often, followed by character limitations and expectations for tweets. Table 5.6 outlines the constraints identified by principals.

Leve	School	Constraints Identified By Principals						
1	Code	Time	Message	Expectation of	Miss Some	Reception	Losing	Privacy
		Demands	Construction	Rate of Communication	Audiences		the meaning	Concerns
				Communication			in the message	
Ele	LE		Х					Х
m.	WE	Х			Х		Х	
	ME	Х	Х				Х	Х
	RE	Х		Х				
Mid.	MM	Х			Х			
/	RH	Х	Х	х			Х	
High	СН	Х	Х	Х	Х			
	SH				Х		Х	Х
	DH			Х		Х		

	Table 5.6	List of	Constraints	Identified	bv	^v Principals
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While principals who use Twitter were adamant that they did not personally find messaging to be a constraint, they all reflected on why messaging *could be* a constraint for many users. However, as principals described possible constraints, many principals

used language that indicated they personally identified with the constraint being discussed.

Principals spoke about the attention and thoughtfulness needed to construct an effective message. Mrs. Sullivan, principal of CH high school, stated leaders need to "figure out the appropriate language to use and to be concise. [Leaders] need to think about it from the system perspective, the school perspective, and [their] own perspective." As principals represented their educational organization, they needed to ensure that they were modeling good communication skills. Mrs. Archer, principal of DH high school, talked about this focus.

There is a lot of pressure to say something in so many characters that's meaningful, that's not offensive, that reflects what you want it to say. It's really not easy. There's a lot of pressure. You have to be careful that you're spelling correctly. You have to be careful of your wording.

The need to construct a careful and purposeful message combined with an increased demand for more frequent communication can be taxing to leaders. Many principals (4/9) identified a feedback loop that self-perpetuated a need for more communication. The more principals tweeted, the more audiences expected them to tweet and the more the principal tweeted to meet the demands of the audience. According to Mrs. Martin, principal at RE elementary school,

You get caught up in it, where you feel like, 'I have to maintain a certain level of postings,' because the playing field becomes so crowded. You don't want your tweets to come down and not be viewed by the people you want to see them, so you feel like you have to constantly up your game.

These principals acknowledged that the use of Twitter demanded a time commitment that competed with other responsibilities.

Related to the time demands associated with the rate and construction of the message, principals also talked about the importance of being thoughtful to ensure that the message being sent through Twitter didn't have unintended consequences or interpretation. A communicated message is received and interpreted by the receiver; as such, there is a risk that any communicated message is not interpreted in alignment with the intent of the communicator. Mr. Barns, principal of RH high school, is always aware that the larger community will read and interpret his tweets according to their own experiences and biases. This has implications for his ability to effectively communicate a larger vision. In addition, this has implications for how the community views his school and his students.

I know, for me, I had to make sure that it wasn't always an athletic event that was showcased. I didn't want that counternarrative to be, 'These black kids may not be good in class, they may not be highly academic in the classroom, but get them on a court and they are all for it.' We're constantly in competition with the counternarrative.

Across town in a more affluent neighborhood, Mr. Cook, principal of ME elementary school, shared similar concerns about his audience interpreting information incorrectly. "If people come at it from a different perspective and a different lens, and something that you perceive as positive and an opportunity to let the students and your school shine could be something that somebody else sees as a negative."

Principals also talked about the risk of being too eager to post messages to Twitter and losing the meaning behind the message. Ms. Chalk, principal at HS high school, talked about only tweeting about events that she was authentically observing. "I'm also cautious to not participate in something just for the sake of coming to get that photo op. I think it's important that teachers [think] that administrators are here because we're invested in the event or the lesson and it's not a photo op." Mr. Booker of WE elementary school expressed similar reservations.

I don't want people to take pictures and tweet out everything they're doing instead of finding those learning moments in the classroom and focusing on quality instruction. Stopping to photograph everything and breaking up the rhythm of instruction and the support for students can be a drawback if it's not managed properly.

Extensive tweeting and the time needed to effectively construct a message can be time consuming, if not time exhaustive, and distorting, from Mr. Booker's perception.

In addition to the time demands of consistent messaging, many principals talked about the time constraints associated with monitoring a Twitter feed and conducting information searches. As Mr. Booker also notes,

There is so much content that is not always relevant – that it can be easy to get bogged down. It's like junk e-mail. You can find yourself reading things that really don't really have to do with what directly you need to be doing.

Nonetheless, all of the principals interviewed were avid adopters of Twitter who have continued to find value in using Twitter to support their leadership practices. Principals

were eager to talk about their Twitter use and appeared energetic and proud as they talked about their school's Twitter feed.

At the same time, over five years after the initial implementation, most principals also talked about having some type of "Twitter overload." For some principals, they responded by cutting back on the time they spend tweeting or stopped using a personal Twitter account in addition to the school account. Other principals take "social media sabbaticals" during the summer. As Mr. Barns, the principal at RH high school, explained, "I felt it very necessary for me to just clear my mind and not be bound to social media."

Four of the nine principals discussed the potential of relinquishing some control over tweeting in the future. Principals who discussed sharing Twitter responsibilities generally felt their school had reached a point in which their vision was engrained in the school culture. As such, they felt that it would be appropriate to train other people to tweet on behalf of the school. Interestingly, none of these principals had taken actionable steps to share the responsibility. However, all principals who discussed sharing the responsibility with another person discussed the need for extensive training and monitoring. The other five principals indicated that they had no interest in relinquishing control of Twitter. For these principals, the unrelenting information stream on social media continues to require a high level of care and attention.

Summary

In this chapter I outlined why principals started using Twitter, why they have continued to use Twitter, and how they use Twitter as part of their communication

profile. Principals who adopt Twitter to support their leadership practices do so because it is fast, easy, real-time, and impactful. In addition, Twitter allows principals to reach extended audiences and engage new stakeholders. Twitter is used to project the principal's vision, to elicit excitement and engagement around the vision, and to celebrate those participating in the successful execution of the vision. Unlike many other communication tools used by principals, Twitter is used solely to communicate positive messaging. Although principals used Twitter as a one-way communication tool to send out information to stakeholders, they also used Twitter to collect information and resources that they can utilize in other more in-depth communications with staff.

By evaluating archived Twitter data, I was able to identify patterns of Twitter use by principals. My interviews with principals solidified, extended, and explained the patterns that emerged from the quantitative content analysis of a sample of their tweets. Principals who use Twitter find that this communication medium helps them to execute their leadership roles. In the past two chapters I have evaluated this data through the lens of the seminal work of Leithwood and Riehl. In the next chapter I will present my conclusions as it aligns with my guiding conceptual framework. In addition, I will discuss the limitations of this study, implications for future research, and connections to leadership practices.

Chapter 6

Conclusion: How Do School Leaders Use Twitter

This research set out to answer the overarching question, *how do school leaders use Twitter to support their leadership practices?* This question was sparked by the intersection of my promotion to an administrative position in a public elementary school and my introduction to a book entitled, *Grown Up Digital* by Dan Tapscott (2009). In this book, Tapscott writes about the new communication expectations and norms of the digital generation. He describes the digital generation as anyone born after 1965, or anyone approximately 53 years old or younger, which encompasses a large portion of public school stakeholders. As such, it is likely that the communication expectations of this digitally savvy and information hungry public influences the communication behaviors of school leaders.

As I was defining my own role as an administrator, I was interested in learning more about the implications of these external influences on my role development and on the roles of school principals at large. During this same time period, education trade journals, websites, and professional organizations were publishing articles about why school principals should incorporate social media into their communication profiles. In May 2012, an article in Edutopia listed the reasons that school districts should be incorporating Twitter into daily practice. Reasons included collaborating and communicating with the public, promoting life-long learner qualities, adapting to changing technologies, improving professional development, improving family involvement, and integrating the smaller school community into a larger global community.

I turned to the literature to find more in-depth answers about the implications of these applications but found little peer reviewed research on the topic. Trade journals and websites like Edutopia and Edweek published articles on why school leaders should incorporate social media into their communication profiles but according to a Web of Science database search, there was no peer reviewed research on how K-12 public school administrators were utilizing these mediums. Moreover, as I observed fellow leaders in my district and elsewhere adopting Twitter, I became curious about how these leaders were using Twitter and how they were conceptualizing communication and leadership in a digitalized society.

In order to explore these topics further, I posed three guiding research questions:

- Who uses Twitter? What are the patterns of Twitter usage by school principals and the schools they serve?
- What are school leaders communicating through Twitter? and
- Why are school leaders using Twitter? How do school leaders use Twitter to support the execution of their leadership roles and responsibilities?

To fully answer these questions, I conducted a mixed methods research study informed by a conceptual framework utilizing the seminal work of Leithwood and Riehl (2003) and Kouzes and Posner (1995). I first explored the demographics and Twitter use of principals in a school district selected for the study; I then did a content analysis of randomly sampled tweets from a period of one year. I analyzed 856 tweets to determine broad communication trends and explored their alignment with the conceptual framework based on Leithwood and Riehl (2002) and Kouzes and Posner (1995). I then interviewed

nine principals at both the elementary and secondary level to gain more nuanced and indepth information about how leaders were conceptualizing their use of Twitter.

This chapter will synthesize the quantitative and qualitative data to provide the comprehensive results of this study. I will first present the overarching themes that emerged from the data. I will then answer the research questions posed above. I close the chapter with a summary of the limitations of the study and the implications for practice and research.

Overarching Themes

School leaders are charged with communicating with stakeholders to build relationships with a larger community and to bring resources and support to the school (Kowalski, 2005). Communication expectations are changing as the demographics of school stakeholders are changing (Tapscott, 2009; Porterfield & Carnes, 2012; Sheninger, 2015). Today's school leaders are communicating primarily with those situated within the digital generation and social media is the most commonly used form of information gathering used by those in the digital generation (Sasseen et al., nd). School leaders must adopt social media in order to use the communication mediums preferred by their stakeholders. Leithwood and Reihl (2003) note that the two primary functions of leadership are to provide direction and exert influence. This research demonstrates that school principals primarily use Twitter as a public relations tool to support the two main functions of leadership by projecting a vision and eliciting engagement around the vision. By doing so they perform major leadership roles, such as setting a direction for their

school, developing their school's organization, and developing people associated with their schools.

The Center for Marketing Research at the University of Massachusetts Dartmouth conducted a study on the use of social media in large companies. In 2009, 82% of fortune 500 companies rated Twitter as a successful addition to their communication platform. Business organizations reported adopting social media for convenience and cost (Kelleher & Sweetser, 2012) while educational organizations reported adopting social media profiles to improve public relations and organizational outcomes (Donovan, 2010; Ferriter et al., 2011; Worner, 2010). This research affirms prior findings from both business and educational fields. School principals primarily use Twitter to set a direction, promote their organization, and develop people. Principals are attracted to Twitter for the ease of use, the promotional capabilities, and the capacity to reach both new and existing publics.

While Twitter has been touted as a two-way communication tool, school leaders primarily use Twitter as a one-way communication tool to project a positive image about the school and build relationships with an extended stakeholder base. Although principals do not find Twitter to be an effective tool to routinely engage in two-way communications, the messages sent through Twitter often spark feedback loops that occur in other communication mediums, such as newsletters, professional development seminars, and face-to-face interactions. Overall, principals who select to use Twitter find it to be a useful addition to their comprehensive communication profile. Principals are clear that this particular medium is most useful in constructing a positive online identity

and building positive relationships with an expanded stakeholder base through a pattern of consistent, albeit short, communications.

Who Uses Twitter?

In the school setting, Twitter has become an increasingly popular communication tool. In the school district of this study, 145 out of 173 possible schools had registered Twitter accounts. However, a much smaller portion of Twitter accounts were solely managed by the school principal. Overall, only one third (33%) of all school Twitter accounts were managed by the school principal. Principals who maintained control of these Twitter accounts represented a broad mix of male and female leaders of different ages and professional experience. Moreover, the demographics of the schools and surrounding communities that they led were just as diverse, indicating no preference for Twitter use by student or community characteristics.

Principals who maintained control of Twitter were eager adopters of Twitter who found value in the communication offerings of the medium. These principals found importance in projecting a positive image of the school. For most of the principals interviewed (6/9), they wanted to use Twitter to improve the public's perception of their school or wanted to construct a digital identity or build a more comprehensive identity about school programs and opportunities.

Principals who use Twitter admitted varying levels of tech savviness when beginning their journey with Twitter, but all reported finding the medium relatively easy to use. Further, principals reported that the immediate value gained through Twitter use outweighed the learning curve and perceived constraints of the medium. While these

principals acknowledged "costs" associated with Twitter use, such as finding the right language and visuals to convey a message that aligns with school and district initiatives, the time required to make these decisions, or the demands from the community to maintain a consistently high level of communication, most principals did not personally experience these issues as significant constraints on their time or responsibilities. All identified that the benefits strongly outweighed potential costs.

Beyond perceiving the benefits of Twitter use, these principals have become avid advocates for its use. Most of the principals that I interviewed had internalized prior messages by district level leaders who had advocated for greater social media use. Much of the language used by these principals mirrored the language used by the former superintendent, who had revolutionized the school district's technology policies and practices, including the use of Twitter as a major communication strategy. When the superintendent first introduced social media use to the school district, he used the language *tell your story*. This theme was echoed in all of the interviews that I conducted with principals (see Table 5.4. in Chapter 5). While some principals said that this language came directly from the superintendent (e.g., the principals at DH high school, CH high school, RE elementary school, and MM middle school), others reported a more nebulous connection to the term (e.g., the principals at WE elementary school and SH high school). One principal, Ms. Cinderson at LE elementary school, remembers reading the term in a book. Regardless of origin, all the principals internalized this language and used it as a general framework to describe their reasoning for using Twitter. Further, they used this language to perpetuate and reinforce Twitter use among their staff – so as to *tell our story*.

Relatedly, these principals spoke positively about the school district, their school, and their role as principal. While these principals were honest about challenges and shortcomings, their overall outlook was positive. They used words like "exciting," "fun," "happy," "energized," "proud," and "celebrate". They spoke of a desire to be part of a larger group of connected professionals and a larger connected vision, both within the field and within the larger community. Although it is not possible to say whether their positiveness made them more likely to adopt Twitter as a communications strategy, most of the principals did describe how using Twitter made them feel good about their role as principal and good about their schools. Many of the principals described how Twitter use helped them to "search for the joy or happy" in their schools and communities.

Finally, the principals in this study who use Twitter have a keen sense of interconnection between the school and surrounding community. These principals reflect the words of Edwards (2006), who writes that school leaders are responsible for creating a common vision between the school and the community, "one in which the community becomes a part of the school and the school becomes a part of the community" (p.230). In Chapter 2, I discussed that social media serves as a connection tool to bring together leaders and groups of individuals as they construct expectations around a common set of norms and values (Smitko, 2012). Social media is also an access point of information for an expanded stakeholder group who would not otherwise have access to traditional school communications (Aharoney, 2011; Kelleher & Sweetser, 2012; Taniguchi, 2011). Principals in this study reflected similar themes by identifying Twitter as a strong communication tool to share information with an existing stakeholder groups as well as expanded stakeholder groups (see Table 5.2 in Chapter 5).

All principals identified the importance of sharing information with the larger community. Some principals (e.g., the principals at WE elementary school, CH high school, and DH high school) spoke specifically about providing service to families and alumni by providing general information. Additionally, principals (e.g., the principals at WE elementary school, RE elementary school, CH high school, and DH high school) talked about connecting with local politicians to create a broad level of support and funding for the school. Eight of the nine principals directly talked about building business partnerships and involving community stakeholders through the use of Twitter. "Twitter helps us build our interconnectedness, both within ourselves and externally with our collaborators, our stakeholders, our celebrators," explained Mrs. Sullivan at CH high school.

Overall, principals who use Twitter have a positive outlook on their role as leaders and as participants in a larger system. They perceive Twitter to be a relatively easy communication medium with the benefits far outweighing the costs or constraints. Finally, principals who use Twitter find value in using Twitter to build an online identity and connect their school with a larger community.

What are School Leaders Communicating?

Bae and Lee (2012) analyzed over 3,000,000 tweets and found that positive and negative emotions expressed by an influential tweeter influenced parallel emotional responses in followers. It is therefore no surprise that school principals carefully constructed only positive messages to send through Twitter in order to connect a positive emotional response with their school. This study analyzed 856 tweets and found that

79% of all tweets had promotional and celebratory language, punctuation, and visuals. These tweets largely served to communicate a vision, excite and engage stakeholders around the vision, and provide examples of success. While a much smaller percentage of tweets were labeled as informational, principals revealed that these tweets also had promotional qualities; according to principals, these informational tweets served to build relationships and promote positive feelings about the school by satiating a heightened informational need of an expanded stakeholder base, now firmly situated in the digital generation. Therefore, while on the surface, Twitter messages served two purposes – to promote or to inform – a deeper analysis of both qualitative and quantitative data revealed that most if not all messages were intended to promote a positive image of the school and build relationships with stakeholders.

School leaders specifically did not post any negative content, content about safety, or other controversial topics. Principals were careful to post information as a representative of the school or as an "unbiased observer"; these posts were carefully balanced to represent the scope of services, activities, accolades, and opportunities presented to students. As part of this third-person posting persona, principals were careful to omit personal and professional identities from posted information on the school Twitter account. This was important to principals to create sustainability in a message that would be consistent across time and future leadership. At the same time, principals talked about their personal connection to the vision and mission of the school. Although remaining anonymous in the messaging was important to principals, it is unclear if this is a necessary component of social media messaging. It is unlikely that any message will

remain consistent across leaders; as the vision and direction of a school changes with new leadership; as a result, the message will shift to remain in alignment with the vision.

Why Are the School Leaders Using Twitter?

"We see it all as a consistent package to message what we're doing, what we think about, what's important to us," explained Mrs. Sullivan, principal at CH high school. This principal, like the other principals in this study, incorporate Twitter as a part of a larger communication package. Some communication mediums are used exclusively for extended and intricate communications, controversial topics, and customized and personalized communications. Twitter, on the other hand, is used almost exclusively for positive promotions, or public relations efforts, of the school. School leaders use short bursts of text and images to promote a positive image of the school and to build relationships with a broad stakeholder base.

In 1976, Grunig – a leading researcher in the field of public relations – first introduced the idea of reciprocity or symmetry between organizations and stakeholders. His seminal research shifted the perspective of public relations from a mean-ends process to a relational process, giving rise to cocreation or relationship theories of public relations. Over the years he refined and extended his research by incorporating relationship theories from the field of psychology to identify how relationships between an organization and the larger public are constructed and perpetuated. Grunig stated that organizations build relationships with the public by using a combination of five cultivation strategies: access, positivity, openness, sharing of tasks, and networking (Grunig, 1984).

When Grunig (1984) first introduced relational public relations, there was no internet. However, the five cultivation strategies he originally outlined over thirty years ago overlays onto the expectations of communication in the digital generation as outlined by Tapscott (2009). According to Tapscott, today's digital generation expects to have access to information and to leaders (access); they expect honesty and candor (openness); they expect to co-construct the world around them through innovation and collaboration (sharing of tasks); they expect to be connected without boundaries of geography or time (networking); and they expect openness, integrity, and playfulness (positivity).

The principals interviewed in this study shared that they used Twitter as a public relations communication tool to fulfill the intersecting needs of the school and of stakeholders. They specifically spoke to creating open, honest, positive systems of communications that were designed to build relationships with stakeholders as they worked together to realize a common vision. According to these principals, Twitter is an easy, cheap, fast, and effective communication tool that allows them to promote a vision, engage others around a vision, and satiate the high communication demands of today's public.

I opened this research by sharing that while extensive research has been conducted on how organizations build public relations, there is little research on online public relations and even less research related to school organization public relations practices. The following subsections provide a more in-depth answer of why school leaders use Twitter using foundational research in relational public relations (Grunig,1984) and the digital generation (Tapscott, 2009) as a loose guide.

Increasing Access to Information

Access is the process by which one party can go directly to the other for information without requiring a third party (Hon & Grunig, 1999). Ki and Hon (2008) defined access as having the opportunity to interact, the willingness to answer questions, and the timely connection of people with appropriate resources.

Both the qualitative and quantitative data support that principals use Twitter to provide information and to connect stakeholders with information both within the school and within a larger public. In today's digital era, stakeholders expect information immediately. Mrs. Archer, principal at DH high school, talked about her school's stakeholder expectations that information regarding sporting events would be posted in real time. Another principal, Ms. Cinderson at LE elementary school, discussed sharing videos of assemblies and concerts as they happen as a service to stakeholders who may not be able to participate in person. Principals find value in being able to share information in the moment. This timeliness is not only critical to meet the needs of the public, but it also allows the principal to build a stream of communications that reinforces the vision.

While increased access is a demand of today's digital public, and while many principals identify the benefit of being able to share information in real-time, there are also implications for this heightened responsibility. Principals discussed the pressure to maintain a certain level of tweets. They note that increasing communications increases the public's appetite for information. Principals warned that satiating the public's need for information can result in a shift in focus that deters from the work of the school. This

pressure has the potential to cause principals to be less careful and planned in their communications. It also has the potential to shift the focus from content to volume.

Many principals indicated a heightened need to stay focused on the vision and only provide information when presented with an authentic opportunity to do so. Although the public has an insatiable desire for instantaneous information, school leaders have to be careful to focus on the meaning and purpose of tweets. When leaders begin to share information without clear alignment to a vision or purpose, the stream of information becomes divergent and contradictory. This lack of clarity has the potential to erode the public's perception of competence and dependability, which then has the potential to erode the public's trust in the school and in the leader. As Porterfield and Carnes (2014) note, online communications have the potential to amplify or erode trust.

Building Trust and Openness

School principals build trust and openness by engaging in honest and consistent communications over time. These communications create an established pattern that is consistent with a larger vision and mission; this alignment and consistency builds trust. These communications project an image of competence, integrity, and dependability – the three dimensions of trust (Kelleher, 2009).

All school principals interviewed discussed the importance of maintaining control of the Twitter account in order to ensure messaging consistency. Principals built a pattern of communications over time by tweeting at least an average of one tweet a day. They were careful to use common language throughout tweets, often referring back to old tweets to ensure consistency (principals at CH high school and SH high school provided

examples of using Twitter archives to do so). Further, they highlighted the consistency in the messaging by using hashtags to alert stakeholders to a common theme.

Principals discussed maintaining control of Twitter in order to ensure consistency in the timing of messages in addition to consistency in content. These leaders are acutely aware of the rate of their tweets and they diligently ensure they post on a consistent basis. Some principals set a schedule to tweet while others had a more organic sense of the pace of tweets. This pattern of consistent and open tweets builds trust; and trust increases the likelihood that stakeholders will become actively engaged in supporting the vision and supporting a constructive problem-solving process (Gunther et al., 2011). One principal even talked about posting consistently enough to remain visible in the news stream of their stakeholders (eg, principal of RE elementary school). Most principals (8/9) talked about diversifying the content of posts to ensure that all stakeholders could find content that would connect them personally to the vision of the school.

When principals provide information about the internal workings of the school, they provide the larger public with insight about the vision and how that vision is being executed. Providing information about activities, sharing information about governance, and helping others understand issues are all actions associated with openness (Ki & Hon, 2008). Further, by sharing information about student activities and achievement, principals are able to illustrate the vision as realized in the behaviors of their staff and students. This action not only provides a measure of success, but it also encourages engagement around the vision by showing the benefits and outcomes of such engagement.

Networking

"Your content isn't going to work for you if it isn't ignited through your network and beyond" (Schaefer, 2014, p.25). All principals interviewed discussed the importance of situating their school within a larger network, both online and offline, in order to amplify their vision. Repeatedly principals echoed the sentiments of Schaefer by stating the importance of supporting the successful execution of their vision by building a larger network to elicit resources, support, and active engagement. Principals in this study reflected reasons for social media networking that have been previously identified in a full body of organizational research (e.g., see Aula, 2011; Strauss, Glassman, Shogan, Smelcer, 2013; Taniguchi, 2011). They engaged in online networking to enhance the positive image of the school, promote communication transparency, gain feedback, and expand their stakeholder base to include previously excluded populations. Some of these stakeholders include politicians, local businesses, the community at larger, and alumni. Using Twitter provided principals the opportunity to tap into a latent or passive public that may be more willing to be active supporters online (Porterfield & Carnes, 2012). As Porterfield and Carnes (2012) so apply stated, "Communication – made easier by new technology – builds partnership both inside and outside the classrooms. These partnerships support student learning" (p. 34).

While networking online holds a lot of potential, one of the major drawbacks is the anonymity of the medium. Principals talked about being very careful about messaging because the audience is nebulous and shifting; it is difficult for a sender to construct a message when the audience is unknown. Online mediums also have the potential to create a counternarrative that can be just as powerful, if not more so. High

school principals were especially aware of a counternarrative that occurs on social media, such as dissatisfaction with public education. This counternarrative is available to the same stakeholder base and poses threats to the leader's ability to build openness and trust. The challenge for principals is to remain honest but positive in a way that acknowledges the counternarrative while also encouraging stakeholders to abandon that narrative and actively engage the leader's vision. School principals frequently used visuals – 71% of tweets included visuals – to elicit powerful positive emotions around the vision and to draw stakeholders to their narrative. In addition, they used features like tags and retweets to reinforce positive behaviors of stakeholders while also building connections and relationships.

While many researchers have argued that leaders are not effectively using social media to build relationships (Bortree & Seltzer, 2009; Kwak et al., 2010; Sweetser et al., 2008; Waters et al., 2009), these studies have largely evaluated online feedback loops. This research demonstrated that while communication may be sent one-way through social media, feedback loops do not necessarily include a written communicated response in the same medium. Feedback loops occur as retweets, tags, the repeated use of common language, and various offline communications. Leadership at the district and school level retweeted messages to reinforce behavior, celebrate actions, and elevate visibility to a larger online community. Principals reacted to their own information being retweeted by tweeting more of the same type of content. They scanned news feeds to see what district leaders were retweeting from other principals and paid attention to that content. In addition, principals responded to personal requests from teachers, community members, and students to post certain types of information. Therefore, while principals

were careful to construct a message that was in alignment with their greater vision, the types of content posted was often a co-construction based on feedback from a larger community. In today's digital society, this co-construction is critical to building relationships with those situated in the digital generation.

While Gruzd et al. (2012) suggested that social media can be used as a forum to discuss issues and ask questions, principals in this study generally did not find value in using social media in this way. They found Twitter to be much more effective tool to excite stakeholders and to promote engagement around an issue. Only three of the nine principals indicated engaging in online dialogic feedback loops. Two principals (the principals at CH high school and RH high school) talked specifically about trying to engage in Twitter chats, polls, and posted questions to elicit online conversations and feedback with little success. One of nine principals (principal of ME elementary school) used Twitter to engage in online Twitter chats within the school and another principal engaged in professional chats for his own personal professional development (principal of RE elementary school). It is important to note that these chats were dedicated and targeted around a singular professional development topic and were targeted to a select population. These chats were bound by time, date, and topic. Therefore, while engaging a larger public in online dialogic loops has generally not been a successful use of Twitter by school principals, a more refined and targeted loop with time, topic, and audience boundaries may result in some success.

School leaders use Twitter as part of a larger communication profile. Twitter is an effective tool to build a pattern of short bursts of information over time. The ease and instantaneous nature of the platform allows leaders to meet the communication needs of a

larger stakeholder base by providing immediate access to information, by building networks across time and space, and by creating a pattern of communications over time to build a sense of trust and openness. This section explored why school principals include Twitter in a larger communication profile. The next section will unpack how school leaders use Twitter to support the execution of their role.

How Does Twitter Support Leadership?

Artful communication presents information in a way that tells a story and, "provides meaning to an unfolding strip of events, weaving connections among them" (Gamson & Modigliani 1989, p.143). One of the main benefits of Twitter identified by principals is the ability to communicate concentrated and targeted information over time to develop a larger narrative, or *story*. In Chapter 2, I outlined that the literature suggests social media has the potential to fulfill multiple communication needs within one platform. This research demonstrates that principals primarily use Twitter as a promotional public relations tool to excite and engage stakeholders around a common vision. They accomplish this task through a more nuanced execution of their leadership roles as they set a direction, develop an organization, and develop people.

Setting a Direction

A school leader sets a vision by determining the goals for the school. They set a direction by creating a pathway to achieve that vision. Leaders set a direction by articulating a vision, creating engagement around the vision, and by setting metrics to

measure success. They fulfill these responsibilities, largely, through communication. As the principals in this study considered which communication medium will be most effective to articulate and brand a vision, they often turned to Twitter.

One of the most critical components of setting a vision is defining the important roles of each stakeholder in the larger vision and then celebrating their strengths and contributions. This process can build engagement with the vision, relationships between stakeholders, and relationships between the larger stakeholder population and the school. Promotions and celebrations were the most common use of Twitter, with 79% of all tweets containing some type of celebratory information. More specifically, principals used Twitter to reflect a positive school culture, project fun, build relationships, and appreciate the contributions of staff and community members. Together, principals used these celebrations to orient and focus the school community on the larger vision. They used hashtags to distill the vision in the simplest terms. Principals used repeated hashtags and other consistent language over time to construct a common language and themes for stakeholders. Principals often used hashtags that included the name, initials, or mascot of the school and a focusing word such as excellence, pride, future, rigor, and smile.

Twitter offers a distillation of a larger and more complex vision into its most simple language with supporting visuals. Twitter holds drawbacks for leaders who are unable to distill their vision to the simplest form. The principals in this study found that using Twitter over time assisted in the refinement and clarity of their overall message. Twitter provided principals with an "elevator speech" about their vision that they were able to transfer to other communication channels. Principals found this refinement process helpful to keep them aligned with and focused on their vision for the school.

Developing an Organization

Setting a direction and developing an organization are deeply connected. The vision is the goal while the organization is the structure to support the goal. As principals develop an organization, they construct programs, structures, and supports to encourage the larger vision. As an example, if the vision is to provide a comprehensive educational program, the structures that support that vision would include a diverse set of educational opportunities for students. In a school setting, the overarching vision is always about providing opportunities to students. Therefore, the health and strength of an organization is measured by student engagement and opportunities.

Principals most commonly used Twitter to project an image of a strong and healthy organization by posting information about student athletics, achievement, activities, arts, and academics. This theme was particularly strong with 51% of all tweets projecting positive themes about student engagement and activities. While promotional tweets do not directly develop an organization, they do highlight and reinforce aspects of an organization that leaders believe to be positive and supportive of an organization's vision. Principals in this study purposefully posted information that they thought would promote the health of the school as an organization and encourage additional stakeholder support.

In addition to highlighting and celebrating the internal opportunities provided students, principals also used Twitter to situate their school within larger communities. These communities were fluid and interwoven. Principals situated their schools in larger communities created around content (academics, arts, athletics), future opportunities (colleges, internships), geographic regions (local, state, national and international), and

relationships (partnerships, alumni, community groups, PTA). Part of the larger vision of all principals included creating citizens of tomorrow, and part of that citizenship included helping stakeholders understand the school's unique role and place in a larger society.

Developing People

Carpenter and Krutka (2015) reported that teachers enjoy using Twitter as a professional development tool. However, principals in this study did not use Twitter to project professional development information on Twitter. Only 6% of all tweets held some of type of professional development information; more common, 16%, were tweets that highlighted a teacher engaged in an instructional practice, though these tweets were still far fewer that the tweets that helped a principal set a direction or develop the school as an organization.

Principals were careful to not publicly share information that may project internal weaknesses in instruction or culture of the school. Principals may have feared that publicly announcing professional development opportunities would send the wrong message to certain stakeholder groups, such as parents or politicians. Tweets that highlighted instructional practices, on the other hand, may have seemed safer to principals. These tweets often contained themes of rigor and differentiation, which served to reinforce teacher behaviors that supported the larger vision and mission of the school. These tweets could also be used as a metric to define successful implementation of district and school initiatives.

Principals, like the teachers in the literature, said that they enjoy using Twitter as a quick, information gathering tool about educational practices. Principals looked for

information to share with staff for both general and individualized professional development. They also looked to Twitter to gain fresh ideas and to see how other schools were conceptualizing and realizing district goals. These uses of Twitter utilized some of its powers without running the risk of sending a message that could be misconstrued by stakeholders.

Principals warned that while Twitter holds immense opportunity to gather information, there is a plethora of information available and not all of it is credible or based on research. Further, principals warned that it is easy to lose focus on the important tasks of the day and to spend too much time searching for information. While the use of Twitter to develop people was a minor use by principals (roughly 18% of tweets), principals still found Twitter useful in fulfilling this role of leadership.

Limitations of the Study

This study is a mixed method study about school principals who use Twitter on a consistent basis as part of their communication profile. This research was bound geographically and temporally, thus limiting generalizability beyond the boundaries of the study site. Nonetheless, the study offered a deep analysis of Twitter use within a school district with a social media rich culture and provided insights into how other principals might use Twitter to engage their stakeholders and perform fundamental leadership roles. While there are limitations to applying the results of this study to school principals within a school district with demographics and a social media culture distinct from that of this study, these results provide a glimpse into how Twitter could be used by principals to set a direction, develop their school as an organization, and develop people.

Further, there is limited generalizability to school principals who do not use social media. Because I did not interview principals who do not use Twitter or who delegate responsibilities for a school's account to other staff, this study reveals little about the motivation of these principals, their communication strategies, or their beliefs about Twitter use. Moreover, the exploratory nature of this study focused on how school principals use Twitter to support their roles and responsibilities; I did not examine the effects of Twitter use on stakeholder groups. While principals were generally positive about their use of Twitter, this study cannot validate principal's beliefs about how Twitter use has influenced stakeholders in general or specific stakeholder groups.

Finally, this research is framed by public relations and leadership theories and is situated in an educational context. As such, the findings are situated within these fields of study and have limited generalizability to other fields and contexts. However, different fields of study can speak to each other usefully, as I have tried to demonstrate by integrating education research, organizational research, and communications research in this study. I believe that these findings advance the literature on social media and leadership broadly, even if they speak most clearly to practitioners and scholars focused on education.

Personal Reflections on Practice

In this research, I argued that K-12 public school principals use Twitter predominantly to brand positively their school through a process of projecting their vision and showcasing the strength and depth of student opportunities and achievements (developing an organization). Principals in this study warned of the dangers of overuse of Twitter. These leaders found that using Twitter as the singular or predominant communication tool may result in Twitter overload, missed audiences, and skewed priorities. Twitter is a powerful communication tool that holds great potential for strengthening schools and leadership as well as considerable potential for damaging schools and leadership. In this section I offer suggestions for practice to support leaders in capitalizing on the potential of Twitter while mitigating the associated risks. These reflections represent the views of the principals that I studied, mediated by my personal experience as the researcher, an elementary school principal, and a frequent user of Twitter.

One of the main strategies principals can employ to mitigate the risks associated with Twitter is to maintain ownership of all Twitter communications. While leader ownership of the information transmitted through Twitter is not mandatory, it is highly encouraged. Leaders are ultimately responsible for all functioning within the schoolhouse, including communications. Twitter has the power to accelerate the formulation of trusting relationships between the school and associated stakeholders. Twitter also has the potential to amplify and accelerate the speed of trust erosion if not managed appropriately. Given that principals have the ultimate responsibility for all communications, it is important for leaders to ensure that Twitter messaging is consistent with their expectations and vision. The information that is posted and viewed on Twitter by a larger public happens instantaneously. The advent of screen shots and digital information recovery makes it difficult, if not impossible, for leaders to completely erase or delete inappropriate or misaligned communications once posted. The instantaneous feature of Twitter, while considered a benefit to the principals I interviewed, also holds

incredible risk if the messaging is not consistent with the overall vision and mission of the school.

The leaders in this study talked about using Twitter as more than a simple vision communication tool. Principals found that using Twitter helped them distill and clarify their vision. While this process happened organically for these leaders, I would encourage leaders who are new Twitter users to engage in communication strategy planning before using Twitter. This planning may include clearly defining the vision and mission, outlining language, hashtags, and visuals that will be used to project this vision, outlining what information will and will not be shared, and planning a recovery strategy if inappropriate or inaccurate information is posted.

In addition, I suggest that leaders have an open dialogue with parents and stakeholders about what information will be shared, particularly as it relates to students. This shared understanding of whether student pictures and names will be included will be important in pre-planning to avoid any potential pitfalls of sharing information about minor children. I also suggest that leaders have an open dialogue with stakeholders about the expectations for the types of information that will be shared and the expected rate of communication. Outlining clear boundaries and expectations may help school leaders understand how to balance Twitter communications with other communication outlets; in addition, boundary setting activities may help prevent leaders from experiencing Twitter overload as they try to satiate the needs of their information hungry stakeholder base.

At a broader school district level, I encourage district leaders to consider establishing policies, procedures, practices, guidelines, and training for social media use prior to launching social media expectations for school leaders. In this district of study,

policy development lagged behind implementation. While there was no evidence of significant negative consequences as a result, there was evidence that ambiguity caused some confusion about the expectations of use. Moreover, it is possible that this ambiguity and lack of appropriate training influenced whether leaders adopted Twitter and whether they continued to use Twitter after the initial expectations faded.

District leaders would benefit from offering a professional development series about effective communication practices. Communication professional development should include information about the needs, values, and norms of the new digital generation and how leaders can meet the needs of this digital public by effectively utilizing digital communication strategies. District leaders should consider the following areas of possible professional development: how to use Twitter as a branding tool; how to use Twitter as an information collecting tool; how to use Twitter to support leadership practices; how to manage Twitter overload; and how to use the functions, tools, and analytics of the Twitter platform. District leaders may want to provide direct instruction to leaders about how to create a comprehensive communication profile and how to use Twitter as one distinct tool in this larger package.

More specifically, Twitter has been shown to be a powerful positive branding tool as well as a platform to project a vision and highlight the strength of the organization. Leaders may benefit from a professional development series about how to use Twitter in this capacity. District leaders may also wish to incorporate application-based techniques and strategies such as how to construct an effective message; how to use repeated language and visuals to construct a pattern of targeted communications; how to use

visuals, hashtags, and retweets to strengthen a message; and how to construct a message to meet the needs of multiple audiences.

While the principals in this study found Twitter to be an effective communication tool, the strategies they used were all self-taught and they learned many hard lessons organically. In order to build leadership communication capacity and to prevent leaders from experiencing the pitfalls of social media, district leaders are encouraged to employ strategic professional development and training opportunities for all school based leaders.

Implications for Future Research

Much of the research on social media to date has selected to utilize either qualitative or quantitative research and has studied these communications from only one lens. As this research demonstrates, much of what happens on social media influences – and is influenced by – offline interactions, intentions, and beliefs. Social media is one thread of a much more complex communication system and larger social phenomenon. Therefore, when researchers evaluate this complex phenomenon from only one perspective, they risk losing important information that might be gained from a different perspective.

As an example, in this research the quantitative data suggested that high school principals in particular utilize Twitter more frequently to project information, suggesting that these leaders do not capitalize on Twitter's ability to construct a positive school brand over time. However, interviews with principals revealed that this use of Twitter is not just about sharing mundane information but about building relationships by meeting the communication needs of their digitally savvy stakeholder population that is

comprised largely of students and alumni. This important distinction was revealed only by using a mixed methods design.

Given the interdependence and interconnection between today's online world and offline world, future researchers are encouraged to explore and study phenomena in both realms. Further, online communications are purposeful constructions that occur based on the personal experiences, influences, and attitudes of an individual. In order to fully understand the meaning behind the message, researchers must ask the content generator to provide context. To fail to do so will lead to inaccurate findings as researchers impose their own experiences, influences, and attitudes on the constructions of another.

This research is situated in the construction and delivery of a communicated message. The question remains whether these messages influence the behaviors in others in measurable action and whether these behaviors influence measurable school outcomes. There is some indication in this research that feedback loops created online influence behaviors. Principals shared that they often looked to see what their supervisors were retweeting and then produced more information of similar content. The qualitative data demonstrated that there was a skewing of data by administrative areas, suggesting that online behaviors and reinforcement structures do, in fact, influence the communication behaviors of leaders. The question remains whether this influence has any meaningful impact on stakeholders and whether the impact is reflected in school outcomes.

This research demonstrated that while the principals interviewed found value in using Twitter, overall the percentage of principals who use Twitter regularly is low in this district. These principals perceive that they are building positive connections, bringing resources to their building, and influencing public perception of their school. Future

researchers are encouraged to test these perceptions to determine whether Twitter has any measurable benefits and should therefore be more widely adopted by more principals. Researchers should also consider the barriers to Twitter use among non-users and what might be the optimal usage of this medium to promote positive leadership practices and positive outcomes for schools.

Relatedly, researchers are encouraged to explore the potential negative consequences of Twitter use. To date, research about Twitter use has focused primarily on the positive outcomes and/or associated constraints. The research has been silent about the potential darker sides of Twitter use. This research indicates that Twitter has the potential to become time consuming and may cause Twitter overload. For the less savvy leader, such time constraints may lead to diminished or ineffective leadership practices. Social media overload may contribute to or exacerbate the social emotional or psychological stress that already accompany being a principal in public schools.

Another potential negative consequence of Twitter use is the ability for those in leadership positions to influence audiences with relatively few checks and balances. While this research focused on how Twitter is used by leaders to positively engage and influence school stakeholders, the same tool can be used by leaders for less altruistic purposes. Twitter information can be constructed without any mediation or editing, especially if leaders maintain total control of messaging. As such, Twitter users have the potential to edit, alter, or fabricate information. Therefore, those in power with an unfiltered and instantaneous communication tool have the potential to construct a powerful narrative that may mislead and misinform the actions of an extended audience. Negative, divisive, and false narratives have the potential to impact overall trust and

stability of institutions and businesses. In order to strengthen research in the field of digital communications future researchers are encouraged to explore the potential negative consequences of Twitter as well as how to mitigate such consequences.

Summary

The world is rapidly changing around us as the way we interact and construct information changes. Today's digital generation is able to access information instantaneously and they are no longer merely consumers of information, but constructors of information. Information bombards the general public on multiple platforms with varying levels of credibility. As a result, the public has become accustomed to a certain level of speed and transparency in communication in all aspects of their lives, including education. This poses unique challenges for school leaders.

Leaders understand that communication is the foundation for all effective leadership practices. As such, leaders must engage in the communication practices most commonly used by their stakeholders. At the same time, education has traditionally lagged behind the larger public in technology adoption. This makes leaders unprepared and unpracticed in using these preferred mediums.

School leaders are facing unique challenges that require effective communication practices. They must bring resources to the school, combat counternarratives that can now be constructed by any stakeholder, elicit support from a larger stakeholder base, and build positive relationships with a larger community. They must ensure that their school

is providing cutting edge educational services while also ensuring that they are seeking to expand opportunities and grow their educational organization.

The use of social media, and Twitter in particular, offers school leaders a unique opportunity to use a preferred communication medium of a digitally oriented public to disseminate information. To date, there has been little research on how school leaders are beginning to navigate communication in a digital society. This study explored the Twitter behaviors of 18 school leaders situated within a large, digitally oriented public school system. The study examined a random sample of 856 sent out to stakeholders during the school year, and it conducted in-depth interviews with nine of those school principals.

Overall, this study found that school principals who use Twitter find the platform easy to use and an effective tool to promote their school, project a positive school identity, build relationships with a larger community, and engage stakeholders around their vision. While principals were able to identify constraints of the medium, they all found that Twitter is an effective tool in a larger, more comprehensive communication package. No principals thought that Twitter would be an effective tool as a stand-alone communication medium, and only a few thought Twitter was an effective medium to project or discuss more complex or controversial issues.

Twitter offers unique communication features including the use of visuals, hashtags, retweets, and tags to enhance the overall communicated message. These features orient the public to the vision, elicit a positive emotional response around the vision, and reinforce the behaviors of those engaging in activities that support the vision.

All of the principals in this study made extensive use of these message enhancements to support their communications with stakeholders.

This research set out to explore how school leaders use Twitter to support their leadership practices. Overall, those leaders who use Twitter find that this medium supports their leadership practices as they construct a vision, engage a broad stakeholder base around the vision, bring resources and support to the school, construct a positive image, and develop the professionals who support the organization. Principals use Twitter primarily as a promotional and relationship building tool. Further, they use Twitter to gather information and guide practices, though these functions were rarely part of public tweets.

Future research should continue to explore how principals make sense of communication practices, how they perceive the benefits and constraints of digital mediums, and how they use of digital communication mediums influences the behaviors of stakeholders and influences school outcomes. This study provides an initial foundation for such future inquiries.

Appendix A

Interview Questions and Probes

- 1. You were selected to participate in this study because you use Twitter on a consistent basis. Talk a little about why you use Twitter.
 - a. Are there expectations from others that you use Twitter? Who?
 - b. Why did you start using Twitter? Why have you continued?
 - c. You could delegate tweeting to another staff member and yet you have chosen to manage the school's twitter site. Talk about why you have maintained control of this role.
- 2. What are the drawbacks or limitations of using Twitter?
- 3. Talk a little about how you decide what information you share on Twitter.
 - a. Do you have input from others on what to post?
 - b. Are there themes or audiences that you focus on more when using Twitter?
- 4. You use Twitter to share information. Do you use Twitter to collect information? Tell me about that.
- 5. How has Twitter changed or influenced your communication as a leader?
- 6. Talk about your role as a principal. How do you think using Twitter impacts the execution of your role?
- 7. Would it be okay if we looked a few of your tweets together and you walked me through what your decision making in crafting and posting the tweet? (review 2 top retweeted tweets) Tell me about this tweet.
 - a. Why was sharing this information important?
 - b. Why did you choose Twitter to share this?
 - c. Were you aware that is one of most retweeted tweets? What do you think about that?
- 8. As we close our time together, do you have any new reflections or anything else you would like to share with me today about on your use of Twitter?

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