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Use of Social Media by Indiana Principals and Superintendents

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ABSTRACT

The purpose of this study was to examine the use of social media by Indiana K-12 principals and superintendents. The use of social media has become prevalent both as a social and professional tool. The social media movement has evolved quickly over the past five years; however, schools and school districts have been slow to effectively utilize this tool out of fear, apprehension, and ignorance. The opportunity to explore social media as a professional tool by educational leaders was opportune and timely as this tool becomes a multi-purpose tool in today's society. Descriptive statistics, independent sample *t* test, and one-way ANOVAs were used to analyze and disseminate the data collected for this study. This study was conducted by administering an electronic survey to all public school K-12 principals and superintendents throughout Indiana.

I created a 16-item Social Media Survey to quantitatively measure the opinions and perceptions of principals and superintendents as to the frequency, preference, and reasons for using social media as a professional tool. A total of 263 principals and 94 superintendents submitted responses to the Social Media Survey. Statistical analysis of the data included descriptive analysis for selected items as well as inferential analysis that included independent sample *t* tests and one-way ANOVAs. A composite score was tabulated from the survey that helped to determine if significant differences existed among dependent variables that included position type, locality, years of experience in the field of education, socioeconomic level, and grade letter received from the Indiana Department of Education. The composite score was determined by collecting the responses of principals and superintendents as they related to social

media as an effective professional tool in the areas of communication, professional development, recruitment, networking, and transparency. An independent sample *t* test found no significant difference between position type (principals and superintendents) composite score responses on the Social Media Survey. A one-way ANOVA found no statistically significant differences between locality (urban, suburban, rural), years of experience in the field of education (0-10, 11-20, 21-30, over 30 years), socioeconomic level (0-25%, 26-50%, 51-75%, 76-100%), or letter grade received by the Indiana Department of Education (A, B, C, D, F) and the social media composite score.

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TABLE OF CONTENTS

ABSTRACT iii

ACKNOWLEDGMENTS v

LIST OF TABLES xii

INTRODUCTION 1

Statement of the Problem 4

Purpose of the Study 5

Research Questions 6

Null Hypotheses 7

Limitations of the Study 7

Delimitations of the Study 8

Definitions of Terms 8

Significance of the Study 10

Summary 10

REVIEW OF LITERATURE 12

Technological Change 14

Most Popular Social Networking Sites in 2013 16

Facebook 17

Twitter 17

Google+ 18

LinkedIn 19

Instagram 19

YouTube 19

K-12 Students Use of Social Media 20

2009 National Social Media Study 21

2012 National Social Media Study 23

Smartphones as Mobile Computers 24

Social Media Research Studies 27

International Society for Technology Education 39

METHODOLOGY 41

Problem 41

Research Questions 42

Null Hypotheses 43

Research Design 44

Population of Study 44

Instrumentation and Data Sources 45

Data Collection Procedures 45

Content Validity 46

Survey Reliability 46

Statistical Analysis 47

Summary 48

ANALYSIS OF DATA 49

Descriptive Analysis 50

Frequency Data For Whole Sample 50

Frequency Data For Position Type (Principal) 53

Frequency Data For Position Type (Superintendent) 54

Demographic Data For Whole Sample 56

Demographic Data by Position Type (Principal) 58

Demographic Data by Position Type (Superintendent) 60

Demographic Data by Locality (Urban) 61

Demographic Data by Locality (Suburban) 63

Demographic Data by Location (Rural) 65

Demographic Data by Years of Experience in the Field of Education (0-10 Years) 66

Demographic Data by Years of Experience in the Field of Education (11-20 Years) 68

Demographic Data by Years of Experience in the Field of Education (21-30 Years) 69

Demographic Data by Years of Experience in the Field of Education (Over 30 Years) 71

Demographic Data by Percentage of Students Who Received Free or Reduced Lunch For the 2013-14 School Year (0-25%) 73

Demographic Data by Percentage of Students Who Received Free or Reduced Lunch For the 2013-14 School Year (26-50%) 74

Demographic Data by Percentage of Students Who Received Free or Reduced Lunch For the 2013-14 School Year (51-75%) 76

Demographic Data by Percentage of Students Who Received Free or Reduced Lunch For the 2013-14 School Year (76-100%) 78

Demographic Data by 2012-13 Letter Grade Received from the Indiana Department of Education (Letter Grade of A) 79

Demographic Data by 2012-13 Letter Grade Received from the Indiana Department of Education (Letter Grade of B) 81

Demographic Data by 2012-13 Letter Grade Received from the Indiana Department of Education (Letter Grade of C) 82

Demographic Data by 2012-13 Letter Grade Received from the Indiana Department of Education (Letter Grade of D) 84

Demographic Data by 2012-13 Letter Grade Received from the Indiana Department of Education (Letter Grade of F) 85

Inferential Test Results 87

Null Hypothesis 1 88

Null Hypothesis 2 89

Null Hypothesis 3 89

Null Hypothesis 4 90

Null Hypothesis 5 91

Summary 91

SUMMARY OF FINDINGS, RESULTS, IMPLICATIONS, AREAS OF FUTURE RESEARCH 94

Summary of Findings 96

Results 97

Research Question 1 97

Research Question 2 100

Research Question 3 102

Research Question 4 103

Research Question 5 104

Research Question 6 105

Research Question 7 106

Implications 106

Areas for Further Research 112

Summary 113

REFERENCES 115

APPENDIX A: INFORMED CONSENT 123

APPENDIX B: FOLLOW UP E-MAIL TO PRINCIPALS AND SUPERINTENDENTS 124

APPENDIX C: USE OF SOCIAL MEDIA BY INDIANA PRINCIPALS AND SUPERINTENDENTS SURVEY 125

APPENDIX D: INTERNATIONAL SOCIETY FOR TECHNOLOGY EDUCATION STANDARDS 128

ISTE-NETS 2007 Student Standards 128

ISTE-NETS 2008 Teacher Standards 130

ISTE-NETS 2009 Administrator Standards 133

APPENDIX E: OPEN-ENDED RESPONSES TO SURVEY QUESTIONS 135

LIST OF TABLES

Table 1. Most Popular Social Media Sites as of November 2013 16

Table 2. Percentage of U.S. Adults Who Own a Mobile Phone 25

Table 3. Means of Class Enjoyment and Collaboration 30

Table 4. Percentage of Agreement Pre- and Post-Spring Break and Thanksgiving 31

Table 5. Frequency of Social Media Use 51

Table 6. Preference of Social Media Sites 52

Table 7. Ways Social Media is Used as a Professional Tool 53

Table 8. Descriptive Whole Sample Data on Perceptions of Effectiveness of Social Media as a Professional Tool 58

Table 9. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Position (Principal) 59

Table 10. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Position (Superintendent) 61

Table 11. Descriptive Data on Perceptions of Effectiveness of Social Media as Professional Tool by Location (Urban) 62

Table 12. Descriptive Data on Perceptions of Effectiveness of Social Media as Professional Tool by Location (Suburban) 64

Table 13. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Location (Rural) 66

Table 14. Descriptive Data on Perceptions of Effectiveness of Social Media as Professional Tool by Years of Experience in the Field of Education (0-10 Years) 67

Table 15. Descriptive Data on Perceptions of Effectiveness of Social Media as Professional Tool by Years of Experience in the Field of Education (11-20 Years) 69

Table 16. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Years of Experience in the Field of Education (21-30 Years) 70

Table 17. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Years of Experience in the Field of Education (Over 30 Years) 72

Table 18. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Percentage of Students Who Received Free or Reduced Lunch (0-25%) 74

Table 19. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Percentage of Students Who Received Free or Reduced Lunch (26-50%) 75

Table 20. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Percentage of Students Who Received Free or Reduced Lunch (51-75%) 77

Table 21. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Percentage of Students Who Received Free or Reduced Lunch (76-100%) 79

Table 22. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by 2012-13 Letter Grades Received From the Indiana Department of Education (Letter Grade of A) 80

Table 23. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by 2012-13 Letter Grades Received From the Indiana Department of Education (Letter Grade of B) 82

Table 24. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by 2012-13 Letter Grades Received From the Indiana Department of Education (Letter Grade of C) 83

Table 25. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by 2012-13 Letter Grades Received From the Indiana Department of Education (Letter Grade of D) 85

Table 26. Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by 2012-13 Letter Grade Received From the Indiana Department of Education (Letter Grade of F) 86

CHAPTER 1

INTRODUCTION

One of the most difficult tasks leaders face is implementing change (Black & Gregersen, 2003). Humans are biologically hard-wired to resist change in order to survive (Black & Gregersen, 2003). Unfortunately, this resistance to change is counterproductive in the 21st century where change is occurring at a rapid rate (Black & Gregersen, 2003). When leaders attempt to implement change quickly it is often met with greater resistance (Black & Gregersen, 2003). Today, school principals and superintendents face the daunting task of leading the fast-paced technological revolution within their schools. Van Dijck (2013) stated that "in December, 2011, 1.2 billion users worldwide, 82% of the world's Internet population over age 15 logged on to a social media site, up from 6% in 2007" (p. 4). This upward trajectory of social media use illustrates the potential that exists in this media. Sheninger (2013) added, "With society becoming more and more reliant on technology, it is incumbent upon leaders to harness the power of digital technologies in order to create school cultures that are transparent, relevant, meaningful, engaging and inspiring" (para. 1).

Effective leaders have the potential to make a significant impact when it comes to influencing others (Whitaker, 2003). Whitaker (2003) stated, "When the principal sneezes, the whole school catches a cold. This is neither good nor bad; it is just the truth. Our impact is significant; our focus becomes the school's focus" (p. 30). Clark (2012) of Forbes Magazine

stated, “The school districts that will thrive will be the one using social media to engage their community, and aggressively enhance and protect their reputation” (p. 2). Her opinion may be warranted in that many more corporations, businesses, and private companies are using social media as a way to connect with potential customers. Flanigan (2014) added, “Many school leaders insist on the need to promote a school culture that embraces blended learning and innovation through technology, but they struggle to put in place what they preach” (p. 1).

Over the past several years, school districts across Indiana have been inadvertently encouraged by state legislators to recruit students from other school districts (Jackson, 2011). This has added pressure to school leaders, specifically principals and superintendents, to showcase the positive aspects of their schools. Social media is a potential tool to assist school districts in the recruitment process.

Educational leaders in the 21st century face a multitude of challenges. No longer are school principals merely managers, they must also be a master of collaboration, teamwork, and instructional leadership (Nettles & Harrington, 2007). The days of leading with an iron fist and a heavy hand are over, and today’s school leaders must adapt to an ever-changing world with ever-changing expectations. The kinder, gentler school principals must continually adapt to the changing needs of their schools and customers. One of the greatest challenges school leaders face is if, how, and when to incorporate newer modes of technology into their schools. In 2014, 87% of Americans utilize the Internet compared to just 14% in 1995 (Fox & Rainie, 2014). This upward trajectory is forcing educational leaders to take a long hard look at how the Internet and, more specifically, social media may be used as an educational tool. Whitaker (2003) discussed how important it is for school leaders to set the tone. “Effective principals understand that they are the filters for the day-to-day reality of school. Whether we are aware of it or not, our

behaviors set the tone" (Whitaker, 2003, p. 5). In addition, research has shown a positive correlation between effective school leadership and student achievement (DuFour & Marzano, 2011).

Humans have become immersed in a world of fast-paced technology that the planet Earth has never before experienced. Many young people of 2014 expect their schools to guide them through the world of instant information instead of having them complete worksheets and listen to lectures in class (Parker, 2010). Schools, in turn, have discovered that students may attain facts and figures instantaneously through the World Wide Web instead of relying on formal educational institutions.

Sheninger (2014) stated,

> Students are engaged in their digital worlds, and they are learning without us. It has become a much more active process due to that ease of accessing information on the Internet and a wide range of tools that support constructivist learning. Students are constructing meaning through the use of technology in ways that are relevant, meaningful, and fun. (p. 14)

The technological revolution has caused many education leaders to consider ways to incorporate social media into their classrooms, schools, and school districts. This poses a dilemma in school districts all over the world, however, as digital natives enter classrooms being taught by digital immigrants (Prensky, 2001).

In 2001, the term digital native (Prensky, 2001) was coined to describe today's student. Digital natives are fluent in the technological world of computers, the Internet, and video games. Prensky added that digital immigrants, on the other hand, are people who have learned technology as one would learn a foreign language. Prensky (2012) stated, "For today's young

people, using technology is as fundamental as reading was for their parents and grandparents. It underlies and supports everything they do" (para. 1). Learning has stretched beyond the classroom walls to a point where students crave lessons that are more engaging and thought provoking (Prensky, 2008). Prensky (2013) stated, "Technology provides us with the new and enhanced capabilities we need. So technology isn't something we need in addition to mental activity; technology is now part of mental activity. And we need to use it wisely" (para. 4).

Statement of the Problem

In today's world, parents have numerous options when it comes to educating their children. Parents can send their children to private or parochial schools, public schools, charter schools, or Montessori schools or they may home school them. Sheninger (2014) discussed how a natural disconnect is occurring between schools and their stakeholders. Sheninger (2014) stated that "the longer this disconnect continues, the more meaningless and irrelevant our schools become to our students" (p. 5). Lovecchio (2013) agreed with Sheninger when he stated, "As social media continues to become an important part of our culture, schools not utilizing social media tools and technologies risk falling behind other districts, which can often lead to districts having to play 'catch-up'" (p. 46).

Collins and Halverson (2010) stated, "People around the world are taking their education out of school and into homes, libraries, Internet cafes and workplaces where they can decide what they want to learn, when they want to learn and how they want to learn it" (p. 18). Collins and Halverson added that just as schools today were created as the result of the industrial revolution, schools of tomorrow would be transformed due to the informational technology revolution. How public schools respond to this revolution will be the key to its success or failure. One of the most notable hurdles public schools must overcome is that of fear and

apprehension that comes with the unknown (Black & Gregersen, 2003). Young teachers graduating from universities today are sometimes handcuffed by this fear. One young teacher shared her frustration:

> I learned about all this great stuff in my college classes, but it is just so hard to get anyone to agree with what I am allowed to use in my classroom. I would love to tap into the students' love of social networks and set up some learning options but the administration, parents, and even other teachers keep screaming at me that it is not safe. They are so frightened that they won't even let the students access MySpace or Facebook from campus computers. (Rosen, 2010, p. 179)

Schools and school districts are in need of courageous and tech savvy leaders who will help overcome the fear and apprehension that comes with using social media and open new pathways for teachers to engage their students (Sheninger, 2014). This study contributes to the knowledge base by examining the use of social media by principals and superintendents in the state of Indiana.

Purpose of the Study

The purpose of this quantitative study was to examine the use of social media among K-12 public school principals and superintendents in the state of Indiana. The data collected in this study will be helpful in tracking the trajectory of social media use in Indiana. Black and Gregersen (2003) discussed how leaders must be ahead of the curve when it comes to change.

> Anticipatory change is just that—anticipating the need for change. In other words, anticipatory changes demands that we look ahead to see in advance the signs that show change on our horizon. This approach helps us to recognize early that the old right map may soon become wrong. Then, based on this recognition, the challenge we face is

> trying to figure out in advance what the new right map should be. (Black & Gergersen, 2003, p. 178)

The technological evolution of the 21st century necessitates the need for educational leaders to utilize vision and anticipatory change so that their school and/or school district stay ahead of the curve. This study identifies some of the factors that may influence educational leaders' decisions to utilize social media. Cox (2012) stated,

> Social media tools could provide school leaders with a myriad of opportunities to share their successes on a frequent basis with stakeholders in the fashion that the stakeholder prefers. The immediacy of the sharing could be a powerful tool for schools to proactively shape their public image. Frequent blog posts, recurrent tweets, engaging social networking site pages, and consistent podcasts and online videos could permit stakeholders to access information at their convenience about the school in general as well as the specific programs taking place. (p. 8)

Research Questions

Creswell (2003) stated that "quantitative research questions inquire about the relationships among variables that the investigator seeks to know" (p. 132). The following research questions of this quantitative study helped provide clarity.

1. What are Indiana principals' perceptions of social media use as a professional tool?
2. What are Indiana superintendents' perceptions of social media use as a professional tool?
3. Is there a statistically significant difference on the social media composite score based on administrative position type?

4. Is there a statistically significant difference on the social media composite score based on location?
5. Is there a statistically significant difference on the social media composite score based on years of experience in the field of education?
6. Is there a statistically significant difference on the social media composite score based on socioeconomic (SES) level?
7. Is there a statistically significant difference on the social media composite score based on the letter grade received in 2012-13?

Null Hypotheses

$H_0$1. There is no statistically ignificant difference on the social media composite score based on administrative position type.

$H_0$2. There is no statistically significant difference on the social media composite score based on location.

$H_0$3. There is no statistically significant difference on the social media composite score based on years of experience in the field of education.

$H_0$4. There is no statistically significant difference on the social media composite score based on socioeconomic (SES) level.

$H_0$5. There is no statistically significant difference on the social media composite score based on the letter grade received in 2012-13.

Limitations of the Study

1. Policies regarding social media usage in school districts may have impacted the principals' and superintendents' opinions or motivation to utilize social media.

School districts that block or aggressively filter social media sites may have had an impact on social media usage as well.

2. The Indiana principal and superintendent e-mail databases were gathered from the Indiana Department of Education. The accuracy of this database could not be assured.
3. The honesty of the respondents could not be controlled.

Delimitations of the Study

1. Only K-12 principals and superintendents, employed during the 2013-14 school year in Indiana, were surveyed.
2. The size of the enrollment within a school was not part of the study so any potential impact was not considered.

Definitions of Terms

Communication refers to the ability of a school or school district to effectively share information with actual and potential stakeholders.

Digital leader refers to a person who "uses the vast reach of technology (especially the use of social media) to improve the lives, well-being, and circumstances of others" (Couros, 2013, para. 2).

Digital native refers to a term that was coined by Prensky in 2001 which describes students in the modern classroom. These students have no memory of life without and are very comfortable around technology. These include children primarily born in the 21st century.

Digital immigrant refers to a term coined by Prensky in 2001 that describes people who recall life before technology. These people are not as comfortable with technology as digital natives. Many of the teachers in classrooms today are digital immigrants.

Networking refers to the cultivation of professional relationships among educational leaders.

Millennial refers to people born between 1980 and 2000 (Howe & Strauss, 2000).

Principal refers to a person who is under supervision of the superintendent, who shall be responsible for the operation of a specific school consistent with district policy, goals, and objectives.

Professional development refers to ongoing learning opportunities that would enhance a principal and/or superintendents' professional learning.

Recruitment refers to school districts recruiting families from outside their district.

Rural school is a school that is located outside of a city and has a low population density.

Social media refers to "the use of digital (and often mobile) technologies and Internet-based applications for exchanging or creating conversation" (Adams, 2011, para. 1).

Social networking sites (SNS) refer to services found online that allow people to "(a) construct a public or semi-public profile within a bounded system, (b) articulate a list of other users with whom they share a connection, and (c) view and traverse their list of connections and those made by others within the system" (Boyd & Ellison, 2007, p. 211).

Student engagement refers to a student's willingness, need, and desire to successfully participate in the learning process that promotes an endured understanding of the content presented.

Suburban school is a school that is located in the outlying areas of a city.

Superintendent refers to a person who is the leader of a school district.

Urban school is a school that is located within a large city or metropolitan area.

Transparency refers to a school district's willingness to share information with its stakeholders.

Significance of the Study

There is growing research related to the use of social media by educational leaders. This study investigated social media use by public school principals and superintendents in Indiana. This study is important in that it may shed light as to how, why, and to what extent principals and superintendents are using social media professionally. This information may be used by school districts across the state of Indiana as they investigate ways in which they could more effectively use social media as a professional tool. Noor Al-Deen and Hendricks (2012) stated,

> Social media have quickly evolved into thousands of sites and formats with limitless applications. They rely on consumer-generated content and are exemplified by interactivity and conversation. Gone is the need for highly educated, sophisticated technological gurus to serve as Internet gatekeepers. Ordinary people are now in control as the publishers and the implications of that power are still not fully understood or utilized. (p. 111)

As social media becomes more of a mainstream educational tool, studies such as this may help to serve as a compass. Due to the emerging research in the field of social media use by educational leaders, this study is timely and important. This study is critical as the public school landscape continues to adapt to 21st century digital natives and their needs.

Summary

This quantitative study examined the use of social media by Indiana public school principals and superintendents. The variables studied include administrative position type, years of experience in the field of education, locality, SES level, and letter grade received from the

Indiana Department of Education during the 2012-13 school year. Chapter 2 offers a review of literature as it relates to the history of social media, the most popular social media sites in 2013, the students' use of social media, the 2009 and 2012 national social media study, Smart Phones as mobile computers, and recent social media research studies. Chapter 3 details the data collection methods, analysis, and research procedures used in the study. The chapter also included the limitations and delimitations of the study as well as the research questions and null hypotheses. Chapters 4 and 5 reveal the findings from the study and recommend future studies as it relates to social media usage by principals and superintendents.

CHAPTER 2

REVIEW OF LITERATURE

This chapter reviews the literature as it relates to social media use as a professional tool in Indiana K-12 schools and school districts. The literature on the topic of social media use in education is growing as researchers continue to study the use of social media as a learning tool in both K-12 and higher education classrooms. The review focuses on the history of social media, the most popular social media sites of 2013, recent social media research that has taken place, as well as recent student, teacher, and administrator technology standards as developed by the International Society for Technology Education (ISTE).

Throughout history people have been concerned that the newest modern technologies such as the printing press, automobiles, or television would ruin society (Rainie & Wellman, 2012). Today, social media have become a way of life for many school-aged children. Today's students are immersed in a world of technology and media that the human race has never before experienced. Limitless information and resources are at students' fingertips. Young people expect their educational leaders to guide them through the world of instant information instead of having them complete worksheets and listen to lectures in class (Parker, 2010). Educators have begun to realize that students can attain facts and figures instantaneously through the World Wide Web. This ability to obtain knowledge without assistance has caused many young people to question the relevance of the traditional school setting. Jones-Kavalier and Flanigan (2006)

described the plight of many classrooms today when they wrote, “A common scenario today is a classroom filled with digitally literate students being led by linear-thinking, technologically stymied instructors” (p. 8).

In 2001, the term digital native (Prensky, 2001) was coined to describe today’s student. Digital natives are fluent in the technological world of computers, the Internet, and video games. Digital immigrants (Prensky, 2001), on the other hand, are people that have had to learn technology as one would learn a foreign language. Prensky (2012) stated, “For today’s young people, using technology is as fundamental as reading was for their parents and grandparents. It underlies and supports everything they do” (para. 1). Learning has stretched beyond the classroom walls to a point where students crave more engaging, thought-provoking learning (Prensky, 2008).

Schools are at a critical crossroad in which changes and adaptations must be made in order to remain relevant. As the human race continues to evolve traditional schools must integrate and embed technology on a more consistent basis. Prensky (2013) stated, “Technology provides us with the new and enhanced capabilities we need. So technology isn't something we need in addition to mental activity; technology is now part of mental activity. And we need to use it wisely” (para. 4).

Humans have communicated in a variety of ways for thousands of years. The Chinese, Egyptians, and Greeks used smoke signals and beacon fires in ancient times to communicate (Adams, 2011). There is also evidence that the Iranians developed the first postal system in 550 B.C. (Adams, 2011). The very first e-mail was sent in 1971 by Ray Tomlinson (Rainie & Wellman, 2012). The telegraph, telephone, radio, and e-mail were all tools of communication that were developed to allow humans to interact from long distances. As the world evolved more

sophisticated forms of communication were developed. The evolution of technology necessitated the need for schools all over the world to embrace technology and social media integration. Students in classrooms today have grown up around technology and are comfortable interacting with computers, tablets, smart phones, etc. (Parker, 2010). Students today rely heavily on the Internet for news, entertainment, and information. Unfortunately, many of the educators in 2013 were born before the technology boom and sometimes lack the confidence to interact with technology as comfortably as their students. This gap is closing somewhat as older teachers retire and new teachers take their place. These newer teachers have a greater comfort level in dealing with technology and the daily advances in ways technology is utilized in classrooms.

Students in today's classrooms are media multitaskers as they watch television, text their friends, and surf the Internet and at the same time work on a homework assignment (Parker, 2010). When these same students enter classrooms, they hope to be stimulated and challenged each day. The challenge of the teacher in today's classrooms is to be able to integrate technology into their lessons without the technology being a distraction. Some believe that social media have the potential to act as a bridge between students and their schools (VizzMedia, 2012).

Technological Change

One of the most difficult aspects of change is to lead an organization and the individuals within the organization to change. Black and Gregersen (2003) conducted extensive research on how effective change is implemented. They stated that humans have mental maps that direct people's daily behavior. Remapping the mental maps is key to implementing change. Black and Gregersen (2003) included a quote from Machiavelli to emphasize their point. It stated,

> For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders by all those who could profit by the new order. This lukewarmness arises from the incredulity of mankind who do not truly believe in anything new until they have had actual experience with it. (as cited in Black & Gregersen, 2003, p. 3)

When it comes to implementing change in today's schools, Machiavelli's words are prophetic. Many educators are resistant to the new order and are comfortable with the status quo. Black and Gregersen (2003) described these people as "hardwired to survive, so we hang on to what has worked in the past" (p. 3). Only when educators model the use of social media as an educational tool to their resistant colleagues will this change begin in a school.

There are potential pitfalls, however, that educators must be cognizant of when implementing technological change. Sheninger mentioned that educational leaders should *lurk and learn* when dipping their toes into the social media waters (Ferriter, 2011). Gooch (2012) developed a toolbox metaphor that explained her philosophy on how social media may be used by school personnel. Gooch's toolbox was divided into three *drawers* that included use, misuse, and abuse. The *use drawer* included using social media as a learning and communication tool as well as collaborating with peers, having a global reach and finding free resources. Gooch's *misuse drawer* involved overuse or underuse of the tool as well as sharing too much information. Gooch's *abuse drawer* included inappropriate relations and communication as well as breach of privacy and pornography. Educational leaders are obligated to enlighten their constituents of these drawers (Gooch, 2012). As school districts gravitate toward the use of social media as an educational tool the potential dangers and pitfalls must be highlighted and shared in order to avoid them.

Turkle (2012) hosted a TED talk, entitled "Connected, but Alone," in which she discussed the potential dangers of technology. She stated that people expect more from technology and less from each other because they are leery of intimacy. Turkle talked about technology and the Goldilocks effect in which it gives people not too much or not too little interaction. Technology, Turkle said, gives people just the right amount of interaction. The fear that no one is listening draws more people to social media sources such as Facebook or Twitter, where there are numerous faceless listeners, according to Turkle. Turkle urged people to use technology wisely but be aware of the pitfalls that come with it.

Most Popular Social Networking Sites in 2013

Table 1 shows the number of users of the most popular social media sites as of November, 2013. These numbers change daily as social media sites gain and lose popularity.

Table 1

Most Popular Social Media Sites as of November 2013

Social Media Site	Number of Users
Facebook	1.15 billion+
Twitter	500.00 million+
Google+	500.00 million+
LinkedIn	238.00 million+
Instagram	130.00 million+
Pinterest	70.00 million+

Source. Adapted from "Social Media in 2013: By the Numbers" by J. Bernstein, 2013. Copyright 2013 by Social Media Today LLC.

This study examined the most popular social media sites as well as surveys conducted to determine which sites were visited the most and by whom. The social media sites that appear to be the most popular are Twitter, Facebook, LinkedIn and Google+ (MMS Education et al., 2012).

Facebook

Harvard University student Mark Zuckerberg created Facebook in 2004. The Facebook, as it was originally called, allowed students at Harvard University to communicate with each other. By 2006, Facebook had extended its membership to include anyone with an e-mail address (Phillip, 2007). In 2013, Facebook had 1.11 billion users (Smith, 2013). The 2012 MMS Education Survey of Educators on Social Networking, Online Communities, and Web 2.0 Tools (MMS Survey) stated that Facebook is currently the most popular social network site among educators with 85% using the site. Among those surveyed, 98% of educators from 18- to 34-year-olds had a Facebook page. The 2012 MMS survey showed that 87% of principals, 92% of teachers and 93% of librarians owned a Facebook page (MMS Education et al., 2012). Students, parents, and teachers have become familiar and comfortable with Facebook, but translating that into using the site for educational purposes has been met with some resistance worldwide. In 2011, Missouri state legislators passed a law that banned teachers from using Facebook to communicate with students (Lieb, 2011). The law was later repealed in 2011.

Twitter

Twitter is a social media site that allows its members to send messages of 140 characters or less. The first ever tweet was sent in March 2006 by co-founder Jack Dorsey when he tweeted "just setting up my twttr" (Hernandez, 2012, para. 1). According to Statistic Brain (2014), there were over 554,000,000 active Twitter users as of May 2013 with over 58,000,000 tweets being

sent each day. Close to $400,000,000 in revenue was generated by Twitter in 2013. Statistic Brain estimated that over 9,100 tweets occur every second.

According to the survey conducted by MMS Education et al. in 2012, younger educators (age 18-34) were more likely to use Twitter than the older educators (over 34 years old). The survey also found that 39% of respondents had a Twitter account and that 48% of respondents visited Twitter at least weekly. According to the Pew Research Center, the most frequent users of Twitter are urban dwellers from 18 to 29 years old (Duggan & Smith, 2013). The percentage of people using Twitter has doubled since 2010. In 2010, the Library of Congress announced that it would keep a digital archive of every public tweet that has been posted on Twitter since 2006 (Hope, 2010). The Library of Congress planned to highlight the more significant tweets of recent history such as the very first tweet by Twitter founder Jack Dorsey as well as President Barack Obama's tweet when he won the 2008 presidential election. Van Dijck (2013) stated,

> From the onset, users and governments embraced Twitter as a tool for connecting individuals and communities of users—a platform that empowers citizens to voice opinions and emotions, that helps stage public dialogues, and supports groups or ideas to garner attention. (p. 73)

Google+

Google+ is a social networking site that was launched in 2011 to compete with Facebook. According to the 2012 survey conducted by MMS Education et al., 27% of educators were members of Google+. As of December of 2012, Google+ had 343 million users. It is a fast growing social media site and has much potential for educators with its many school friendly features. The MMS Education et al. survey showed that 41% of educators between the ages of 18 and 34 use Google+. Although there is limited research on the use of Google+, it appears that

this social networking site is becoming more popular among educators as an alternative to Facebook.

LinkedIn

LinkedIn was founded in December 2002 and was introduced to the public in May 2003 (Yueng, 2013). Although it is older than Facebook, Twitter, and YouTube, LinkedIn has fewer users with 225 million (Smith, 2013). LinkedIn has been more popular among young professionals. According to the MMS Education et al. (2012) survey, LinkedIn users among educators rose from 14% in 2009 to 41% in 2012. The survey also showed that 56% of educators over 55 years old used LinkedIn as opposed to just 35% of educators from 18 to 34 years old. Incorporating LinkedIn to a high school and college curriculum appears more fitting than the elementary and middle school settings.

Instagram

Stanford University graduates Kevin Systrom and Mike Krieger co-founded Instagram on October 6, 2010 (Instagram, 2014). The social networking site quickly reached one million users by December 2010. Facebook purchased Instagram on April 9, 2012, for one billion dollars. As of September 2013, Instagram had over 150 million users with 55 million photos posted each day. Instagram allows users to take and share photos on Facebook, Twitter, and Flickr. Instagram was the fastest growing social networking sites with a 23% increase in membership from June 2013 to January 2014 (Lunden, 2014). Instagram appears to appeal to younger people with over 90% of all Instagram users under 35-years-old (Costill, 2014).

YouTube

YouTube is the number one online video site in the world with over four billion hours of video viewed each month (Dickey, 2013). YouTube was launched in 2005 by coworkers at

PayPal, Chad Hurley, Steve Chen, and Jawed Karim, who had come up with the idea over dinner. By 2006, YouTube had been acquired by Internet giant, Google, who purchased YouTube for $1.65 billion (Dickey, 2013). Schools across the country had blocked YouTube from their servers due to what was deemed as a wasteland of useless video until Google began to improve its filtering system so that inappropriate content could be cut (Strom, 2012). Teachers have recently begun to upload their own videos and create YouTube channels specifically for their students to view. Many school districts, such as in Chicago, have seen the value in the free online video site and have embraced the teaching tool (Strom, 2013).

K-12 Students Use of Social Media

The number of teens using social media has increased dramatically over the past seven years. Social media sites have become equivalent to going to the mall or hanging out at the arcade to millions of teens today (Parker, 2010). Today's teens have a much more physically sheltered life than teens of the past. Teens of today have much less free time and are involved in many more organized activities that are directed by their parents (Parker, 2010). Social networks such as Facebook, Twitter, and Instagram allow teens to stay connected to their peer group without having to be in the same room. Games, such as Xbox Live, allow for young people to play together online. As the use of social media continues to grow among young and old alike, many school systems still show a hesitation to fully integrate social networking sites. According to Bumgardner and Knestis (2011), half of the 96% of students who had online access admitted to using social networks. Fifty percent of students stated that they used a social network to discuss schoolwork. One of the most prevalent concerns of many school districts is how to protect students from the potential dangers of the Internet.

Madden et al. (2013) surveyed 802 teens between the ages of 12 and 17 in 2006 and again in 2012. The study showed that 91% of teens posted photos of themselves online in 2012 compared to 79% in 2006. In 2012, 71% of teens listed their school names on their social network compared to 49% in 2006. The study also showed that Twitter use by teens had risen from 16% to 24%. The study found that 98% of Facebook-using teens were friends with people they knew from school.

2009 National Social Media Study

In 2009, a national study was co-sponsored by edWeb.net, MCH Strategic Data, and MMS Education that investigated the use of social media by principals, librarians, and teachers. This study included a quantitative component in the form of a national survey. The goals of the survey were to "benchmark attitudes, perceptions, and utilization of social networking websites and content-sharing tools by teachers, principals, and school librarians" (edWeb.net et al., 2009, p. 2). Over 82,000 educators were randomly selected to take part in the survey with a total of 1,284 educators responding. The summary of the quantitative results showed that 61% of educators had joined a social network and that joining a social network gave them a more positive attitude toward technology (edWeb.net et al., 2009). The survey also showed that educators who were not digital natives were more intimidated by technology, and technology took too much time. The restrictions schools and school districts placed on access to school websites was also an area of concern. The 2009 survey showed that Facebook (85%), MySpace (20%), and LinkedIn (14%) were the most popular websites among educators (edWeb.net et al., 2009). Librarians were the most open to using social media at 70%, with teachers at 62%, and principals at 54% (edWeb.net et al., 2009). Female educators were more likely (63%) than male educators (55%) to join a social network (edWeb.net et al., 2009). The age of an educator

appeared to be a factor in determining which teachers joined a social network. Younger educators, ages 18 to 34, showed a greater likelihood to join a social network than older educators, over 35 years old. The study showed no substantial difference among social network usage among elementary, middle, and high school educators. The 2009 survey showed that 89% of educators used online search engines, 63% searched for educational products and services, and 59% sent text messages (edWeb.net et al., 2009). The survey also included numerous quotes by respondents that expressed various opinions concerning social media in 2009. They included a statement from a teacher who felt as though "the power of the computer is amazing. Older teachers are getting left behind in life by the younger generation, who powers forward in technology" (edWeb.net et al., 2009, p. 34). Another educator was not as optimistic; when one stated, "Teaching is a people profession, face-to-face is best. If you depend on a computer to communicate, don't be a teacher" (edWeb.net et al., 2009, p. 34).

Phase 2 of this study involved a qualitative component in which 12 principals were interviewed online and asked about their opinions, perceptions, and beliefs as they relate to social media as an educational tool for school leaders. In 2010, a report was released entitled *School Principals and Social Networking in Education: Practices, Policies, and Realities in 2010.* This report summarized the findings from the 2009 study. Some of the highlights from the report included that most principals felt as though social media was valuable as a medium for sharing professional knowledge with colleagues, but that legal concerns, lack of knowledge and comfort, as well as lack of time to appropriately set up and monitor social media sites were concerns ("School Principals," 2010). The prevailing theme from the study was that principals saw the importance of utilizing social media as it was a potentially useful tool with great momentum among faculty, students, parents, and colleagues ("School Principals," 2010).

2012 National Social Media Study

From 2009 to 2012 the attitudes toward social media among educational leaders continued to evolve. In 2010, the U.S. Department of Education developed a National Education Technology Plan that stated, "Social networks can be used to provide educators with career-long personal learning tools and resources that make professional learning timely and relevant as well as an ongoing activity that continually improves practice and evolves their skills over time" (MMS Education et al., 2012, p. 3). This shift in attitude prompted the co-sponsors of the 2009 national study—edWeb.net, MCH Strategic Data, and MMS Education—to duplicate their survey in 2012. The survey discovered that the percentage of educators who were members of a social network had climbed from 61% in 2009 to 82% in 2012. Principal participation in social media moved from 54% in 2009 to 76% in 2012. Facebook remained the most popular social network site among educators with 85% membership (MMS Education et al., 2012). Educator membership to LinkedIn increased from 14% in 2009 to 41% in 2012 (MMS Education et al., 2012). Twitter and Google+ were not listed in the 2009 survey but were surveyed in 2012 (MMS Education et al., 2012). Twitter had a membership of 39% among educators and Google+ had a 27% membership. MySpace began to slip as membership fell from 20% in 2009 to 7% in 2012 (MMS Education et al., 2012).

The term *Web 2.0 tools* was included in the 2012 report and encompasses blogs, wikis, webinars, document, and photo and video sharing (MMS Education et al., 2012). The survey found that webinars were the number one professional development tool used by educators (MMS Education et al., 2012). Since 2009, the number of educators using a Smartphone increased to 38% in 2012 (MMS Education et al., 2012). Some of the most telling statistics in the 2012 survey showed that the younger educators used social media much more than their

older colleagues. Ninety-seven percent of educators from 18 to 34 years old participated in social networks compared to 75% of educators older than 55 years of age (MMS Education et al., 2012). These older educators have made great progress since 2009 when only 47% of teachers older than 55 were members of a social network. The survey also showed that 100% of first-year teachers were members of a social network compared to 69% of educators with 31 years of teaching or more (MMS Education et al., 2012). The survey stated that "younger educators are more likely to be members of Twitter and Google+ while older educators are members of LinkedIn" (MMS Education et al., 2012, p. 19).

Smartphones as Mobile Computers

A tool that has dramatically increased the number of people using social media is the Smartphone. The use of the mobile (smart) phone has revolutionized the way in which humans communicate with each other (Rainie & Wellman, 2012). Mobile phones and wireless computers have allowed people to access the World Wide Web from practically anywhere on the planet. Prior to the Mobile Revolution (Rainie & Wellman, 2012), people had to rely on pay phones when they left their homes. Without access to a phone from one's home, a person was unreachable. The mobile phone has allowed for easier access to anyone who owns such a device. More teenagers than ever have access to a mobile phone. In 1985, there were 340,000 American subscribers to mobile phones. That number climbed to over 300 million in 2011 (Rainie & Wellman, 2012). In 2013, the number of mobile phone subscribers had jumped to 6.8 billion worldwide (Gupta, 2014). It is estimated that the number of cell phone subscribers will surpass the world population of 7.1 billion in 2014 (Gupta, 2014). This steep trajectory clearly shows that the mobile phone has become a valuable tool worldwide. Table 2 shows the increase in mobile phone usage from 2004 to 2013 (Duggan & Smith, 2013). The number of Americans

from 18 to 29 years of age with access to a mobile phone had risen to 97% in 2011. As technology becomes more affordable and accessible, the number of school-age children with access to wireless technology should also increase. This may enable them easier access to social media that could be used as an educational tool by teachers. In turn, principals and superintendents could also reach a greater audience as mobile phone usage increases.

Table 2

Percentage of U.S. Adults Who Own a Mobile Phone

Demographic	March 2004	September 2013
All	74	91
Men	74	92
Women	73	90
Whites	74	90
Blacks	73	92
Latino*	76	90
Ages 18-29	79	97
Ages 30-49	82	95
Ages 50-64	75	89
Ages 65+	46	77
Less than $30,000	56	85
$30K-$50K	76	93
$50K-$75K	84	95
$75,000+	94	99

Table 2 (continued)

Demographic	March 2004	September 2013
Urban	75	92
Suburban	77	92
Rural	63	86

Source. Adapted from "Social Media Update 2013" by M. Duggan & S. Smith, 2013. Copyright 2014 by Pew Research Center. *The 2004 figure is for English-speaking Latinos; 2011 figure is for English and Spanish speaking.

Goad (2012) conducted a research study in 2012 that gauged the perception of classroom teachers on the use of cell phones as an instructional tool to enhance student learning. Goad distributed a survey to 500 public school teachers from Michigan, Ohio, Kentucky, Indiana, and Illinois. The study focused on five research questions:

1. Is there a significant difference between STEM teachers and teachers of other disciplines in the perceived importance of integrating technology in their instruction?
2. Is there significant difference between STEM teachers and teachers of other disciplines in their ability to design and assess lessons supported by technology?
3. Is there a significant relationship between teachers' comfort level with technology use and their integration of technology to support their lessons?
4. Are levels of student engagement different based on the frequency of integration of technology?
5. Do the nine proficiency indicators serve as predictors of student engagement as reported by teachers? (p. 8)

Goad determined that teachers, overall, were slow to adapt to the use of technology in their classrooms. Goad discovered that a significant difference did exist with regard to her Research Question 2. It was determined that STEM teachers rated themselves higher than teachers of other disciplines when it came to designing and assessing lessons that were supported by technology (Goad, 2012). Goad also discovered a strong, positive correlation between the teachers' comfort level with technology and their ability to design and assess lessons. The study discovered that students showed higher levels of motivation and collaboration, and learning took place when technology was integrated into a lesson. There were concerns expressed by teachers surveyed that included integration of cell phones into lessons could be a distraction, many schools ban the use of cell phones in schools, and that cell phone service is spotty in many schools. Goad predicted that, as the comfort level among teachers grow, mobile technology will become more of a go-to instructional tool.

Social Media Research Studies

As social networks such as Facebook gained popularity, digital natives were attracted to the network's ability to "personalize content with interactivity, as users share and discuss content with friends and family" (Yaros as cited in Noor Al-Deen & Hendricks, 2012, p. 57). Since social media's inception, educators have discussed ways to incorporate this tool into the classroom, although research to study motivational benefits have been limited (Noor Al-Deen & Hendricks, 2012). Yaros (as cited in Noor Al-Deen & Hendricks, 2012) described a case study that took place that "explored whether social media, such as Twitter and Facebook, can facilitate learning by enhancing student engagement, identity, and enjoyment of a given course, independent of the content to be learned" (p. 57). The study implied that by increasing student interest and engagement through the use of social media would make learning easier (Noor Al-

Deen & Hendricks, 2012). The case study involved 36 undergraduates enrolled in an introductory information literacy course in a large mid-Atlantic university. The study attempted to answer two research questions. The research questions were "To what extent do social media enhance students' engagement with course content?" and "Can social media within a formal learning environment enhance students' perceived cohesion of a course?" (Noor Al-Deen & Hendricks, 2012, p. 61). Eight weeks into the course, students were given a social media survey of 17 questions. The survey was administered to the students a total of three times during the semester. The survey asked students questions (10 Likert scale, five yes/no, and two demographic) concerning how well they knew and liked classmates in other classes as well *this course*. Some of the other survey questions asked students about their comfort level using Facebook and how they worked with a partner or in small groups. Students earned five points extra credit for completing the survey. In addition, students we informed of an online project that would take place over spring break. The online project involved creating a Facebook account and joining the group that included all class volunteers. Students could earn up to 25 points extra credit for participating in the Facebook activity. Students earned 15 points extra credit for posting at least three text posts per day during their nine-day break. An additional 10 points could be earned by posting a photo and a video over the course of the break. Students could not earn points for posting more than the minimum requirement. Once students returned from spring break, they were asked to complete the same survey they had taken previously.

A second social media project was introduced to the class two weeks after the completion of the first project. Extra credit was once again offered to students for their participation in the mobile social media project. All students in the class were issued an Apple iPod Touch that included Wi-Fi access for three weeks. Once students had the mobile devices for two weeks

they were offered another opportunity for extra credit that involved each student to report events during a campus-wide open house. Students earned 20 points extra credit spending a minimum of three hours on campus conducting audio interviews and tweets from various locations. The students completed the third survey at the first class meeting after the open house.

The results from the first Facebook project showed that 29 students who participated could have posted 87 postings and 29 photos to meet the minimum requirement for extra credit. The actual number of text postings totaled 361, which is approximately 12 posts per student (nine above the per student minimum). The students also posted 40 photos and three videos. The number of daily postings showed consistently over 30 posts per day and a marked increase in posts over the final three days of spring break (Table 3).

Table 3 shows that the mean for 10 of the 12 measures increased from the pre-Facebook survey to the third survey that was administered near the end of the semester. Interestingly, the two measures that decreased were liking other classes (compared to this class) and liking classmates in other classes. Of the 10 measures that showed an increase, four of the changes were determined to be statistically significant. The statistically significant changes included—likes these classmates, interest in group project, interest in a partner project, and knows my classmates.

The third social media project involved administering the same social media survey to a sample of students ($n = 36$) in the fall semester three times. As with the spring semester, students were asked three yes/no statements related to social media. The statements were

- Courses with social media are innovative.
- I'm comfortable sharing on Facebook.
- The class respects my opinion.

Table 3

Means of Class Enjoyment and Collaboration

Concepts	Items	Pre-FB	Post-FB	EOC	*F*
Enjoyment	Likes these classmates	3.5	3.5	3.8	3.46*
	Enjoys this class	4.2	4.3	4.3	.16
	Comfort sharing in class	4.1	3.9	4.1	1.47
	My opinion respected	3.9	3.9	4.1	1.84
Collaboration	Likes other classmates	3.5	3.4	3.5	.24
	Interest in friendships	3.4	3.3	3.6	1.48
	Interest in group projects	2.6	2.6	3.1	6.23*
	Interest in a partner project	2.8	2.9	3.4	4.20*
	Enjoys other class	3.2	3.0	3.1	.49
	Knows other classmates	2.8	2.7	2.7	.53
	Knows my classmates	2.3	2.7	2.8	5.32*
	Comfort sharing on FB	3.4	3.5	3.6	.49

Source. Adapted from *Social Media: Usage and* Impact by H. S. Noor Al-Deen & J. A. Hendricks, 2012. Copyright 2012 by Lexington Books. *Note.* * p = < .05; EOC = End of Class; FB = Facebook.

Each student was issued an iPod Touch and was asked, for extra credit, to post comments over Thanksgiving break. Table 4 shows the results of the perceptions of social media across both semesters. The data shows a trend of increasing comfort with students with regard to using social media as an education tool. Students in this study showed an increase in comfort level as well as an increase in connectedness with their classmates when using social media.

Table 4

Percentage of Agreement Pre- and Post-Spring Break and Thanksgiving

Item	Spring Pre	Spring Post	Spring End	Fall Pre	Fall Post
Courses with social media are innovative	82	85	86	4	7
I'm comfortable sharing on Facebook	79	80	83	1	100
My opinion is respected by the class	82	100	100	100	100

Source. Adapted from *Social Media: Usage and* Impact by H. S. Noor Al-Deen & J. A. Hendricks, 2012. Copyright 2012 by Lexington Books.

Noor Al-Deen and Hendricks (2012) stated that "few, if any other, communication tools appear to simultaneously offer individuals both personal and interpersonal interactivity more than social media" (p. 69). It was concluded that as much as social media may help to engage students in learning, the ultimate responsibility of lesson planning and learning outcomes lies with the classroom teacher. Noor Al-Deen and Hendricks's opinion, with regard to the future of social media as an educational tool, was that "this appears to be an opportune time to posit and empirically measure effects and new theory related to social media in education" (p. 70). This study encourages further research to be performed to determine how or if social media impacts learning at different grade levels and different disciplines.

A recent study by Duggan and Smith (2013) showed that social media use continues to increase with Facebook being the predominant site visited. The study discovered that more people are using more than one social media site than in the past. As an example, 93% of Instagram users also have a Facebook account. This shows that social media are becoming a more common practice among people in today's world. Teaching students how to effectively

use social media as an educational tool to connect, collaborate, and expand is more imperative than ever.

The study by Duggan and Smith (2013) may provide valuable research and data to the growing phenomenon of social media use in K-12 schools. The data gathered from the Duggan and Smith study may be used to determine the positive and negative effects of social media in education. Principals, who consist primarily of digital immigrants, must learn new ways to incorporate technology into their schools in order to keep pace with the ever-changing world. The Duggan and Smith study may also provide some insight into the use of social media by Indiana's classroom teachers. Future studies involving social media in schools may look much different as the landscape of social networking sites continues to evolve.

In June 2001, the Pew Research Center conducted its first report that focused on teenage life online (Madden et al., 2013). The description of a teen's life was explained in this manner:

> The Internet is the telephone, television, game console, and radio wrapped up in one for most teenagers and that means it has become a major "player" in many American families. Teens go online to chat with their friends, kill boredom, see the wider world, and follow latest trends. Many enjoy doing all those things at the same time during their online sessions. Multitasking is their way of life. And the emotional hallmark of that life is enthusiasm for the new ways the Internet lets them connect with friends, expand their social networks, explore their identities, and learn new things. (Madden et al., 2013, p. 16)

This study showed that teens using social networking sites increased from 55% in 2006 to 81% in 2012 (Madden et al., 2013). Adults visiting social networking sites increased from 16% in 2006 to 67% in 2012 (Madden et al., 2013). This upward trajectory indicates that social media is

becoming more and more embedded in the daily life of people worldwide. This data necessitates the need to study and monitor the usage of social media by school principals and superintendents.

Lovecchio (2013) conducted a study that involved the implementation of social media by school principals and their staff. Lovecchio developed the following research questions:

1. How have principals gone about integrating social media into their school?
2. How do principals, who actively integrate social media into the school community, describe the implementation process?
3. What strategies did principals utilize to gain staff member support?
4. What obstacles did principals identify as impeding the implementation process? (pp. 11-12)

Lovecchio (2013) conducted a qualitative case study at three different secondary public schools in Massachusetts that included a principal with at least one year of administrative experience prior to implementing social media. Two teachers from each of the three secondary schools, who had also been actively using social media in their classrooms, were asked to participate in the case study. Lovecchio accessed sources, such as school mission and vision statements, improvement plans, technology plans, student handbooks, acceptable use policies and school/district websites, in order to see if common themes and/or cultural traits existed at the respective schools. Open-ended interview questions were asked during a one-on-one meeting with Lovecchio. Lovecchio's (2013) summary stated,

> The three participating sites all are utilizing social media tools to fit their own school and student needs. The socioeconomic status of each town, the availability of resources, and the philosophies of each school's principal and district leadership have impacted the

> implementation process at each school. None of the participating schools utilized a formal implementation plan for social media, with examples of both principal led and teacher driven change present at the participating sites. While the processes were different at each participating school, the resulting utilization of social media tools is consistent. Increased communication, student engagement, staff collaboration, and professional networking are among the benefits of social media listed by the study participants. (p. 78)

Lovecchio (2013) also determined that "each school principal's vision relating to the implementation and use of social media impacted the process and utilization by staff members" (p. 89). Lovecchio (2013) stated, "Each of the school's principals is a strong advocate for the use of educational technology as well as social media and created and communicated this vision to staff members at their respective schools" (pp. 89-90).

Allman (2012) conducted a study involving West Virginia school administrators and their use of technology as a professional tool. She developed the following research questions to drive her study:

1. What technology-based methods do West Virginia school administrators use the most often to communicate with school staff?
2. To what extent do West Virginia school administrators perceive this technology-based communication tool as being an effective method to communicate with school staff?
3. What technology-based methods do West Virginia school administrators use the most often to communicate with other administrators?

4. To what extent do West Virginia school administrators perceive this technology-based communication tool as being an effective method to communicate with other administrators?
5. What technology-based methods do West Virginia school administrators use the most often to communicate with parents?
6. To what extent do West Virginia school administrators perceive this technology-based communication tool as being an effective method to communicate with parents?
7. What technology-based methods do West Virginia administrators use the most often to communicate with students?
8. To what extent do West Virginia school administrators perceive this technology-based communication tool as being an effective method to communicate with students? (pp. 9-10)

Allman (2012) distributed a survey she developed to principals at each public school in West Virginia (n = 684). The survey included eight multiple-choice questions and six demographic questions. Allman had 305 of 684 principals respond to her survey. The survey consisted of three sections—methods of technology-based communication used by principals with their constituencies, demographic information, and open-ended comments.

Allman's (2012) study revealed that principals' primary communication tool was through e-mail. The lack of consistent broadband service throughout the state of West Virginia prohibited effective social media usage as a form of communication. Allman added that only 33% of West Virginia residents had Internet access in 2012. Allman concluded that multiple factors impacted the ability of West Virginia principals to use technology as a form of

communication with their constituents with one of the most significant factors being the lack of Internet service to the majority of the state of West Virginia.

Cox (2012) analyzed the how and why of social media usage by principals and superintendents from four regions of the United States and Canada. The qualitative study involved interviews with 12 principals and 12 superintendents from the four regions. Cox developed two research questions that drove his study.

1. What are the experiences of school principals and superintendents who use multiple social media tools such as blogs, micro blogs (e.g., Twitter), social networking sites (e.g. Facebook), podcasts, and online videos to communicate with employees, students, parents, and community members?
2. Why are school principals and superintendents choosing to communicate with employees, students, parents, and community members through multiple social media tools? (Cox, 2012, p. 10)

Cox's (2012) study uncovered many themes from his interviews with principals and superintendents. Cox stated that four themes emerged from the 12 qualitative interviews with the school principals and from the Internet data regarding their social media use. The four emergent themes included:

1. Social media tools allow for greater interactions between school principals and their stakeholders.
2. Social media tools provide stronger connections to local stakeholders, to fellow educators, and to the world.
3. Social media use can have significant impact on a school principal's personal and professional growth.

4. Social media use is an expectation; it's no longer optional. (Cox, 2012, p. 73)

Cox (2012) believed that the first three themes more closely aligned with his first research question and his fourth theme aligned more closely with his second research question. Cox stated that significant themes also emerged from his interviews with the 12 superintendents. The six themes consisted of

1. Social media tools allow for more immediate and more frequent interactions between school superintendents and their stakeholders.
2. Social media tools provide for greater transparency regarding decision-making and budgeting processes.
3. Social media use can have a significant impact on a school superintendent's personal and professional growth.
4. Social media tools provide stronger connections to local stakeholders, to fellow educators, and to the world.
5. Social media use is an expectation; it's no longer optional.
6. Social media tools allow stakeholders to access information from the superintendent in a multi-modal way. (Cox, 2012, pp. 112-113)

Cox (2012) shared that Themes 1, 3, 4, and 6 were more closely aligned with his first research question and that Themes 2 and 5 were more closely aligned with his second research question. Cox determined that there were four strong benefits related to school principals and superintendents using social media. Cox (2012) stated,

> These benefits included enhanced interaction with employees, students, parents, and community members; increased connections to stakeholders, fellow educators, and the education profession; a positive impact on the administrator's own personal and

> professional development as well as increased transparency in interactions; and an expectation that social media tools would be used. (p. 163)

Cox concluded that his research study shed much light on the benefits of social media use as an educational tool. His summary included the following:

> This research study revealed that school principals and superintendents have benefited in four distinct ways as a result of using social media tools. The interactions between the administrators and their stakeholders have increased, including higher levels of informal communication and the ability to instantly communicate important items such as weather-related delays, school cancellations, and safety concerns. The connections between administrators and stakeholders had strengthened, leading to deeper, richer relationships. School administrators reported an impact on their personal growth and professional development, partly due to the varied benefits derived from a Personal (or Professional) Learning Network. Finally, administrators valued the enhanced transparency afforded by social media communications. In addition to sharing more detailed information about decisions, school administrators could share rationale behind the decision and the thought process that led to the decision. Additionally, participants noted that communication via social media tools were no longer optional. It should be considered as a requirement for serving as a school administrator in the twenty-first century. (Cox, 2012, p. 187)

McCutcheon (2012) conducted a quantitative study in 2012 that investigated the personal and professional use of social media by Indiana principals. He compared his findings to a 2009 national survey (edWeb.net et al., 2009). McCutcheon used a one-way ANOVA to statistically analyze his survey data. The statistical analysis was performed in order to answer McCutcheon's

12 hypotheses. McCutcheon discovered a significant difference in gender groups as it related to social media for professional development. He found that female principals in Indiana used social media for professional development more than male counterparts. His theory stated that female principals utilized Pinterest and Facebook to seek new ideas where men may stick with using current resources. McCutcheon also found that a significant difference existed among elementary, middle, and high school principals on the use of social media for professional development. McCutcheon theorized that high schools tend to be larger, and this may necessitate the need to use social media to get information out to their larger faculties. He also tied this into communication as high school parents may not be as engaged as elementary or middle school families so there may exist a greater need, by high school principals, to utilize social media for communication.

International Society for Technology Education

The International Society for Technology Education (ISTE) is a non-profit organization that was founded in 1979. There are currently more than 100,000 educators worldwide who are active members of ISTE. Standards have been developed by ISTE to address the technological goals of students, teachers, and administrators (Appendix D).

As schools across the country and the world move toward a more technology-rich environment for their students, the training and comfort level of teachers and administrators continues to evolve. The ISTE standards are a step in the right direction, but without intensive and deliberate training and implementation, the standards may not be met.

The literature reviewed in this chapter has shown that there is an emerging body of research as it relates to social media usage in education. The literature also shows that a growing

number of school administrators are utilizing social media as a way to effectively communicate with their communities. This study adds to this growing body of research.

CHAPTER 3

METHODOLOGY

This chapter discusses the research methodology that includes research questions, null hypotheses, data sources, population of the study, the data collection process, instrument used as well as the statistical analysis. The purpose of this quantitative study was to examine the use of social media by K-12 principals and superintendents in Indiana. The quantitative research design involved administering online surveys to K-12 public school principals and superintendents from the state of Indiana. The Qualtrics online surveys were distributed electronically.

Problem

This study researched the use of social media by Indiana public school principals and superintendents. Many educators, administrators, superintendents, and school board members are hesitant to embrace the technological advances that are readily available. This reluctance to change is not a new phenomenon in the public school setting. Cox (2012) emphasized the need for principals and superintendents to be open-minded when it comes to social media as an educational tool:

> The growing demand across the country for increased levels of accountability combined with the expansion of charter schools, voucher systems, and open-enrollment legislation as well as increased opportunities for students to transfer from schools deemed "failing" by the state or federal government have created an expectation of higher levels of

> transparency and increased communication from school officials. School principals and superintendents must continue to find ways to promote their educational programs, recruit and retain quality staff, and engage the community in support of the local schools. A comprehensive social media strategy could assist school officials in accomplishing those objectives by providing them with opportunities to share the information in the manner and the time that the stakeholders prefer. A comprehensive social media strategy would also allow for sharing a deeper level of information that traditional formats are not able to do. (Cox, 2012, p. 14)

From the ballpoint pen to the overhead projector to the interactive smart board, educators have treaded lightly toward full implementation of technology. DuFour and Marzano (2011) discussed the daunting task of taking on the ever-challenging landscape of educational change.

> As educators throughout North America are beset by the perfect storm of challenging conditions, they would be wise to remember the words of Abraham Lincoln who wrote in his 1862 message to Congress: "The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise to the occasion. As our case is new, so must we think anew." (Lincoln as cited in DuFour & Marzano, 2011, p. 25)

Research Questions

The following research questions helped to provide clarity for this quantitative study.

1. What are Indiana principals' perceptions of social media use as a professional tool?
2. What are Indiana Superintendents' perceptions of social media use as a professional tool?

3. Is there a statistically significant difference on the social media composite score based on administrative position type?
4. Is there a statistically significant difference on the social media composite score based on location?
5. Is there a statistically significant difference on the social media composite score based on years of experience in the field of education?
6. Is there a statistically significant difference on the social media composite score based on SES level?
7. Is there a statistically significant difference on the social media composite score based on the letter grade received in 2012-13?

Null Hypotheses

$H_0$1. There is no statistically significant difference on the social media composite score based on administrative position type.

$H_0$2. There is no statistically significant difference on the social media composite score based on location.

$H_0$3. There is no statistically significant difference on the social media composite score based on years of experience in the field of education.

$H_0$4. There is no statistically significant difference on the social media composite score based on SES level.

$H_0$5. There is no statistically significant difference on the social media composite score based on the letter grade received in 2012-13.

Research Design

Creswell (2009) stated, "Quantitative research is a means for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures" (p. 4). Quantitative research allows the researcher to be completely independent of the research and subjects surveyed.

This study used an online survey that guarded the subjects' confidentiality. No information, such as school or district name, was collected that would identify a participant. Inferential and descriptive statistics were used to determine if differences existed among the dependent variables.

This quantitative study used a survey that was developed based on the literature review in Chapter 2. Indiana public school principals and superintendents were asked to complete the survey that measured each participants' frequency of use of social media, preference of social media site, and their perceptions of the effectiveness of social media as a professional tool. All participants' survey data gathered from the Qualtrics survey instrument remained confidential.

Population of Study

As of February 2014, there were approximately 290 public school districts in the state of Indiana (Indiana Department of Education, 2014). An e-mail was sent to each superintendent and principal(s) within the district asking for his or her participation in this study. E-mail addresses for each participant were acquired by utilizing the Indiana Department of Education website (Indiana Department of Education, 2014). A database of these e-mail addresses was created and utilized to distribute the survey electronically using the Qualtrics online survey tool.

Instrumentation and Data Sources

Participants were asked to complete a survey consisting of 16 questions. The survey consisted of three sections. Section 1 consisted of three questions that asked about frequency, preference, and ways in which social media is used by the participant. Section 2 consisted of five Likert scale questions that asked participants to share their opinions of the effectiveness of social media use as a professional tool. Section 3 consisted of eight demographic questions. The descriptive statistical data collected was used to address Research Questions 1 and 2. The inferential statistical data collected was used to address Research Questions 3 through 7.

Data Collection Procedures

All public school principals and superintendents from the state of Indiana were asked to participate in the study via e-mail. The e-mail addresses of all participants were obtained from the Indiana Department of Education (2014) website. An informed consent letter (Appendix A) preceded the survey (Appendix B). The letter explained the purpose of the study and contained directions on how to access the online Qualtrics survey. The letter also informed participants that their identity would remain confidential and that no personal information would be collected as well as informed them that they may choose to discontinue the survey at any time. Principals and superintendents who chose to take part in the survey proceeded beyond the letter of consent and began the survey. The survey was distributed in June 2014.

Principals and superintendents were asked questions that related to their use of social media. The data collected were used to examine their use of social media as a professional tool. The survey remained on-line for a total of 10 days. Within this 10-day period, Indiana principals and superintendents were contacted via e-mail to ask for their participation. Approximately six days after the initial e-mail contact with principals and superintendents was made, a follow e-

mail (Appendix C) was sent to thank all who participated and to remind those who had not yet participated that the survey would remain active for a few more days. At the conclusion of 10 days, the survey was taken offline and data were statistically analyzed.

Content Validity

Content validity allows for the researcher to see if the items (in this study the survey instrument) measure the content they were intended to measure (Creswell, 2009). Creswell (2009) stated that "establishing the validity of the scores in a survey helps to identify whether an instrument might be a good one to use in survey research" (p. 149). Content validity was established by me through a review of research related to the topic in Chapter 2. Content validity was also determined by using sample populations of administrators from the New Albany–Floyd County School Corporation as well as a cohort group of administrators from the Indiana State doctoral cohort who were not selected to participate in the research study. The aforementioned groups reviewed the questions from the Social Media Survey that was created by me. The groups offered feedback as to whether the purpose of the study was being met.

Survey Reliability

Creswell (2009) stated that a study may be considered highly reliable if it produces similar results under consistent conditions. Survey reliability is the degree of stability shown when a measurement is repeated under consistent conditions. The Social Media Survey results used in this study were analyzed for reliability using a Cronbach's alpha test, the most commonly used measure of reliability (Tavakol & Dennick, 2011). A Cronbach's alpha score was .845 that is above the required .7 for reliability.

Statistical Analysis

Research Question 1 and 2 were tested using descriptive analysis. Social media survey responses from Indiana principals and superintendents were tabulated and analyzed. Research Questions 3 through 7 were tested using inferential analysis. Research Question 3 used an independent sample *t* test to measure the significant differences on the social media composite score based on administrative position type. Research Question 4 was tested using a one-way analysis of variance (ANOVA) to measure the significant differences on the social media composite score based on location. Research Question 5 was tested using a one-way analysis of variance (ANOVA) to measure the significant differences on the social media composite score based on years of experience in the field of education. Research Question 6 was tested using a one-way analysis of variance (ANOVA) to measure the significant differences on the social media composite score based on socioeconomic status level. Research Question 7 was tested using a one-way analysis of variance (ANOVA) to measure the significant differences on the social media composite score based on letter grade received in 2012-13 by the Indiana Department of Education.

The independent variables of this study consisted of administrative position type, location, years of experience in the field of education, socioeconomic status level, and letter grade received from the Indiana Department of Education during the 2012-13 school year. The independent variable of administrative position type had two levels—principal or superintendent. The independent variable of location had three levels—suburban, urban, or rural. The independent variable based on years of experience in the field of education had four levels—0-10 years, 11-20 years, 21-30 years, or over 30 years. The independent variable based on socioeconomic status level had four levels—0-25%, 26-50%, 51-75%, or 76-100%. The

independent variable based on letter grade received by the Indiana Department of Education in 2012-13 school year had five levels—A, B, C, D, or F. The dependent variables were the social media survey composite scores as it related to administrative position type, location, years of experience in the field of education, socioeconomic status level, and letter grade received from the IDOE during the 2012-13 school year.

Prior to conducting an ANOVA, all assumptions (normality, homogeneity of variance, and independence) were tested. Any significant one-way ANOVA test result requires a post hoc test to determine where the significant differences lie. A Tukey's HSD post hoc test was utilized to determine which groups were significantly different from one another.

Summary

The purpose of this quantitative study was to examine the use of social media by Indiana principals and superintendents. The process by which the study was conducted was explained in detail. Chapter 1 reviewed the statement of the problem, purpose of the study, the research questions and null hypotheses, the limitations and delimitations of the study, the definitions of terms, and the significance of the study. Chapter 2 reviewed the literature related to the study which included the most popular social networking sites in 2013, K-12 students' use of social media, a 2009 and 2012 national social media survey, Smartphones as mobile computers, and recent social media research studies. Chapter 4 reviews the research questions and null hypotheses, a description of the survey instrument, the participants and procedures included in the study. Content validity, survey reliability and statistical data analysis are also reviewed.

CHAPTER 4

ANALYSIS OF DATA

The purpose of this quantitative study was to examine the use of social media among K-12 public school principals and superintendents in the state of Indiana. This study used survey methodology in order to gather data from the respondents. The survey collected data related to social media preference, frequency of social media usage, and ways in which social media is currently being used as a professional tool. Demographic data such as age, gender, school/district locality, educational experience, socioeconomic status level of school/district, and school/district letter grade received from the Indiana Department of Education was also collected. The Social Media survey was developed for this study to quantitatively measure the professional use of social media by Indiana principals and superintendents.

The Social Media survey consisted of 16 items and was organized into three sections. Section I consisted of three questions that asked participants how often they used social media as a professional tool in their current administrative position, which social media sites they used most frequently as a professional tool in their current administrative position, and in what ways they used social media as a professional tool in their current administrative position. Section II consisted of five questions that asked the respondents their opinions related to their perceived effectiveness of social media usage. A Likert scale was used to measure responses. A score of 1 on the Likert scale reflected that the respondent strongly disagreed with the statement. A score

of 6 on the Likert scale reflected that the respondent strongly agreed with the statement. Section III asked respondents questions related to demographics of the respondents. Age, gender, years of experience in the field of education, school/district socioeconomic status level during the 2013-14 school year, school/district location, and school/district letter grade received during the 2012-13 school year by the Indiana Department of Education (2014).

E-mail addresses of all public school principals and superintendents in Indiana were obtained from the Indiana Department of Education (2014). A total of 358 surveys were completed utilizing the Qualtrics online survey software.

Descriptive Analysis

Frequency Data for Whole Sample

The 358 respondents were asked questions related to frequency, preference, and reasons for using social media as a professional tool. Within the sample, 356 of 358 answered the survey question, "How often do you use social media as a professional tool in your current administrative position?" Respondents were given four categories from which to choose: *several times per day, daily, periodically during the week,* or *never.* Table 5 shows the results of the respondents' frequency of social media use as a professional tool.

Table 5

Frequency of Social Media Use

Frequency	Whole Sample	Principals	Superintendents
Several times per day	57 (15.9%)	40 (15.2%)	17 (18.1%)
Daily	77 (21.5%)	57 (21.7%)	20 (20.2%)
Periodically during the week	152 (42.5%)	114 (43.3%)	38 (40.4%)
Never	70 (19.6%)	52 (19.8%)	18 (19.1%)

The 70 respondents who chose *never* as their response were asked to explain why they never use social media as a professional tool. Many of the responses included being too busy, not knowing how, and negativity associated with social media (Appendix E).

Within the sample, all 358 respondents answered the survey question, "Which social media site(s) do you use most frequently as a professional tool in your current administrative position?" Respondents were permitted to select more than one response. The responses in Table 6 include seven categories from which to choose: Facebook, Twitter, Google+, LinkedIn, Instagram, Pinterest, and other.

Table 6

Preference of Social Media Sites

Site	Whole Sample	Principals	Superintendents
Facebook	171 (47.8%)	127 (48.3%)	43 (45.7%)
Twitter	208 (58.1%)	155 (58.9%)	52 (55.3%)
Google+	108 (30.2%)	77 (29.3%)	31 (33.0%)
LinkedIn	92 (25.7%)	58 (22.1%)	34 (36.2%)
Instagram	13 (3.6%)	12 (4.6%)	1 (1.1%)
Pinterest	45 (12.6%)	43 (16.3%)	2 (2.1%)
Other	17 (4.7%)	15 (5.7%)	2 (2.1%)

The 17 respondents who selected other were asked to share other social media sites they use. Many of the open-ended responses included My Big Campus, Google Docs, and school websites (Appendix E).

Within the sample, all 358 respondents answered the survey question, "In what way(s) do you use social media as a professional tool in your current administrative position?" Respondents were permitted to select more than one response. The responses included five categories from which to choose: stay connected with colleagues, share information with stakeholders (families, school board members, public in general, etc.), stay up-to-date with the latest educational information and trends, network with other educators, and other (Table 7).

Table 7

Ways Social Media is Used as a Professional Tool

Ways Used	Whole Sample	Principals	Superintendents
Stay connected with colleagues	186 (52.0%)	133 (50.6%)	52 (55.3%)
Share information with stakeholders	251 (70.1%)	190 (72.2%)	60 (63.8%)
Stay up to date on the latest information and trends	211 (58.9)	160 (60.8%)	50 (53.2%)
Network with other educators	170 (47.5%)	124 (47.1%)	45 (47.9%)
Other	22 (6.1%)	20 (7.6%)	2 (2.1%)

The 22 respondents who chose other were asked to share other ways in which they use social media as a professional tool. Some of the open-ended responses included promoting school activities, connect with alumni, business colleagues and community service organizations, and to do background checks on potential staff members (Appendix E).

Frequency Data for Position Type (Principal)

The 263 principal respondents were asked questions related to frequency, preference, and reasons for using social media as a professional tool. Within the sample, all 263 principal respondents answered the survey question, "How often do you use social media as a professional tool in your current administrative position?" Respondents were given four categories from which to choose: several times per day, daily, periodically during the week, or never. Results are located in Table 5. The 52 respondents who chose never as their response were asked to explain

why they never use social media as a professional tool. Many of the responses included being too busy, not knowing how, and negativity associated with social media (Appendix E).

Within the sample, all 263 principal respondents answered the survey question, "Which social media site(s) do you use most frequently as a professional tool in your current administrative position?" Respondents were permitted to select more than one response. The responses included seven categories from which to choose: Facebook, Twitter, Google+, LinkedIn, Instagram, Pinterest, and other. Responses are located in Table 6. The 15 respondents who selected other were asked to share other social media sites they use. Many of the open-ended responses included My Big Campus, Google Docs, and school websites (Appendix E).

Within the sample, all 263 principal respondents answered the survey question, "In what way(s) do you use social media as a professional tool in your current administrative position?" Respondents were permitted to select more than one response. The responses included five categories from which to choose: stay connected with colleagues, share information with stakeholders (families, school board members, public in general, etc.), stay up-to-date with the latest educational information and trends, network with other educators, and other. Responses are located in Table 7. The 20 respondents who chose other were asked to share other ways in which they use social media as a professional tool. Some of the open-ended responses included promoting school activities, connect with alumni, business colleagues and community service organizations, and to do background checks on potential staff members (Appendix E).

Frequency Data for Position Type (Superintendent)

The 94 superintendent respondents were asked questions related to frequency, preference, and reasons for using social media as a professional tool. Within the sample, 92 of 94 superintendent respondents answered the survey question, "How often do you use social media

as a professional tool in your current administrative position?" Respondents were given four categories from which to choose: *several times per day, daily, periodically during the week,* or *never.* Responses are located in Table 5. The 18 respondents who chose *never* as their response were asked to explain why they never use social media as a professional tool. Many of the responses included being too busy, not knowing how, and negativity associated with social media (Appendix E).

Within the sample, all 94 superintendent respondents answered the survey question, "Which social media site(s) do you use most frequently as a professional tool in your current administrative position?" Respondents were permitted to select more than one response. The responses included seven categories from which to choose: Facebook, Twitter, Google+, LinkedIn, Instagram, Pinterest, and other. Responses are located in Table 6. The two respondents who selected other were asked to share other social media sites they use. Many of the open-ended responses included My Big Campus, Google Docs, and school websites (Appendix E).

Within the sample, all 94 superintendent respondents answered the survey question, "In what way(s) do you use social media as a professional tool in your current administrative position?" Respondents were permitted to select more than one response. The responses included five categories from which to choose: stay connected with colleagues, share information with stakeholders (families, school board members, public in general, etc.), stay up-to-date with the latest educational information and trends, network with other educators, and other. Responses are located in Table 7. The two respondents who chose other were asked to share other ways in which they use social media as a professional tool. Some of the open-ended responses included promoting school activities, connect with alumni, business colleagues and

community service organizations, and to do background checks on potential staff members (Appendix E).

Demographic Data for Whole Sample

Survey responses were entered into SPSS software and data collected as it related to current administrative position, gender, age, years of experience in the field of education, percentage of students receiving free or reduced lunch for the 2013-14 school year, letter grade received by the Indiana Department of Education for the 2012-13 school year, and school/district locality. Principal and superintendent e-mail databases were acquired from the Indiana Department of Education (2014). Invitations were sent to 1,913 public school principals and 369 public school superintendents throughout Indiana. The invitations included charter school principals and superintendents in Indiana. The data analysis revealed that 358 of 2,281 (15.7%) Indiana public school principals and superintendents participated in the study. There were 263 of 1,913 (13.8%) principals and 94 of 369 (25.5%) superintendents who were invited to participate in the study that chose to do so. One respondent chose not to share his/her position type. Of the 357 respondents, 228 (63.7%) were men and 129 (36.0%) were women.

Within the sample, 357 of the 358 respondents reported their age. Respondents were given five possible age ranges from which to choose: 29 years old or under, 30-39 years old, 40-49 years old, 50-59 years old, or 60 years old or over. Of the 357 respondents, 66 (18.4%) were in the 30-39 year old range, 125 (34.9%) were in the 40-49 year old range, 111 (31.0%) were in the 50-59 year old range, and 55 (15.4%) were 60 years old or over. A total of 356 of the 358 respondents reported their years of experience in the field of education. Respondents were given four categories from which to choose: 0-10 years, 11-20 years, 21-30 years, or over 30 years. Of the 356 respondents, 31 (8.7%) had 0-10 years of experience, 115 (32.1%) had 11-20 years of

experience, 119 (33.2%) had 21-30 years of experience, 91 (25.4%) had over 30 years of experience. Within the sample, 356 of the 358 respondents reported the percentage of their students that received free or reduced lunch during the 2013-14 school year. Respondents were given four categories from which to choose: 0-25%, 26-50%, 51-75%, 76-100%. Of the 356 respondents, 45 (12.6%) reported 0-25%, 150 (41.9%) reported 26%-50%, 119 (33.2%) reported 51%-75%, 42 (11.7%) reported 76%-100%.

A total of 354 of the 358 respondents reported the 2012-13 school year letter grades their school or school district received from the Indiana Department of Education. Respondents were given five categories from which to choose: A, B, C, D, or F. Of the 354 respondents, 150 (41.9%) received an A, 93 (26.0%) received a B, 73 (20.4%) received a C, 33 (9.2%) received a D, five (1.4%) received an F. Within the sample, 355 of the 358 respondents reported their school (principal) or district (superintendent) location. Respondents were given three categories from which to choose: urban, suburban, or rural. Of the 355 respondents, 70 (19.6%) reported urban, 99 (27.7%) suburban, and 186 (52.0%) rural. Table 8 shows the results of the whole sample respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 8

Descriptive Whole Sample Data on Perceptions of Effectiveness of Social Media as a Professional Tool

Type of Professional Tool	Mean	*SD*
Communication	4.46	1.35
Professional Development	4.13	1.36
Recruitment	3.76	1.41
Networking	4.53	1.27
Transparency	4.28	1.29
Composite Score	21.15	5.51

Demographic Data by Position Type (Principal)

The demographic data analysis as it related to position type (principal) revealed that 263 respondents participated in the study. Within the sample, 262 of 263 of the respondents reported their gender that included 159 (60.5%) men and 103 (39.2%) women. A total of 263 respondents reported their age range that included 61 (23.2%) in the 30-39 year old range, 98 (37.3%) in the 40-49 year old range, 74 (28.1%) in the 50-59 year old range, and 30 (11.4%) 60 years old or over. Within the sample, 262 of the 263 respondents reported their years' experience in the field of education that included 26 (9.9%) with 0-10 years, 101 (38.4%) with 11-20 years, 77 (29.3%) with 21-30 years, and 58 (22.1%) with over 30 years. A total of 262 of 263 respondents reported the percentage of students who received free or reduced lunch during the 2013-14 school year that included 36 (13.7%) with 0-25%, 106 (40.3%) with 26-50%, 83 (31.6%) with 51-75%, and 37 (14.1%) with 76-100%. Within the sample, 260 of 263 respondents shared the letter grade

their school received from the Indiana Department of Education in 2012-13. There were 117 (44.5%) who received an A, 63 (24.0%) who received a B, 45 (17.1%) who received a C, 30 (11.4%) who received a D, and five (1.9%) who received an F. A total of 261 of 263 respondents reported their school locality. There were 62 (23.6%) urban, 79 (30.0%) suburban, and 120 (45.6%) rural. Table 9 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 9

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Position (Principal)

Type of Professional Tool	Mean	*SD*
Communication	4.54	1.28
Professional Development	4.21	1.32
Recruitment	3.81	1.38
Networking	4.57	1.23
Transparency	4.32	1.25
Composite Score	21.45	5.17

The communication and professional development scores exhibited the most difference from the principal respondents compared to the whole sample. Principals' mean scores in these two areas were higher, possibly indicating principals view social media utilization as a more useful tool in the areas of communication and professional development than the whole sample.

It should also be noted that principals rated the five areas of social media found within the study as higher than the whole sample.

Demographic Data by Position Type (Superintendent)

The demographic data analysis as it related to position type (superintendent) revealed that 94 respondents participated in the study. Within the sample, 94 respondents reported their gender that included 68 (72.3%) men and 26 (27.7%) women. A total of 93 of the 94 respondents reported their age range that included five (5.3%) in the 30-39 year old range, 27 (28.7%) in the 40-49 year old range, 36 (38.3%) in the 50-59 years old range, and 25 (26.6%) 60 year olds or older. Within the sample, 93 of the 94 respondents reported their years of experience in the field of education. There were five (5.3%) who had 0-10 years, 14 (14.9%) had 11-20 years, 42 (44.7%) had 21-30 years, and 32 (34.0%) had over 30 years. A total of 93 of the 94 respondents reported their percentage of students who received free or reduced lunch during the 2013-14 school year in respondents' respective school district. There were nine (9.6%) who reported 0-25%, 44 (46.8%) 26-50%, 36 (38.3%) 51-75%, and four (4.3%) 76-100%. Within the sample, 93 of the 94 respondents reported the letter grade their school district received from the Indiana Department of Education in 2012-13. There were 33 (35.1%) who received an A, 30 (31.9%) received a B, 28 (29.8%) received a C, and two (2.1%) received a D. A total of 93 of the 94 respondents reported their school district location. There were seven (7.4%) urban, 20 (21.3%) suburban, and 66 (70.2%) rural school districts. Table 10 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 10

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Position (Superintendent)

Type of Professional Tool	Mean	*SD*
Communication	4.22	1.51
Professional Development	3.90	1.47
Recruitment	3.60	1.50
Networking	4.38	1.38
Transparency	4.16	1.42
Composite Score	20.27	6.35

The communication and professional development scores exhibited the greatest difference from the superintendent respondents compared to the whole sample. Superintendents' mean scores in these two areas were lower, thus, possibly indicating superintendents view social media utilization as a less useful tool in the areas of communication and professional development. It should also be noted that superintendents rated the five areas of social media found within the study as lower than the whole sample.

Demographic Data by Locality (Urban)

The demographic data analysis as it related to locality (urban) revealed that 70 respondents participated in the study. Within the sample, 69 of 70 urban respondents reported their administrative position type that included 62 (88.6%) principals and seven (10.0%) superintendents. A total of 70 respondents reported their gender that included 35 (50.0%) men and 35 (50.0%) women. Within the sample, 70 respondents reported their age range. There

were 15 (21.4%) in the 30-39 year old range, 20 (28.6%) in the 40-49 year old range, 24 (34.3%) in the 50-59 year old range, and 11 (15.7%) were 60 year olds or older. A total of 70 respondents reported their years of experience in the field of education. There were six (8.6%) who had 0-10 years, 25 (35.7%) with 11-20 years, 21 (30.0%) with 21-30 years, and 18 (25.7%) with over 30 years of experience. Within the sample, 69 of 70 respondents reported the percentage of students who received free or reduced lunch during the 2013-14 school year. There was one (1.4%) with 0-25%, 12 (17.1%) with 26-50%, 25 (35.7%) with 51-75%, and 31 (44.3%) with 76-100%. A total of 68 of 70 respondents reported the letter grade received from the Indiana Department of Education in 2012-13. There were 19 (27.1%) who received an A, 21 (30%) received a B, 12 (17.1%) received a C, 13 (18.6%) received a D, and three (4.3%) received an F. Table 11 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 11

Descriptive Data on Perceptions of Effectiveness of Social Media as Professional Tool by Location (Urban)

Type of Professional Tool	Mean	*SD*
Communication	4.60	1.42
Professional Development	4.23	1.43
Recruitment	4.24	1.28
Networking	4.44	1.29
Transparency	4.37	1.21
Composite Score	21.89	5.46

The communication and recruitment scores exhibited the greatest difference from the urban respondents compared to the whole sample. Urban respondents' mean scores in these two areas were higher, thus, possibly indicating urban respondents view social media utilization as a more useful tool in the areas of communication and recruitment. It should also be noted that urban respondents rated four of the five areas of social media found within the study as higher than the whole sample. The only area the urban respondents rated lower than the whole sample was networking.

Demographic Data by Locality (Suburban)

The demographic data analysis as it related to locality (suburban) revealed that 99 respondents participated in the study. Within the sample, 99 respondents reported their administrative position type that included 79 (79.8%) principals and 20 (20.2%) superintendents. A total of 98 of 99 respondents reported their gender that included 62 (62.6%) men and 36 (36.4%) women. Within the sample, 99 respondents reported their age range. There were 16 (16.2%) in the 30-39 year old range, 43 (43.4%) in the 40-49 year old range, 25 (25.3%) in the 50-59 year old range, and 15 (15.2%) who were 60 year olds or older. A total of 99 respondents reported years of experience in the field of education. There were five (5.1%) who had 0-10 years of experience, 33 (33.3%) with 11-20 years, 36 (36.4%) with 21-30 years, and 25 (25.3%) with over 30 years. Within the sample, 98 of 99 respondents reported the percentage of students who received free or reduced lunch during the 2013-14 school year. There were 33 (33.3%) who had 0-25%, 37 (37.4%) with 26-50%, 25 (25.3%) with 51-75%, and 4 (4.0%) with 76-100%. A total of 98 of 99 respondents reported the letter grade received from the Indiana Department of Education in 2012-13. There were 60 (60.6%) who received an A, 21 (21.2%) received a B, nine

(9.1%) received a C, seven (7.1%) received a D, and one (1.0%) received an F. Table 12 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 12

Descriptive Data on Perceptions of Effectiveness of Social Media as Professional Tool by Location (Suburban)

Type of Professional Tool	Mean	*SD*
Communication	4.58	1.20
Professional Development	4.19	1.28
Recruitment	3.54	1.42
Networking	4.71	1.09
Transparency	4.46	1.26
Composite Score	21.48	5.05

The recruitment, networking, and transparency scores exhibited the greatest difference from the suburban respondents compared to the whole sample. Suburban respondents' mean scores in the areas of networking and transparency were higher, thus, possibly indicating suburban respondents view social media utilization as a more useful tool in these areas. Suburban respondents mean score in the area of recruitment were lower, thus, possibly indicating that suburban respondents view social media utilization as a less useful tool in this area.

Demographic Data by Location (Rural)

The demographic data analysis as it related to locality (rural) revealed that 186 respondents participated in the study. Within the sample, 186 respondents reported their administrative position type that included 120 (64.5%) principals and 66 (35.5%) superintendents. A total of 186 respondents reported their gender that included 131 (70.4%) men and 55 (29.6%) women. Within the sample, 185 of 186 respondents reported their age range. There were 34 (18.3%) in the 30-39-year-old range, 62 (33.3%) in the 40-49-year-old range, 61 (32.8%) were in the 50-59-year-old range, and 28 (15.1%) 60 year olds or over were reported. A total of 184 of 186 respondents reported their years of experience in the field of education. There were 19 (10.2%) with 0-10 years of experience, 57 (30.6%) with 11-20 years, 61 (32.8%) with 21-30 years, and 47 (25.3%) with over 30 years of experience. Within the sample, 186 respondents reported their percentage of students who received free or reduced lunch during the 2013-14 school year. There were 11 (5.9%) who had 0-25%, 101 (54.3%) had 26-50%, 68 (36.6%) had 51-75%, and six (3.2%) had 76-100%. A total of 186 respondents reported their letter grade received from the Indiana Department of Education in 2012-13. There were 71 (38.2%) who received an A, 51 (27.4%) received a B, 52 (28.0%) received a C, and 12 (6.5%) received a D. Table 13 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 13

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Location (Rural)

Type of Professional Tool	Mean	*SD*
Communication	4.33	1.40
Professional Development	4.04	1.39
Recruitment	3.69	1.43
Networking	4.45	1.34
Transparency	4.13	1.34
Composite Score	20.64	5.75

The communication and transparency mean scores exhibited the greatest difference from the rural respondents compared to the whole sample. Rural respondents' mean scores in these two areas were lower, thus, possibly indicating rural respondents view social media utilization as a less useful tool in areas of communication and transparency. It should also be noted that rural respondents rated all five areas of social media found within the study as lower than the whole sample.

Demographic Data by Years of Experience in the Field of Education (0-10 Years)

The demographic data analysis as it related to years of experience in the field of education (0-10 years) revealed that 31 respondents participated in the study. Within the sample, the demographic data as it related to years of experience in the field of education (0-10 years) revealed that of the 31 respondents, 26 (83.9%) were principals and five (16.1%) were superintendents. The gender breakdown showed that 22 (71.0%) were men and nine (29%) were

women. With regard to age range, 17 (54.8%) were in the 30-39year old range, seven (22.6%) were in the 40-49 years old range, six (19.4%) were in the 50-59 year old range, and one (3.2%) was 60 years old or over. Within the sample, the percentage of students who received free or reduced lunch during the 2013-14 school year showed that one (3.2%) had 0-25%, 15 (48.4%) had 26-50%, 11 (35.5%) had 51-75%, four (12.9%) had 76-100%. Within the sample, the letter grade received from the Indiana Department of Education in 2012-13 revealed that nine (29.0%) received an A, nine (29.0%) received a B, seven (22.6%) received a C, four (12.9%) received a D, and one (3.2%) received an F. There were 30 of 31 respondents who reported their locality. A total of six (19.4%) were urban, five (16.1%) were suburban, and 19 (61.3%) were rural. Table 14 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 14

Descriptive Data on Perceptions of Effectiveness of Social Media as Professional Tool by Years of Experience in the Field of Education (0-10 Years)

Type of Professional Tool	Mean	*SD*
Communication	4.35	1.45
Professional Development	3.87	1.50
Recruitment	3.97	1.35
Networking	4.42	1.29
Transparency	4.00	1.46
Composite Score	20.61	5.75

The professional development, recruitment, and transparency mean scores exhibited the greatest difference from the respondents with 0-10 years of experience in the field of education compared to the whole sample. The respondents' mean scores in the areas of professional development and transparency were lower than the whole sample, thus, possibly indicating they view social media utilization as a less useful tool in these areas. The respondents' mean score in the area of recruitment was higher than the whole sample, thus, possibly indicating they view social media utilization as a more useful tool in this area.

Demographic Data by Years of Experience in the Field of Education (11-20 Years)

The demographic data analysis as it related to years of experience in the field of education (11-20 years) revealed that there were a total of 115 respondents. Respondents who shared position type showed that 101 (87.8%) were principals and 14 (12.2%) were superintendents. Within the sample, of the 115 respondents 77 (67.0%) were men and 38 (33.0%) were women. A total of 115 respondents shared their age range that showed 49 (42.6%) were in the 30-39 year old range, 51 (44.3%) were in the 40-49 year old range, 13 (11.3%) were in the 50-59 year old range, and two (1.7%) were 60 years old or over. The 114 of 115 respondents who shared what percentage of their students who received free or reduced lunch during the 2013-14 school year included 14 (12.2%) who had 0-25%, 56 (48.7%) had 26-50%, 28 (24.3%) had 51-75%, and 16 (13.9%) had 76-100%. Respondents shared the letter grade received from the Indiana Department of Education in 2012-13 that showed 47 (40.9%) received an A, 24 (20.9%) received a B, 31 (27.0%) received a C, 12 (10.4%) received a D, and one (0.9%) received an F. Within the sample, 115 respondents shared their locality that showed 25 (21.7%) were urban, 33 (28.7%) were suburban, 57 (49.6%) were rural. Table 15 shows the

results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 15

Descriptive Data on Perceptions of Effectiveness of Social Media as Professional Tool by Years of Experience in the Field of Education (11-20 Years)

Type of Professional Tool	Mean	*SD*
Communication	4.65	1.22
Professional Development	4.35	1.32
Recruitment	3.79	1.43
Networking	4.61	1.23
Transparency	4.47	1.11
Composite Score	21.87	5.01

The communication, professional development, and transparency mean scores exhibited the greatest difference from the respondents with 11-20 years of experience in the field of education compared to the whole sample. The respondents' mean scores in all three areas were higher than the whole sample, thus, possibly indicating they view social media utilization as a more useful tool in these areas. It should also be noted that respondents with 11-20 years of experience in the field of education rated all five areas of social media found within the study as higher than the whole sample.

Demographic Data by Years of Experience in the Field of Education (21-30 Years)

Within the sample, the demographic data as it related to years of experience in the field of education (21-30 years) revealed that there were a total of 119 respondents. The position type

showed that 77 (64.7%) principals and 42 (35.3%) superintendents participated. Within the sample related to gender, 71 (59.7%) were men and 48 (40.3%) were women. The respondents age range included 67 (56.3%) who were in the 40-49 year old range, 46 (38.7%) were in the 50-59 year old range, and six (5.0%) were 60 years old or over. Within the sample, respondents shared what percentage of students that received free or reduced lunch during the 2013-14 school year. The totals included 17 (14.3%) had 0-25%, 42 (35.3%) had 26-50%, 50 (42.0%) had 51-75%, and 10 (8.4%) had 76-100%. Within the sample, a total of 117 of 119 respondents shared the letter grade received from the Indiana Department of Education in 2012-13 that showed 50 (42.0%) received an A, 33 (27.7%) received a B, 21 (17.6%) received a C, 12 (10.1%) received a D, and one (0.8%) received an F. A total of 118 of 119 shared their locality that showed 21 (17.6%) were urban, 36 (30.3%) were suburban, 61 (51.3%) were rural. Table 16 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 16

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Years of Experience in the Field of Education (21-30 Years)

Type of Professional Tool	Mean	*SD*
Communication	4.50	1.40
Professional Development	4.08	1.41
Recruitment	3.81	1.39
Networking	4.51	1.40
Transparency	4.24	1.36
Composite Score	21.14	6.02

The professional development and recruitment scores exhibited the most difference from the respondents with 21-30 years of experience in the field of education compared to the whole sample. Respondents' mean score was lower in the area of professional development than the whole sample, thus, possibly indicating respondents with 21-30 years of experience in the field of education view social media utilization as a less useful tool in this area. Respondents' mean score was higher in the area of recruitment than the whole sample in the area of recruitment, thus possibly indicating they view the utilization of social media as a more useful tool in this area.

Demographic Data by Years of Experience in the Field of Education (Over 30 Years)

Within the sample, the demographic data as it related to years of experience in the field of education (over 30 years) revealed that there were a total of 91 respondents. The position type data showed that of the 90 of 91 respondents 58 (63.7%) were principals and 32 (35.2%) were superintendents. There were 90 of 91 respondents who shared their gender that included 56 (61.5%) men and 34 (37.4%) women. Within the sample, 91 respondents reported their age range which showed that 45 (49.5%) were in the 50-59 year old range and 46 (50.5%) were 60-years-old or over. A total of 90 of 91 respondents reported the percentage of students that received free or reduced lunch during the 2013-14 school year which included 13 (14.3%) who had 0-25%, 36 (39.6%) had 26-50%, 29 (31.9%) had 51-75%, 12 (13.2%) had 76-100%. Within the sample, 90 of 91 respondents reported the letter grade received from the Indiana Department of Education in 2012-13 which showed that 43 (47.3%) received an A, 26 (28.6%) received a B, 14 (15.4%) received a C, five (5.5%) received a D, two (2.2%) received an F. A total of 90 of 91 respondents reported their locality that showed 18 (19.8%) were urban, 25 (27.5%) were suburban, and 47 (51.6%) were rural. Table 17 shows the results of the respondents' perceptions

of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 17

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Years of Experience in the Field of Education (Over 30 Years)

Type of Professional Tool	Mean	*SD*
Communication	4.19	1.40
Professional Development	3.98	1.30
Recruitment	3.59	1.45
Networking	4.47	1.15
Transparency	4.19	1.37
Composite Score	20.42	5.37

The communication and recruitment mean scores exhibited the greatest difference from the respondents with over 30 years of experience in the field of education compared to the whole sample. Respondents' mean scores in these two areas were lower, thus, possibly indicating respondents with over 30 years of educational experience view social media utilization as a less useful tool in areas of communication and recruitment. It should also be noted that respondents with over 30 years of educational experience rated all five areas of social media found within the study as lower than the whole sample.

Demographic Data by Percentage of Students Who Received Free or Reduced Lunch For the 2013-14 School Year (0-25%)

The demographic data as it related to percentage of students who received free or reduced lunch for the 2013-14 school year (0-25%) had a total of 45 respondents. Position type revealed that 36 (80.0%) were principals and nine (20.0%) were superintendents. With regard to gender, 26 (57.8%) were men and 19 (42.2%) were women. Within the sample, the age range breakdown showed that eight (17.8%) were in the 30-39 year old range, 18 (40.0%) were in the 40-49 year old range, 10 (22.2%) were in the 50-59 year old range, and nine (20.0%) were 60-years-old or over. The respondents who shared their years of experience in the field of education revealed that one (2.2%) had 0-10 years, 14 (31.1%) had 11-20 years, 17 (37.8%) had 21-30 years, and 13 (28.9%) had over 30 years. A total of 44 of 45 respondents who reported the letter grade received from the Indiana Department of Education in 2012-13 revealed that 42 (93.3%) received an A, and two (4.4%) received a C. The respondents who shared their locality reported that one (2.2%) was urban, 33 (73.3%) suburban, and 11 (24.4%) rural. Table 18 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 18

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Percentage of Students Who Received Free or Reduced Lunch (0-25%)

Type of Professional Tool	Mean	*SD*
Communication	4.53	1.20
Professional Development	4.20	1.16
Recruitment	3.33	1.19
Networking	4.62	1.09
Transparency	4.29	1.18
Composite Score	20.98	4.64

The recruitment and networking mean scores exhibited the greatest difference from the 0-25% free and reduced student lunch respondents compared to the whole sample. Respondents' mean score in the area of recruitment was lower than the whole sample, thus, possibly indicating 0-25% free and reduced student lunch respondents view social media utilization as a less useful tool in this area. Respondents' mean score in the area of networking was higher than the whole sample, thus, possibly indicating 0-25% free and reduced student lunch respondents view social media utilization as a more useful tool in this area.

Demographic Data by Percentage of Students Who Received Free or Reduced Lunch For the 2013-14 School Year (26-50%)

The demographic data as it related to percentage of students who received free or reduced lunch (26-50%) for the 2013-14 school year had a total of 150 respondents. Within the sample, there were 106 (70.7%) principals and 44 (29.3%) superintendents. Of the 149 of 150

respondents who reported their gender, there were 106 (70.7%) men and 43 (28.7%) women. Within the sample, the respondents reported age ranges showed that 32 (21.3%) were in the 30-39 year old range, 51 (34.0%) were in the 40-49 year old range, 49 (32.7%) were in the 50-59 year old range, 18 (12.0%) were 60 years old or over. Of the 149 of 150 respondents reporting their years of experience in the field of education, 15 (10.0%) had 0-10 years, 56 (37.3%) had 11-20 years, 42 (28.0%) had 21-30 years, and 36 (24.0%) had over 30 years. Within the sample, respondents who reported letter grade received from the Indiana Department of Education in 2012-13 revealed that 68 (45.3%) received an A, 45 (30.0%) received a B, 31 (20.7%) received a C, five (3.3%) received a D, and one (0.7%) received an F. The respondents who reported their locality revealed that 12 (8.0%) were urban, 37 (24.7%) were suburban, and 101 (67.3%) were rural. Table 19 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 19

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Percentage of Students Who Received Free or Reduced Lunch (26-50%)

Type of Professional Tool	Mean	*SD*
Communication	4.56	1.28
Professional Development	4.28	1.33
Recruitment	3.95	1.47
Networking	4.59	1.33
Transparency	4.41	1.29
Composite Score	21.79	5.60

The professional development and recruitment mean scores exhibited the greatest difference from the 26-50% free and reduced student lunch respondents compared to the whole sample. Respondents' mean score in both areas were higher than the whole sample, thus, possibly indicating 26-50% free and reduced student lunch respondents view social media utilization as a more useful tool. It should also be noted that respondents with 26-50% free or reduced lunch students rated all five areas of social media found within the study as higher than the whole sample.

Demographic Data by Percentage of Students Who Received Free or Reduced Lunch For the 2013-14 School Year (51-75%)

The demographic data as it related to percentage of students who received free or reduced lunch for the 2013-14 school year (51-75%) had a total of 119 respondents. The position type data revealed that 83 (69.7%) were principals and 36 (30.3%) were superintendents. The demographic data related to gender showed that 79 (66.4%) were men and 40 (33.6%) were women. Of the 118 of 119 respondents who reported their age range, the data showed that 18 (15.1%) were in the 30-39 year old range, 42 (35.3%) were in the 40-49 year old range, 37 (31.1%) were in the 50-59 year old range, and 21 (17.6%) were 60-years-old or over. Of the 118 of 119 respondents who reported their years of experience in the field of education, the results showed that 11 (9.2%) had 0-10 years, 28 (23.5%) had 11-20 years, 50 (42.0%) had 21-30 years, and 29 (24.4%) had over 30 years. Within the sample of respondents who reported the letter grade received from the Indiana Department of Education in 2012-13, the data revealed that 36 (30.3%) received an A, 39 (32.8%) received a B, 31 (26.1%) received a C, and 13 (10.9%) received a D. Of the 118 of 119 respondents who reported locality 25 (21.0%) were urban, 25 (21.0%) were suburban, and 68 (57.1%) were rural. Table 20 shows the results of the

respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 20

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Percentage of Students Who Received Free or Reduced Lunch (51-75%)

Type of Professional Tool	Mean	*SD*
Communication	4.30	1.44
Professional Development	3.88	1.47
Recruitment	3.63	1.33
Networking	4.40	1.27
Transparency	4.02	1.37
Composite Score	20.24	5.58

The professional development and transparency mean scores exhibited the greatest difference from the 51-75% free and reduced student lunch respondents compared to the whole sample. Respondents' mean score in both areas were lower than the whole sample, thus, possibly indicating 51-75% free and reduced student lunch respondents view social media utilization as a less useful tool. It should also be noted that respondents with 51-75% free or reduced lunch students rated all five areas of social media found within the study as lower than the whole sample.

Demographic Data by Percentage of Students Who Received Free or Reduced Lunch For the 2013-14 School Year (76-100%)

The demographic data as it related to percentage of students who received free or reduced lunch for the 2013-14 school year (76-100%) had a total of 42 respondents. There were 41 of 42 respondents who reported their position type that showed 37 (881.%) were principals and four (9.5%) were superintendents. Within the sample, the gender breakdown showed that 17 (40.5%) were men and 25 (59.5%) were women. Respondents who reported their age range showed that eight (19.0%) were in the 30-39 year old range, 13 (31.0%) were in the 40-49 year old range, 15 (35.7%) were in the 50-59 year old range, and six (14.3%) were 60 years old or over. The respondents that reported their years of experience in the field of education showed that four (9.5%) had 0-10 years, 16 (38.1%) had 11-20 years, 10 (23.8%) had 21-30 years, and 12 (28.6%) had over 30 years. There were 40 of 42 respondents that reported the letter grade received from the Indiana Department of Education in 2012-13 which showed that four (9.5%) received an A, nine (21.4%) received a B, eight (19.0%) received a C, 15 (35.7%) received a D, and four (9.5%) received an F. Within the sample, 41 of 42 respondents that reported locality showed that 31 (73.8%) were urban, four (9.5%) were suburban, and six (14.3%) were rural. Table 21 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 21

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by Percentage of Students Who Received Free or Reduced Lunch (76-100%)

Type of Professional Tool	Mean	*SD*
Communication	4.48	1.53
Professional Development	4.19	1.35
Recruitment	3.93	1.58
Networking	4.57	1.27
Transparency	4.50	1.13
Composite Score	21.67	5.77

The recruitment and transparency mean scores exhibited the greatest difference from the 76-100% free and reduced student lunch respondents compared to the whole sample. Respondents' mean score in both areas were higher than the whole sample, thus, possibly indicating 76-100% free and reduced student lunch respondents view social media utilization as a more useful tool. It should also be noted that respondents with 76-100% free or reduced lunch students rated all five areas of social media found within the study as higher than the whole sample.

Demographic Data by 2012-13 Letter Grade Received from the Indiana Department of Education (Letter Grade of A)

The demographic data as it related to the letter grade received from the Indiana Department of Education (letter grade of A) in 2012-13 had a total of 150 respondents. The position type revealed that 117 (78.0%) were principals and 33 (22%) were superintendents.

Respondents' gender results showed that 90 (60.0%) were men and 60 (40.0%) were women. Of the 149 of 150 respondents who reported their age range the results showed that 26 (17.3%) were in the 30-39 year old range, 57 (38.0%) were in the 40-49 year old range, 36 (24.0%) were in the 50-59 year old range, and 30 (20.0%) were 60 years old or over. Of the 149 of 150 respondents reporting years of experience in the field of education, nine (6.0%) had 0-10 years, 47 (31.3%) had 11-20 years, 50 (33.3%) had 21-30 years, and 43 (28.7%) had over 30 years. Respondents who reported percentage of students who received free or reduced lunch during the 2013-14 school year, results showed 42 (28.0%) had 0-25%, 68 (45.3%) had 26-50%, 36 (24.0%) had 51-75%, four (2.7%) had 76-100%. The respondents' locality breakdown showed that 19 (12.7%) were urban, 60 (40.0%) were suburban, and 71 (47.3%) were rural. Table 22 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 22

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by 2012-13 Letter Grades Received From the Indiana Department of Education (Letter Grade of A)

Type of Professional Tool	Mean	*SD*
Communication	4.47	1.33
Professional Development	4.15	1.35
Recruitment	3.66	1.49
Networking	4.55	1.30
Transparency	4.25	1.37
Composite Score	21.09	5.75

The recruitment and transparency mean scores exhibited the greatest difference from the respondents who received a letter grade of A from the IDOE in 2012-13 compared to the whole sample. Respondents' mean score in both areas were lower than the whole sample, thus, possibly indicating the letter grade of A respondents view social media utilization as a less useful professional tool.

Demographic Data by 2012-13 Letter Grade Received from the Indiana Department of Education (Letter Grade of B)

The demographic data as it related to the letter grade received from the Indiana Department of Education (letter grade of B) in 2012-13 had a total of 93 respondents. Respondents reported that 63 (67.7%) were principals and 30 (32.3%) were superintendents. A total of 92 of 93 respondents reported their gender that showed (74.2%) were men and (24.7%) were women. Within the sample, the respondents reported their age range, which showed that 17 (18.3%) were in the 30-39 year old range, 26 (28.0%) were in the 40-49 year old range, 38 (40.9%) were in the 50-59 year old range, and 12 (12.9%) were 60 years old or over. A total of 92 of 93 respondents reported their years of experience in the field of education, which showed that nine (9.7%) had 0-10 years, 24 (25.8%) had 11-20 years, 33 (35.5%) had 21-30 years, and 26 (28.0%) had over 30 years. Respondents reported the percentage of students that received free or reduced lunch during the 2013-14 school year and showed that 45 (48.4%) had 26-50%, 39 (41.9%) had 51-75%, and nine (9.7%) had 76-100%. Respondents reported their locality that showed 21 (22.6%) were urban, 21 (22.6%) were suburban, and 51 (54.8%) were rural. Table 23 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 23

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by 2012-13 Letter Grades Received From the Indiana Department of Education (Letter Grade of B)

Type of Professional Tool	Mean	*SD*
Communication	4.33	1.47
Professional Development	4.00	1.48
Recruitment	3.84	1.32
Networking	4.37	1.28
Transparency	4.23	1.35
Composite Score	20.76	5.74

The communication and networking mean scores exhibited the greatest difference from the respondents who received a letter grade of B from the IDOE in 2012-13 compared to the whole sample. Respondents' mean score in both areas were lower than the whole sample, thus, possibly indicating the letter grade of B respondents view social media utilization as a less useful tool.

Demographic Data by 2012-13 Letter Grade Received from the Indiana Department of Education (Letter Grade of C)

The demographic data as it related to the letter grade received from the Indiana Department of Education (letter grade of C) in 2012-13 had a total of 73 respondents. Respondents reported their position type that showed 45 (61.6%) were principals and 28 (38.4%) were superintendents. Respondents reported gender that showed 52 (71.2%) were men and 21 (28.8%) were women. The age range that respondents reported showed that 16 (21.9%) were in

the 30-39 year old range, 27 (37.0%) were in the 40-49 year old range, 21 (28.8%) were in the 50-59 year old range, and nine (12.3%) were 60-years-old or over. The years of experience in the field of education that respondents reported showed that seven (9.6%) had 0-10 years, 31 (42.5%) had 11-20 years, 21 (28.8%) had 21-30 years, and 14 (19.2%) had over 30 years. A total of 72 of 23 respondents reported the percentage of students that received free or reduced lunch during the 2013-14 school year which showed that two (2.7%) had 0-25%, 31 (42.5%) had 26-50%, 31 (42.5%) had 51-75%, and eight (11.0%) had 76-100%. Respondents reported locality that showed 12 (16.4%) were urban, nine (12.3%) were suburban, and 52 (71.2%) were rural. Table 24 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 24

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by 2012-13 Letter Grades Received From the Indiana Department of Education (Letter Grade of C)

Type of Professional Tool	Mean	*SD*
Communication	4.48	1.29
Professional Development	4.15	1.34
Recruitment	3.81	1.38
Networking	4.51	1.31
Transparency	4.34	1.20
Composite Score	21.29	5.23

The recruitment and transparency mean scores exhibited the greatest difference from the respondents who received a letter grade of C from the IDOE in 2012-13 compared to the whole sample. Respondents' mean score in both areas were higher than the whole sample, thus, possibly indicating the letter grade of C respondents view social media utilization as a more useful tool.

Demographic Data by 2012-13 Letter Grade Received from the Indiana Department of Education (Letter Grade of D)

The demographic data as it related to the letter grade received from the Indiana Department of Education (letter grade of D) in 2012-13 had at total of 33 respondents. There were 32 of 33 respondents that reported position type that showed 30 (90.9%) were principals and two (6.1%) were superintendents. Respondents reported gender that showed 16 (48.5%) were men and 17 (51.5%) were women. Age range was reported by respondents that showed five (15.2%) were in the 30-39 year old range, 14 (42.4%) were in the 40-49 year old range, 12 (36.4%) were in the 50-59 year old range, and two (6.1%) were 60 years old or over. Respondents reported years of experience in the field of education that showed four (12.1%) had 0-10 years, 12 (36.4%) had 11-20 years, 12 (36.4%) had 21-30 years, and five (15.2%) had over 30 years. The percentage of students that received free or reduced lunch during the 2013-14 school year was reported by the respondents and showed that five (15.2%) had 26-50%, 13 (39.4%) had 51-75%, and 15 (45.5%) had 76-100%. There were 32 of 33 respondents that reported locality that showed 13 (39.4%) were urban, seven (21.2%) were suburban, and 12 (36.4%) were rural. Table 25 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 25

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by 2012-13 Letter Grades Received From the Indiana Department of Education (Letter Grade of D)

Type of Professional Tool	Mean	*SD*
Communication	4.61	1.27
Professional Development	4.18	1.21
Recruitment	3.79	1.45
Networking	4.82	0.98
Transparency	4.36	1.03
Composite Score	21.76	4.44

The communication and networking mean scores exhibited the greatest difference from the respondents who received a letter grade of D from the IDOE in 2012-13 compared to the whole sample. Respondents' mean score in both areas were higher than the whole sample, thus, possibly indicating the letter grade of D respondents view social media utilization as a more useful tool. It should also be noted that letter grade of D respondents rated all five areas of social media found within the study as higher than the whole sample.

Demographic Data by 2012-13 Letter Grade Received from the Indiana Department of Education (Letter Grade of F)

The demographic data as it related to the letter grade received from the Indiana Department of Education (letter grade of F) in 2012-13 had a total of five respondents. Position type reported by respondents revealed that five (100%) were principals. Gender reported by respondents showed that one (20.0%) was a man and four (80.0%) were women. The age range

reported by respondents showed that two (40.0%) were in the 30-39 year old range, two (40.0%) were in the 50-59 year old range, and one (20.0%) was 60 years old or over. Respondents reported years of experience in the field of education that showed one (20.0%) had 0-10 years, one (20.0%) had 11-20 years, one (20.0%) had 21-30 years, and two (40.0%) had over 30 years. The percentage of students who received free or reduced lunch during the 2013-14 school year reported by respondents showed that one (20.0%) had 26-50% and four (80.0%) had 76-100%. A total of four of five respondents reported locality that showed three (60.0%) were urban and one (20.0%) was suburban. Table 26 shows the results of the respondents' perceptions of effectiveness of social media as a professional tool as it relates to communication, professional development, recruitment, networking, and transparency.

Table 26

Descriptive Data on Perceptions of Effectiveness of Social Media as a Professional Tool by 2012-13 Letter Grade Received From the Indiana Department of Education (Letter Grade of F)

Type of Professional Tool	Mean	*SD*
Communication	4.40	1.52
Professional Development	4.40	1.52
Recruitment	4.40	1.34
Networking	4.60	1.52
Transparency	4.20	1.30
Composite Score	22.00	6.96

The professional development and recruitment mean scores exhibited the greatest difference from the respondents who received a letter grade of F from the IDOE in 2012-13 compared to the whole sample. Respondents' mean score in both areas were higher than the whole sample, thus, possibly indicating the letter grade of F respondents view social media utilization as a more tool.

Inferential Test Results

For Research Question 3, an independent sample *t* test was performed to determine if a significant difference existed among the two position types, principals and superintendents. An independent sample *t*-test was selected because there was one dependent variable along with one independent variable (position type) that had two groups (principals and superintendents).

For Research Questions 4 through 7, a one-way analysis of variance (ANOVA) was used to determine whether any significant differences existed between the means of three or more independent groups. The one-way ANOVA was selected because there was one dependent variable and the independent variable had more than two levels for each of the null hypotheses. Research Question 4 asked, "Is there a significant difference on the social media composite score based on school/district location?" The independent variable was school/district locality that included three levels: urban, suburban, and rural. Research Question 5 asked, "Is there a significant difference on the social media composite score based on years of experience in the field of education?" The independent variable was years of experience in the field of education that included four levels: 0-10 years, 11-20 years, 21-30 years, and over 30 years. Research Question 6 asked, "Is there a significant difference on the social media composite score based on socioeconomic status level?" The independent variable was socioeconomic status level and consisted of four levels: 0-25%, 26-50%, 51-75%, and 76-100%. Research Question 7 asked,

"Is there a significant difference on the social media composite score based on the letter grade received from the Indiana Department of Education during the 2012-13 school year?" The independent variable was the letter grade received and consisted of five levels: A, B, C, D, and F. The dependent variable for Research Questions 4 through 7 was the social media composite score.

Null Hypothesis 1

$H_0$1. There is no significant difference on the social media composite score based on administrative position type. Assumptions were tested to ensure the validity of the results. Social media composite scores were examined to determine if potential outliers existed. Examination of the box plots determined that no data point was more than 1.5 standard deviations away from the edge of the box, which meant there were no outliers discovered. The assumption of normality was examined using the Shapiro-Wilks test. This assumption was met as the significance value in the Shapiro-Wilks test was greater than .05. The assumption of homogeneity of variance looks to ensure that the variances within both groups on the dependent variable are equal to each other. Levene's test of equality of variances was used to examine the assumption of homogeneity of variance. The assumption of homogeneity of variance had been violated, $F = 7.457$, $p = .007$. The degrees of freedom within the test were reduced which helped to accommodate for this violation.

The social media composite scores for principals ($M = 21.45$, $SD = 5.17$) and superintendents ($M = 20.27$, $SD = 6.35$) were examined using an independent sample t-test to determine if a significant difference existed. There was no significant difference between the two groups, $t(139.47) = 1.625$, $p = .107$, two-tailed. With a lack of significant differences identified with the inferential test, the null hypothesis was retained.

Null Hypothesis 2

$H_0$2. There is no significant difference on the social media composite score based on location. Assumptions were tested to ensure the validity of the results. Social media composite scores were examined to determine if potential outliers existed. Examination of the box plots determined that no data point was more than 1.5 standard deviations away from the edge of the box, which meant there were no outliers discovered. The assumption of normality was examined using the Shapiro-Wilks test. This assumption was met as the significance value in the Shapiro-Wilks test was greater than .05. The assumption of homogeneity of variance had been met, F = .992, p = .372.

The social media composite scores for urban (M = 21.89, SD = 5.46), suburban (M = 21.48, SD = 5.05), and rural (M = 20.64, SD = 5.75) were examined using a one-way analysis of variance (ANOVA) to determine if a significant difference existed. With the one-way ANOVA there were no significant differences on the social media composite score based on school/district location, $F(2, 352) = 1.59$, p = .205. With a lack of significant differences identified with the inferential test the null hypothesis has been retained. Due to no significant difference being found there was no need to perform a post hoc test.

Null Hypothesis 3

$H_0$3. There is no significant difference on the social media composite score based on years of experience in the field of education. Assumptions were tested to ensure the validity of the results. Social media composite scores were examined to determine if potential outliers existed. Examination of the box plots determined that no data point was more than 1.5 standard deviations away from the edge of the box, which meant there were no outliers discovered. The assumption of normality was examined using the Shapiro-Wilks test. This assumption was met

as the significance value in the Shapiro-Wilks test was greater than .05. The assumption of homogeneity of variance had been met, $F = 1.311$, $p = .271$.

The social media composite scores for 0-10 years of experience ($M = 20.61$, $SD = 5.75$), 11-20 years ($M = 21.87$, $SD = 5.01$), 21-30 years ($M = 21.14$, $SD = 6.02$), and over 30 years ($M = 20.42$, $SD = 5.37$) were examined using a one-way ANOVA to determine if a significant difference existed. With the one-way ANOVA there were no significant differences on the social media composite score based on years of experience in the field of education, $F(3, 352) = 1.28$, $p = .280$. With a lack of significant differences identified with the inferential test the null hypothesis was retained. Due to no significant difference being found there was no need to perform a post hoc test.

Null Hypothesis 4

$H_0$4. There is no significant difference on the social media composite score based on SES level. Assumptions were tested to ensure the validity of the results. Social media composite scores were examined to determine if potential outliers existed. Examination of the box plots determined that no data point was more than 1.5 standard deviations away from the edge of the box, which meant there were no outliers discovered. The assumption of normality was examined using the Shapiro-Wilks test. This assumption was met as the significance value in the Shapiro-Wilks test was greater than .05. The assumption of homogeneity of variance had been met, $F = .521$, $p = .668$.

The social media composite scores for socioeconomic status levels of 0-25% ($M = 20.98$, $SD = 4.64$), 26-50% ($M = 21.79$, $SD = 5.60$), 51-75% ($M = 20.24$, $SD = 5.58$), and 76-100% ($M = 21.67$, $SD = 5.77$) were examined using a one-way ANOVA to determine if a significant difference existed. With the one-way ANOVA there were no significant differences on the

social media composite score based on socioeconomic status level, $F(3, 352) = 1.902$, $p = .129$. With a lack of significant differences identified with the inferential test the null hypothesis has been retained. Due to no significant difference being found there was no need to perform a post-hoc test.

Null Hypothesis 5

$H_0$5. There is no significant difference on the social media composite score based on the letter grade received in 2012-13. Assumptions were tested to ensure the validity of the results. Social media composite scores were examined to determine if potential outliers existed. Examination of the box plots determined that no data point was more than 1.5 standard deviations away from the edge of the box, which meant there were no outliers discovered. The assumption of normality was examined using the Shapiro-Wilks test. This assumption was met as the significance value in the Shapiro-Wilks test was greater than .05. The assumption of homogeneity of variance had been met, $F = .521$, $p = .668$.

The social media composite scores for letter grades of A($M = 21.09$, $SD = 5.75$), B($M = 20.76$, $SD = 5.74$), C($M = 21.29$, $SD = 5.24$), D($M = 21.76$, $SD = 4.44$) were examined using a one-way ANOVA to determine if a significant difference existed. With the one-way ANOVA there were no significant differences on the social media composite score based on letter grade received, $F(4, 349) = .254$, $p = .907$. With a lack of significant differences identified with the inferential test the null hypothesis was retained. Due to no significant difference being found there was no need to perform a post hoc test.

Summary

Included in this chapter was an analysis of the data collected in the quantitative study to investigate the seven research questions. Principals and superintendents from Indiana were

contacted via e-mail to take part in an electronic survey that provided the descriptive and inferential data for this study. Descriptive data were used to address Research Questions 1 and 2 that asked "What are Indiana principals' and superintendents' perceptions of social media use as a professional tool?" Through the use of the electronic survey it was determined that Indiana principals exhibited a more positive perception of the effectiveness of social media as a professional tool in the areas of communication, professional development, recruitment, networking, and promoting than the whole sample. The online survey also determined that Indiana superintendents exhibited a less positive perception of the effectiveness of social media as a professional tool in the areas of communication, professional development, recruitment, networking, and promoting than the whole sample.

The survey also revealed the frequency of social media use, specific social media preference, and the most common ways social media is used by Indiana principals and superintendents professionally. The most frequent response of both principal and superintendent respondents with regard to frequency of social media was periodically during the week. Twitter was the most commonly used social media tool by both principals and superintendents. The most frequent response by both principal and superintendent respondents with regard to how they use social media was to share information with their stakeholders.

An independent sample *t* test was conducted to determine if a significant difference existed on the social media composite score based on administrative position type, as asked by Research Question 3. There was no significant difference between the two groups, $t(139.47) = 1.625$, $p = .107$, two-tailed.

A one-way ANOVA was conducted to answer Research Questions 4 through 7. Research Question 4 asked, "Is there a significant difference on the social media composite score based on locality?" The one-way ANOVA found no significant difference, F (2, 352) = 1.59, p = .205.

Research Question 5 asked, "Is there a significant difference on the social media composite score based on years of experience in the field of education?" The one-way ANOVA found no significant difference, F(2, 352) = 1.59, p = .205.

Research Question 6 asked, "Is there a significant difference on the social media composite score based on socio-economic level of students?" The one-way ANOVA found no significant difference, F(3, 352) = 1.902, p = .129.

Research Question 7 asked, "Is there a significant difference on the social media composite score based on letter grade received from the IDOE in 2012-13?" The one-way ANOVA found no significant difference, F(4, 349) = .254, p = .907.

A summary and discussion of the results are presented in Chapter 5. Chapter 5 also includes additional discussion on the descriptive and inferential data and recommendations for future use on the study of social media in education.

CHAPTER 5

SUMMARY OF FINDINGS, RESULTS, IMPLICATIONS, AREAS OF FUTURE RESEARCH

This chapter is organized into four sections that include the summary of findings, results, implications, and recommendations for future studies. The summary of findings section shares an overview of what this study discovered. The results section shares the specific results of the study as it relates to each research question. The implications section shares what impact this study may have on current and future educational leadership practices as it relates to social media. The recommendations for future research section looks at the possibility of future research in the area of social media.

The purpose of this quantitative study was to examine the use of social media among K-12 public school principals and superintendents in the state of Indiana. As social media becomes more prominent in the day-to-day lives of both adults and children, schools must develop effective ways to utilize this tool. Black and Gregersen (2003) emphasized the need for anticipatory change as leaders peer out beyond the horizon. The most effective leaders possess this vision and guide their followers accordingly. Social media allows for school leaders to utilize this tool to share successes on an immediate and frequent basis (Cox, 2012). This immediate feedback allows stakeholders to feel more connected and informed.

The focus of this study was to investigate seven research questions that were developed based on social media use by principals and superintendents in Indiana. The seven research questions were

1. What are Indiana principals' perceptions of social media use as a professional tool?
2. What are Indiana superintendents' perceptions of social media use as a professional tool?
3. Is there a statistically significant difference on the social media composite score based on administrative position type?
4. Is there a statistically significant difference on the social media composite score based on location?
5. Is there a statistically significant difference on the social media composite score based on years of experience in the field of education?
6. Is there a statistically significant difference on the social media composite score based on socio-economic (SES) level?
7. Is there a statistically significant difference on the social media composite score based on the letter grade received by the Indiana Department of Education in 2012-13?

This study administered a social media survey to all public school principals and superintendents throughout Indiana. This survey quantitatively measured the frequency, preference, and ways in which social media is used in 2014. The survey also measured the perceptions as to the effectiveness of social media as a professional tool by Indiana principals and superintendents. In the survey each respondent was asked to rate his or her perception of the effectiveness of social media as a professional tool using a 6-point Likert scale with a range of

strongly disagree to strongly agree. The results of the survey were statistically analyzed and interpreted in order to answer the research questions.

Summary of Findings

The survey results showed that 358 (15.7%) Indiana educational leaders, which included 263 (13.8%) principals and 94 (25.5%) superintendents, responded to the survey. The survey results showed that 15.9% use social media several times per day, 21.5% use it daily, and 42.5% use social media periodically during the week. There were 19.6% who stated that they never use social media. Many of the reasons for never using social media as a professional tool included being too busy, not being comfortable with social media, and fear of the negativity that may accompany social media. The most popular social media sites were Twitter (58.1%), Facebook (47.8%), Google+ (30.2%), LinkedIn (25.7%), Pinterest (12.6%), and Instagram (3.6%). There were 4.7% of administrators who shared that they use other forms of social media such as Google docs, My Big Campus, and their school and district websites. The most popular way of using social media was to "share information with stakeholders" (70.1%), followed by "staying up-to-date with the latest education information and trends" (58.9%), and "network with other educators" (47.5%). There were 6.1% of respondents who stated that they use social media to connect with alumni, business colleagues, and community service organizations as well as do background checks on potential staff members. Respondents stated that these background checks come in the form of Google searches as well as checking Facebook, Twitter, or other forms of social media to check the professionalism that may or may not be exhibited online by potential school employees.

Principals and superintendent respondents shared their perceptions on the effectiveness of social media as a professional tool. The responses showed that networking and communication

were viewed as the most effective uses of social media and that recruiting was viewed as the least effective. The potential reason for networking as the most popular of the responses could be that networking is less of a threat to school administrators as they are communicating with colleagues and not the general public. Principals and superintendents viewed professional development and recruiting as the least effective social media tools. This suggests that school administrators are still not comfortable enough with social media to use the tool for professional development and recruiting as both of those areas may still be considered areas in which face-to-face communication is more effective. The results also suggest that the idea of recruiting students is still a relatively new phenomenon, as discussed by Jackson (2011) in Chapter 1. The data suggests that some school administrators may not feel as though recruiting students from other school districts is fair or ethical as it potentially pits school corporations, as well as school administrators, against one another.

Results

Research Question 1

Research Question 1 asked, "What are Indiana principals' perceptions of social media use as a professional tool?" Table 5 shows responses to Survey Question 1, "How often do you use social media as a professional tool in your current administrative position?"

Over 80% of the principals reported that they use social media either several times per day, daily, or periodically during the week with the largest percentage reporting that they use social media periodically during the week (43.3%). This is an increase from the research in Chapter 2 that showed 76% of principals used social media in 2012 (MMS Education et al., 2012). The results showed that 19.8% of the principal respondents shared that they never used

social media as a professional tool (Appendix E). Some of the explanations as to why principals never used social media were as follows:

- I do not have time between e-mail, staff evaluations, purchase orders, student visits, curriculum development, meeting with community members, serving on community boards and programs, etc.
- I believe face-to-face meetings have the greatest potential to influence change and build relationships. Social media is simply a venue that creates controversy and disperses misinformation to the masses.
- Social media is blocked by our technology department and our superintendent discourages its use.

Table 6 shows responses to Survey Question 2, "Which social media site(s) do you use most frequently as a professional tool in your current administrative position?"

Twitter (58.9%) was the most popular social media site used by Indiana principals with Facebook (48.3%) as the next choice. This response is a shift in preference from research in the Chapter 2 literature review that showed Facebook to be the most popular social media site among principals in 2012 (MMS Education et al., 2012). A potential reason for Twitter's emergence could be the ease of which one can follow other educators around the world without having to *friend* the person, as Facebook requires. Van Dijck (2013) stated, "Twitter's strongest asset in the competition with other platforms is its ability to generate enormous amounts of "live" streams of short-lived online traffic that can be minutely tracked in real time" (p. 87). This feature of Twitter allows educators to have "edchats" that focus on various topics. Another possible reason may be that the increased use of smart phones has allowed more principals to

have a Twitter application easily accessible. Some of the sites that were mentioned as other included school web sites, My Big Campus, and Google Docs (Appendix E).

Table 7 shows responses to Survey Question 3 that stated, "In what way(s) do you use social media as a professional tool in your current administrative position?" The most popular use of social media as a professional tool among principals was "share information with stakeholders" (72.2%) followed by "stay up to date with the latest trends" (60.8%) and "stay connected with colleagues" (50.6%). These results suggest that educational leaders understand the importance of transparency as they attempt to keep stakeholders informed. In today's age of information, stakeholders want to know what is going on in their schools on a day-to-day basis. Social media has become a free and easy way for school leaders to communicate with all stakeholders who wish to stay in the loop. Some of the open-ended responses included promoting school activities, connecting with alumni, business colleagues and community service organizations, and to do background checks on potential staff members (Appendix E).

Survey Questions 4 through 8 asked respondents to share their opinions on the effectiveness of social media in the areas of communication, professional development, recruitment, networking, and transparency. Principals had the most positive feedback in the areas of networking and communication as it relates to effectiveness of social media as a professional tool. A potential reason for these responses could be that both communication and networking are imperative to the survival and upward mobility of principals in today's educational landscape. It should also be noted that principals showed more positive feedback in all five areas than superintendents, and that suggests principals are more open to the idea of using social media for communication, professional development, recruitment, networking, and transparency than superintendents.

Research Question 2

Research Question 2 asked, "What are Indiana superintendents' perceptions of social media use as a professional tool?" Table 5 shows superintendents' responses to Survey Question 1 which stated, "How often do you use social media as a professional tool in your current administrative position?" Superintendents' responses showed that 78.6% use social media several times per day, daily, or periodically during the week with the largest percentage reporting that they use social media periodically during the week (40.4%). This suggests that the majority of superintendents who responded to this survey have begun to use social media in some professional capacity. The results showed that 19.1% of the superintendents shared that they never used social media as a professional tool. The explanations why superintendents never use social media included

- Do not have time or interest to do so.
- I am just not comfortable with it and am not sure it is the best way to communicate with my community and others.
- It is not a professional way to communicate (Appendix E).

Table 6 shows responses to Survey Question 2, which stated, "Which social media site(s) do you use most frequently as a professional tool in your current administrative position?" Twitter (55.3%) was the most popular social media site used by Indiana superintendents with Facebook (45.3%) as the next choice. A potential reason for Twitter's emergence could be the ease of which a one can follow other educators from around the world without having to friend the person, as Facebook requires. Another possible reason may be that the increased use of smart phones has allowed more superintendents to have a Twitter app easily accessible. Twitter has emerged as a valuable tool to connect with other educators from around the world in a safe

and controlled manner. A few superintendents who stated that they use other included such tools as My Big Campus, corporation websites, and Google Docs (Appendix E).

Table 7 shows responses to Survey Question 3, which stated, "In what way(s) do you use social media as a professional tool in your current administrative position?" The most popular use of social media as a professional tool among superintendents was "share information with stakeholders" (63.8%) followed by "stay connected with colleagues" (55.3%) and "stay up-to-date with the latest trends" (53.2%). Superintendents shared that they also use social media in the following ways:

- I sometimes use Facebook to determine the "temperature" of the community and the misinformation that is floating out there.
- Stay current with what stakeholders are saying.
- Promote school activities and student achievement (Appendix E).

These results suggest that superintendents understand the importance of transparency as they attempt to keep stakeholders informed and that social media is a free and easy way to do so. In today's age of information, stakeholders want to stay in the know when it comes to their schools. Social media have become a free and easy way for school leaders to communicate with all those who wish to stay in the loop.

Survey Questions 4 through 8 asked superintendents to share their opinions on the effectiveness of social media in the areas of communication, professional development, recruitment, networking, and transparency. Superintendents had the most positive responses in the areas of communication and professional development as it related to effectiveness of social media as a professional tool. A potential reason for these responses could be that both communication and professional development are critical components of a superintendents' role

as an instructional leader of their school corporation. It should also be noted that superintendents scored lower than principals in all five areas. A possible reason for this could be that superintendents may not yet be at a comfort level that principals are with regard to social media as a professional tool. The perceptions and opinions of a superintendents' school board toward social media could play a big part as well.

Research Questions 3 through 7 used statistical analysis to determine if significant differences existed among various dependent variables. A composite score of Survey Questions 4 through 8 was used to determine the outcome. Survey Questions 4 through 8 asked principals and superintendents to rate their opinion of social media as an effective professional tool in the areas of communication, professional development, recruitment, networking, and transparency. A 6-point Likert scale was used with 1 being *strongly disagree* and 6 being *strongly agree*.

Research Question 3

The third research question asked, "Is there a statistically significant difference on the social media composite score based on administrative position type (principal and superintendent)?" An independent sample *t* test was used to prove that there was no significant difference. One potential reason why no significant difference was found among principals and superintendents might be that both principals and superintendents are becoming more comfortable with social media as it is more commonplace in today's world. Another important factor that I identified was that both principals ($M = 21.45$, $SD = 5.17$) and superintendents ($M = 20.27$, $SD = 6.35$) exhibited an overall positive perception of social media as an effective professional tool. Both principals and superintendents responded most positively to the idea of using social media for networking. This suggests that both principals and superintendents realize the value of using social media to meet and connect with fellow administrators. The social

media aspect of networking is easier than attending expensive conferences or workshops and allows administrators more freedom and flexibility in the area of networking. Recruitment was the area in which both principals and superintendents showed the least positivity toward. A possible reason for this could be that the idea of recruiting families from other districts is still a relatively new concept in Indiana. Recruiting families from other districts also conflicts with the idea of networking and forming positive relationships with fellow administrators from neighboring school districts. As the idea of recruiting becomes more prevalent in Indiana, it may force principals and superintendents into uncomfortable situations as they vie for families.

Research Question 4

The fourth research question asked, "Is there a statistically significant difference on the social media composite score based on location (urban, suburban, rural)?" A one-way ANOVA was used to prove that there was no significant difference. Urban ($M = 21.89$, $SD = 5.46$), suburban ($M = 21.48$, $SD = 5.05$), and rural ($M = 20.64$, $SD = 5.75$) principals and superintendents exhibited an overall positive opinion of social media as an effective professional tool. Although no significant difference was found, urban principals and superintendents had the most positive opinions of social media as a professional tool. This aligns with the data found in the literature review that showed significant growth in the number of urban adults who owned a mobile phone from 2004 to 2013 (Duggan & Smith, 2013). The ability for urban principals and superintendents to access social media from their mobile phones may have been a reason why they had the most positive feedback overall. Urban principals and superintendents had the most positive opinion in the area of communication, and suburban and rural principals and superintendents had the most positive opinion in the area of networking. A potential reason for this may be that urban principals and superintendents value communicating with their

stakeholders as it is one way to build trust. Another potential reason for using social media could be to reach a larger population. Suburban and rural principals and superintendents value networking the most as it allows them to reach out to one another as they are not as geographically close to one another as urban administrators might be.

Research Question 5

The fifth research question asked, "Is there a statistically significant difference on the social media composite score based on years of experience in the field of education (0-10 years, 11-20 years, 21-30 years, over 30 years)?' A one-way analysis of variance (ANOVA) was used to prove that there was no significant difference. Principals and superintendents with 0-10 years (M = 20.61, SD = 5.75), 11-20 years (M = 21.87, SD = 5.01), 21-30 years (M = 21.14, SD = 6.02), and over 30 years (M = 20.42, SD = 5.37) of experience exhibited an overall positive opinion of social media as an effective professional tool. Principals and superintendents with 11-20 years and 21-30 years of experience had the most positive opinion of the effectiveness of social media as a professional tool which supports the research in Chapter 2, which stated that there was a trend toward older educators exhibiting a more positive attitude toward the use of social media (MMS Education et al., 2012). A potential reason for this could be that principals and superintendents with 0-10 years of experience lack the confidence to take the risk of using social media unless it is explicitly supported by their respective school districts. It might be suggested that principals and superintendents with more experience have the self-confidence to take more risks professionally. Principals and superintendents across all ranges of experience shared that networking was an important aspect of social media as a professional tool for them. A potential reason for this may be that, regardless of years of experience, principals and superintendents value the ability to stay connected with their colleagues through social media.

Principals and superintendents lead an extremely busy life that allows for minimal time for administrators to physically get together. Social media allows busy principals and superintendents to stay connected. For principals and superintendents with 0-10 years of experience the area of professional development received the lowest scores which may suggest that younger administrators may not value the online professional development opportunities as much as the more experienced administrators.

Research Question 6

The sixth research question asked, "Is there a statistically significant difference on the social media composite score based on socioeconomic status level (0-25%, 26-50%, 51-75%, 76-100%)?" A one-way ANOVA was used to prove that there was no significant difference. I found that principals and superintendents with 0-25% (M = 20.98, SD = 4.64), 26-50% (M = 21.79, SD = 5.60), 51-75% (M = 20.24, SD = 5.58), and 76-100% (M = 21.67, SD = 5.77) exhibited an overall positive opinion of social media as an effective professional tool. Principals and superintendents with 26-50% socioeconomic status levels had the most positive opinion of social media as a professional tool followed by principals and superintendents with a 76-100% socioeconomic status level. A possible reason could be that traditionally, higher socioeconomic status levels can be found in urban areas. As discussed with Research Question 5, there has been a significant increase in the number of urban residents with mobile phones that may explain the positive attitude toward social media as a professional tool. Principals and superintendents representing all four socioeconomic status levels (0-25%, 26-50%, 51-75%, and 75-10%) exhibited the most positive attitude toward networking and the least positive attitude toward recruiting. Regardless of socioeconomic status level, principals and superintendents appeared to value the ability to network with fellow colleagues through social media which aligns with

research in Chapter 2 (Cox, 2012). Cox (2012) stated, "Social media tools provide stronger connections to local stakeholders, to fellow educators, and to the world." (pp. 112-113)

Research Question 7

The seventh research question asked "Is there a statistically significant difference on the social media composite score based on letter grade received by the Indiana Department of Education in 2012-13 (A, B, C, D, F)?" A one-way ANOVA was used to prove that there was no significant difference. Principals and superintendents of schools and districts with a letter grade of A (M = 21.09, SD = 5.75), B (M = 20.76, SD = 5.74), C (M = 21.29, SD = 5.23), D (M = 21.76, SD = 4.44), and F (M = 22.00, SD = 6.96) exhibited an overall positive opinion of social media as an effective professional tool. (It should be noted that there were only five principals and superintendents who were from F school/school districts that could skew the analysis.) Principals and superintendents who received a letter grade of D had the most positive opinion as to the effectiveness of social media as a professional tool. A potential reason could be that more urban, high socioeconomic status level schools also received a letter grade of D. If so, then the explanation of the increase of cell phone usage among those living in urban areas may explain this result. More research would be needed to affirm this possible correlation. Principals and superintendents from schools receiving A, B, C, D, and F exhibited the most positive attitude toward using social media as a networking tool and showed the least positive attitude toward using social media for recruiting. As with the results in the previous research questions, this shows a trend in how principals and superintendents in Indiana prefer to use social media.

Implications

Social media is becoming a powerful, essential, multi-purpose tool for educational leaders. Over the past 10 years, this tool has grown from college campuses into a world-wide

phenomenon. As technological developments continue to advance, social media may become more of a staple in educational settings.

The implications of this study and their application to Indiana principals and superintendents are as follows:

1. This study showed that principal and superintendent respondents in Indiana exhibited an overall positive perception of social media as a professional tool. Over 80% of the educational leaders who participated in this study stated that they consistently use social media as a professional tool. The shift from Facebook to Twitter as the preferred social media tool among Indiana principals and superintendents contradicts the data in Chapter 2 that showed Facebook as the most common social media tool among administrators. This information could be valuable to schools and school districts as they utilize social media as a professional tool. Training educational leaders on the use of the most popular sites, such as Twitter and Facebook, could benefit the user and the stakeholder.
2. The study determined that the most popular uses of social media among Indiana principal and superintendent respondents were in the areas of networking and communication. The position of principals and superintendents can be a lonely existence. The ability to network with peers who hold a similar position can be reassuring, enlightening, and even therapeutic. Time is a valuable commodity that must be used wisely. Educational leaders are discovering each other online and are able to network in small snippets of time. This opportunity to connect with each other is new and valuable with more principals and superintendents joining professional learning networks daily.

Communication has always been a must for educational leaders. The ability to effectively communicate with stakeholders has become less of an option and more of an expectation among school leaders (Cox, 2012). The most effective school leaders will be those that keep their communities informed. Social media places school leaders on a level playing field regardless of resources. From Gary to New Albany, Indiana, school leaders have access to social media to share the great things their schools are accomplishing.

3. Principals and superintendents viewed the areas of professional development and recruiting as the least effective ways to use social media as a professional tool. A possible explanation for this could be that educational leaders feel as though professional development needs to be a face-to-face experience. Although professional development opportunities exist online, educational leaders may feel as though they let go of some control when it is not a face-to-face experience.

   Recruiting of families from other districts is a shift that is relatively new in Indiana, and it may not feel natural for educational leaders to compete against neighboring school districts for children. As more school districts openly recruit families social media may gain appeal as an easy and inexpensive tool for luring families into one's school district. A future study in this area may show if this attitude changes.

4. This study discovered that educational leaders in Indiana with 11-20 years of educational experience exhibited the most positive attitude toward social media as an effective professional tool. This data may suggest that digital natives (Prensky, 2001) are growing up and becoming educational leaders. As mentioned in Chapter 2, digital

natives are more comfortable with technology due to the fact that they were born into a more technological savvy world. This age group showed the most positive opinions of social media in the areas of communication and networking. The idea of connecting with stakeholders and each other appears to be a powerful factor in this age group. This would be a beneficial piece of information for school districts as they select 21st century leaders.

5. Although this study showed an overall positive opinion of social media by educational leaders in Indiana, there were numerous comments shared that lead me to believe many leaders are still apprehensive. The following comments exhibit this apprehension:
    - I am just not comfortable with social media and am not sure it is the best way of communicating with my community and others.
    - I believe there are better methods of communicating with my constituents including face-to-face meetings.
    - I have not found a way that fits my time or my demographic well. I want to communicate more but am worried about the pitfalls.
    - I sincerely believe that Facebook and Twitter are inappropriate for K-8 students and for staff.
    - Social media is not a professional way to communicate. There is a lack of integrity as well as inaccurate information found on social media.
    - Social media is simply a venue that creates controversy and disperses misinformation to the masses.

- I do not feel comfortable using Facebook or Twitter personally; therefore, I feel completely unable to do it professionally.
- It is blocked by our technology department and our superintendent discourages its use.

The dark side of social media is a valid concern that will need to be addressed. Many school districts, such as those in Silicon Valley, intentionally have no computers in their schools due to the concern that technology has become too much of an addiction (Duivestein & Bloem, 2013). Technology socialist Turkle (2012) warned that modern technology has the power to turn us into anti-social, technological dependent beings (2012). School districts would be wise to use this information to educate and train educational leaders on the professional and appropriate uses of social media in an educational setting. This study could be used to show educational leaders that their concerns are validated, but with the proper training, social media may be used effectively and efficiently. Many educational leaders may feel as though this is another item placed on their already full plate instead of thinking of social media as a tool that can replace many items on their plate.

The fear and apprehension that once accompanied social media use appears to be subsiding as more educational leaders embrace its role. This study has shown that there is a generally positive opinion toward social media by principal and superintendent respondents. School districts may use this study to educate their school boards as to the benefits, as well as potential pitfalls, of using social media as a professional tool.

The use of social media as a communication tool is smart, cost effective, and efficient. It allows teachers, principals, and superintendents to share information with many families instantaneously.

Professional development is imperative when it comes to training certified and classified staff members in a school district. Social media is a logical platform that can be used to train, educate, and inform all team members. The ability to reach out to hundreds of team members through social media in order to develop them professionally is a feature that should be utilized.

Jackson (2011) emphasized the need for school districts across the state of Indiana to recruit families from other school districts as state laws changed. Although recruitment was one of the areas in this study in which principals and superintendents were the least enthusiastic about, the need to recruit is important to the survival of a school district. Social media can be a tool that gets the positive message of a school district out to families looking to relocate.

In 2014, networking has become critically important to millions of people around the world. Using social media to forge professional relationships has become commonplace with millions of professionals making connections every day. The use of social media to make professional connections will continue to trend upward as the desire to network increases. Principals and superintendents throughout Indiana have more to do in less time. The use of social media as a networking tool allows school administrators to network in a timely and efficient manner.

As with recruitment, being a transparent school district has become priority number one when trying to increase student enrollment. Districts across the state are competing for a finite number of students, and using social media as a platform of information and transparency is a cost effective way of sharing a positive message. School districts that wait for the good old days to return may only see their districts shrink as neighboring districts thrive.

This study has the potential to benefit school districts across the nation as the trend to communicate, professionally develop employees, network, recruit, and promote school districts

become more prominent. School districts will see the benefit of acquiring educational leaders who are familiar with social media and use it as an effective tool in their day-to-day practice. Social media is a free, easy, effective way to connect with stakeholders, students, parents, and potential families, and school districts need to utilize the social media tool to grow their districts. Competition for students and their families will increase and the need to communicate with the masses through social media is imperative.

Principals and superintendents will need to model and support proper social media use to their teachers. The use of social media by teachers in every classroom will benefit students and their families as the need for school and classroom transparency grows. Students will be impacted in a positive manner if their schools are using social media to keep them and their families informed. Principal and superintendent respondents throughout Indiana have exhibited, through this study, that social media are being used for a variety of reasons that include communication, professional development, recruiting, networking, and transparency. The use of social media, in my opinion, is on an upward trajectory, and school districts need to take advantage of this powerful professional tool.

Areas for Further Research

This study focused on the opinions and perceptions of social media by Indiana principals and superintendents. The following recommendations for further research in this area are as follows:

- Conduct a qualitative study in which principals and superintendents are selected and interviewed about their opinions of social media as a professional tool.
- Conduct a regional or national study that gathers information from a broader group of educational leaders. This data would offer more statistical power to the study.

- Conduct a study that gathers input from other stakeholders, such as school board members, parents, teachers, or students.
- Conduct a mixed-design study in which educational leaders share their opinions through quantitative and qualitative methods in order to get a more thorough opinion of social media as a professional tool.
- Replicate this study in the future to see if there are changes in the opinions and perceptions of social media use among Indiana principals and superintendents.
- Conduct a mixed-design study that investigates the area of recruiting families in the state of Indiana more closely as this topic will continue to be an important aspect of the fiscal success or failure of Indiana school districts.

Summary

Social media have become a day-to-day tool that humans use for a variety of personal and professional reasons. Educational leaders of today must take full advantage of every tool available to communicate, develop professionally, network, recruit, and promote their school districts in order to grow and prosper in today's educational climate. Cox (2012) stated, "Social media use is an expectation; it's no longer optional" (p. 73). This study has provided the reader with valuable information and insight regarding the perception and utilization of social media by Indiana principals and superintendents. I predict that, as social media becomes a more user-friendly and prominent tool, the number and frequency with which it is used will continue to climb. I recommend that school districts embrace social media and begin to develop ways in which to train their employees on the most effective and appropriate uses of this powerful tool.

School districts will find resistance among the masses of reluctant principals and superintendents who are still very leery of social media. The responses in Appendix E show that

there is much apprehension among respondents. This data does not include the many principals and superintendents who chose not to participate in this study due to their negative feelings toward social media. The challenge of school districts to remain relevant and viable in this increasingly competitive market will be to utilize every tool imaginable, including social media, to showcase the great things that are happening in their schools. Sheninger (2014) stated, "Leaders who embrace a digital style understand that this investment is necessary to create the types of schools needed to prepare students for a digital world" (p. 123). Love it or hate it, social media is a tool that must be acknowledged and utilized by school districts if they wish to keep pace with their potentially technology savvy neighbors.

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APPENDIX A: INFORMED CONSENT

June 2014

A Study on The Use of Social Media by Indiana Principals and Superintendents

You are being invited to participate in a research study about social media use by principals and superintendents in Indiana. This study is being conducted by Steve Griffin under the guidance of Dr. Terry McDaniel from the Educational Leadership, Administration, and Foundations Department at Indiana State University. This study is being conducted to fulfill a dissertation requirement. The purpose of this study is to evaluate the use of social media by principals and superintendents in Indiana. A survey is being sent to all public school principals and superintendents in the State of Indiana.

There are no known risks if you decide to participate in this research study. There are no costs to you for participating in the study. The information you provide will help school corporations determine the factors that persuade or dissuade the use of social media by public school principals and superintendents in Indiana. The questionnaire will take approximately five minutes to complete. The information collected may not benefit you directly, but the information learned in this study may provide more general benefits.

This survey is anonymous. You will not be asked to share your name at any time. This is a web-based survey, although there is no absolute guaranteed anonymity, there will be no collection of any participants' IP addresses or any attempt to identify the names of the participants by the researcher. You may delete this e-mail in which this message was delivered at any time. There will be no future e-mail contacts concerning this survey. In addition, no one will be able to identify you or your answers, and no one will know whether or not you participated in the study. Individuals at the ISU Institutional Review Board may inspect these records. Should the data be published, no individual information will be disclosed.

Your participation in this study is voluntary and *extremely appreciated*. By completing parts or all of the survey through the Qualtrics program, you are voluntarily agreeing to participate. You are free to decline to answer any particular question you do not wish to answer for any reason. At any time, you may close the browser and exit the program if you do not wish to complete the survey after starting the process.

If you have any questions about the study, please contact me at (812) 542-3105 or at sgriffin@nafcs.k12.in.us. You may also contact my faculty sponsor, Dr. Terry McDaniel, at (812) 237-3862 or at terry.mcdaniel@instate.edu.

If you have any questions about your rights as a research subject or if you feel you've been placed at risk, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Indiana State University, Office of Sponsored Programs, Terre Haute, IN, 47809, by phone at (812) 237-8217, or by e-mail at irb@indstate.edu.

APPENDIX B: FOLLOW UP E-MAIL TO PRINCIPALS AND SUPERINTENDENTS

June, 2014

A Study on The Use of Social Media by Indiana Principals and Superintendents

Hello Again!

Thank you so much for your willingness to participate in the survey of *The Use of Social Media by Indiana Principals and Superintendents.* Your quick response was greatly appreciated! With your assistance the opinions and perceptions on the use of social media by principals and superintendents in Indiana will be used to complete the study. If you have not yet had the opportunity to take the survey and would still like to do so please click the link below. Your name and e-mail address is not used for the survey and it should only take approximately five minutes to complete. *Your input is greatly appreciated!*

Thank you in advance for your time and participation.

The Survey can be found here: https://indstate.qualtrics.com/SE/?SID=SV_4TMCIvvVgLoNL3D

This link will be active until Monday June 23, 2014.

If you have any questions about the study, please contact me at (502) 836-4424 or at sgriffin@nafcs.k12.in.us. You may also contact my faculty sponsor, Dr. Terry McDaniel, at (812) 237-3862 or at terry.mcdaniel@indstate.edu

If you have any questions about your rights as a research subject or if you feel you've been placed at risk, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Indiana State University, Office of Sponsored Programs, Terre Haute, IN, 47809, by phone at (812) 237-8217, or by e-mail at irb@indstate.edu.

In advance, thank you for your time and participation.

Steve Griffin

Date of IRB Approval: May 26, 2014
IRB Number: 597552-2
Project Expiration Date: Study is exempt – no expiration date

APPENDIX C: USE OF SOCIAL MEDIA BY INDIANA PRINCIPALS AND SUPERINTENDENTS SURVEY

My name is Steve Griffin and I am a doctoral candidate at Indiana State University. For my dissertation study, I have chosen to study the use of social media by principals and superintendents in Indiana. I am requesting your participation in this research study. Your participation is voluntary and there is no consequence if you do not participate. No one will be able to identify you as a participant. At any time you have the right to refuse to participate by simply closing the browser and exiting the program

Section I: Social Media Use

1) How often do you use social media as a professional tool in your current administrative position?
   A. Several times per day
   B. Daily
   C. Periodically during the week
   D. Never
      If "never" was chosen the respondent was asked to explain why they do not use social media as a professional tool.

2) Which social media sites do you use most frequently as a professional tool in your current administrative position (you may choose more than one social media option below)?
   A. Facebook
   B. Twitter
   C. Google+
   D. LinkedIn
   E. Instagram
   F. Pinterest
   G. Other
      If "other" was chosen the respondent was asked to share what social media sites they use most often as a professional tool.

3) In what ways do you use social media as a professional tool in your current administrative position?
   A. Stay connected with colleagues.
   B. Share information with stakeholders (families, school board members, public in general, etc.).

C. Stay up to date with the latest educational information, research, and trends.
D. Network with other educators from outside the district.
E. Other.
If "other" was chosen respondents were asked to share what other ways they use social media as a professional tool.

Section II: Effectiveness of Social Media

Directions: Please answer each question as it pertains to your opinion related to the effectiveness of social media as a principal/superintendent.

4) Effective principals/superintendents utilize social media for communicating with their community.
1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Somewhat Agree
5 = Agree
6 = Strongly Agree

5) Effective principals/superintendents utilize social media for professional development.
1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Somewhat Agree
5 = Agree
6 = Strongly Agree

6) Effective principals/superintendents utilize social media to recruit potential families from outside his/her school district.
1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Somewhat Agree
5 = Agree
6 = Strongly Agree

7) Effective principals/superintendents utilize social media as a tool to network with other educators.
1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Somewhat Agree
5 = Agree
6 = Strongly Agree

8) Effective principals/superintendents believe that social media allows for greater transparency among schools/school districts and their community.
   1 = Strongly Disagree
   2 = Disagree
   3 = Somewhat Disagree
   4 = Somewhat Agree
   5 = Agree
   6 = Strongly Agree

Section III: Demographic information

9) What is your current administrative position?
   Principal Superintendent

10) What is your gender?
   Female Male

11) What is your age?
   29 or under 30-39 40-49 50-59 60 or over

12) How many years of experience do you have in the field of education (ending in the 2013-14 school year)?
   0-10 years 11-20 years 21-30 years Over 30 years

13) What percentage of students in your school (principal) or school district (superintendent) received free or reduced lunch during the 2013-14 school year:
   0 – 25% 26-50% 51-75% 76% - 100%

14) What was the 2012-13 letter grade your school (principal) or school district (superintendent) received from the Indiana Department of Education?
   A B C D F

15) What is the best descriptor of your school (principal) or district (superintendent) locality?
   Urban Suburban Rural

16) In your opinion, what future social media studies should be conducted as it relates to education?

APPENDIX D: INTERNATIONAL SOCIETY FOR TECHNOLOGY EDUCATION STANDARDS

ISTE-NETS 2007 Student Standards

Creativity and innovation. Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

1. Apply existing knowledge to generate new ideas, products, or processes.
2. Create original works as a means of personal or group expression.
3. Use models and simulations to explore complex systems and issues.
4. Identify trends and forecast possibilities. (International Society for Technology in Education, 2007, para. 1)

Communication and collaboration. Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

1. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
2. Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
3. Develop cultural understanding and global awareness by engaging with learners of other cultures.

4. Contribute to project teams to produce original works or solve problems. (International Society for Technology in Education, 2007, para. 2)

Research and information fluency. Students apply digital tools to gather, evaluate, and use information.

1. Plan strategies to guide inquiry.
2. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
3. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
4. Process data and report results. (International Society for Technology in Education, 2007, para. 3)

Critical thinking, problem solving, and decision making. Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

1. Identify and define authentic problems and significant questions for investigation.
2. Plan and manage activities to develop a solution or complete a project.
3. Collect and analyze data to identify solutions and / or make informed decisions.
4. Use multiple processes and diverse perspectives to explore alternative solutionsiste.org/nets. (International Society for Technology in Education, 2007, para. 4)

Digital citizenship. Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

1. Advocate and practice safe, legal, and responsible use of information and technology.

2. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
3. Demonstrate personal responsibility for lifelong learning.
4. Exhibit leadership for digital citizenship. (International Society for Technology in Education, 2007, para. 5)

Technology operations and concepts. Students demonstrate a sound understanding of technology concepts, systems, and operations.

1. Understand and use technology systems.
2. Select and use applications effectively and productively.
3. Troubleshoot systems and applications.
4. Transfer current knowledge to learning of new technologies. (International Society for Technology in Education, 2007, para. 6)

ISTE-NETS 2008 Teacher Standards

Facilitate and inspire student learning and creativity. Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

1. Promote, support, and model creative and innovative thinking and inventiveness.
2. Engage students in exploring real-world issues and solving authentic problems using digital tools and resources.
3. Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes.

4. Model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments. (International Society for Technology in Education, 2008, para. 1)

Design and develop digital-age learning experiences and assessments. Teachers design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS·S.

1. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity.
2. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress.
3. Customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources.
4. Provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching. (International Society for Technology in Education, 2008, para. 2)

Model digital-age work and learning. Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

1. Demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations.

2. Collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation.
3. Communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital age media and formats.
4. Model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning. (International Society for Technology in Education, 2008, para. 3)

Promote and model digital citizenship and responsibility. Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.

1. Advocate, model, and teach safe, legal and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources.
2. Address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources.
3. Promote and model digital etiquette and responsible social interactions related to the use of technology and information.
4. Develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital age communication and collaboration tools. (International Society for Technology in Education, 2008, para. 4)

Engage in professional growth and leadership. Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and

professional community by promoting and demonstrating the effective use of digital tools and resources.

1. Participate in local and global learning communities to explore creative applications of technology to improve student learning.
2. Exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others.
3. Evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning.
4. Contribute to the effectiveness, vitality and self-renewal of the teaching profession and of their school and community. (International Society for Technology in Education, 2008, para. 5)

ISTE-NETS 2009 Administrator Standards

Visionary leadership. Educational administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization.

1. Inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders.
2. Engage in an ongoing process to develop, implement, and communicate technology-infused strategic plans aligned with a shared vision.

3. Advocate on local, state and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan. (International Society for Technology in Education, 2009, para. 1)

Digital-age learning culture. Educational administrators create, promote, and sustain a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students.

1. Ensure instructional innovation focused on continuous improvement of digital-age learning.
2. Model and promote the frequent and effective use of technology for learning.
3. Provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners.
4. Ensure effective practice in the study of technology and its infusion across the curriculum.
5. Promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital age collaboration. (International Society for Technology in Education, 2009, para. 2)

Excellence in professional practice. Educational administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources.

1. Allocate time, resources, and access to ensure ongoing professional growth in technology fluency and integration.
2. Facilitate and participate in learning communities that stimulate, nurture and support administrators, faculty, and staff in the study and use of technology.

3. Promote and model effective communication and collaboration among stakeholders using digital age tools.
4. Stay abreast of educational research and emerging trends regarding effective use of technology and encourage evaluation of new technologies for their potential to improve student learning. (International Society for Technology in Education, 2009, para. 3)

Systemic improvement. Educational administrators provide digital age leadership and management to continuously improve the organization through the effective use of information and technology resources.

1. Lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources.
2. Collaborate to establish metrics, collect and analyze data, interpret results, and share findings to improve staff performance and student learning.
3. Recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals.
4. Establish and leverage strategic partnerships to support systemic improvement.
5. Establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning. (International Society for Technology in Education, 2009, para. 4)

Digital citizenship. Educational administrators model and facilitate understanding of social, ethical and legal issues and responsibilities related to an evolving digital culture.

1. Ensure equitable access to appropriate digital tools and resources to meet the needs of all learners.

2. Promote, model and establish policies for safe, legal, and ethical use of digital information and technology.
3. Promote and model responsible social interactions related to the use of technology and information.
4. Model and facilitate the development of a shared cultural understanding and involvement in global issues through the use of contemporary communication and collaboration tools. (International Society for Technology in Education, 2009, para. 5)

APPENDIX E: OPEN-ENDED RESPONSES TO SURVEY QUESTIONS

If you selected "Never" in question 1 please briefly explain why you choose not to use social media as a professional tool.

- I do not have time between e-mail, staff evaluations, purchase orders, student visits, curriculum development, meeting with community members, serving on community boards and programs, etc. We do have a Facebook page but is not used and students' parents do not use it either.
- Not sure how and don't have the time.
- I don't have a smartphone and I am not interested in social media.
- Elementary level - I intentionally do not have social media pages (personally or professionally) at this time. Our parent association has a 'Facebook' page for information and I check that site periodically.
- Have not found a way that fits time or my demographic well; want to communicate more, but am worried about pitfalls.
- I use e-mail and the telephone. It is easier to type information and I am able to give more detailed information.
- I believe face-to-face meetings have the greatest potential to influence change and build relationships. Social media is simply a venue that creates controversy and disperses misinformation to the masses.
- I fear social media use could cause problems.
- We do not have 1:1 capabilities as of yet. I have not taken time to explore the benefits of using social media.
- I do not feel it is appropriate to use social media in school related business. We have other methods of communication with our school community.
- I am just not comfortable with it and I am not sure it is the best way of communication with my community and others.
- Personal-professional use is dangerous in my opinion. The school will use it, but I do not have access to it.
- Not controllable enough.
- Need additional training.
- I have not taken the time to start and was discouraged by some negative comments that were posted on other elementary school Facebook accounts. I am considering trying to maintain a FB page in the upcoming year.

- It's not a professional way to communicate. Lack of integrity. Much information presented on social media sites is inaccurate.
- As a principal, I don't use social media to avoid having something posted on my page that I could not justify. I may in the future use a page to share information from me but currently our school website fills that need for me.
- I am leery of all social media. If I knew more of how to use it maybe I would feel more confident with it.
- Too busy.
- I am not personally familiar enough with social media to use it productively. I do use Learning Connection and Pinterest to stay current with regard to information in the field of education.
- I don't have time.
- I use websites----just have not yet engaged in social media for PD or to communicate.
- For communication I still rely upon e-mail or phone.
- I don't have time.
- Just have chosen not to.
- Negative feedback, don't want negative responses posted, people are too irresponsible with social media, do not want to be associated with the poor choices of others.
- No time and I don't need media to perform my duties.
- I sincerely believe that Facebook and Twitter are inappropriate for K-8 students and for staff.
- I am unfamiliar with the other media sites to comment.
- I have not signed up.
- Don't feel as though I have the time each day.
- I have too much to do and not enough time as it is. I see the use of social media being a major time drain with much less positive result than is generally accepted.
- Not time to do well....
- Have no interest in using it.
- Little understanding and fear.
- I am uncomfortable in doing so.
- Our school counselor runs our school Facebook account.
- Time and dangerous.
- My time is already maxed out with all of my responsibilities. Having another task would not give my brain a break. I communicate well with text, e-mail, phone, and most importantly, in person.
- It would probably be a lack of knowledge of using it effectively.
- It is not a means that I am comfortable with using.
- Too negative
- It is blocked by our technology department, and our superintendent discourages its use.

- The corporation level maintains social media and messaging is sent to them.
- Do not have the time or the interest to do so.
- Not familiar with it and it can put too much information out there.
- Not sure what to use.
- Not something I am interested in doing. Don't think it is a particularly effective use of my time.
- I believe there are better methods of communicating to my constituents including face-to-face meetings.
- Not comfortable with the confidentiality.
- Time is my biggest issue.
- Too many negatives attached, too much drama, don't like the responses that are negative or hurtful, too much time spent on unnecessary details.
- I have not had time to learn how or if there is value. I do not use social media in my home life.
- E-mail and texting is the mode of communication.
- Do not like social media. Not necessary for me. Problem after problem. They are not worth it!!!!
- We have a computer apps class (advanced) that updates our school webpage, Facebook page, and Twitter accounts each day. Our athletic department also has a Facebook page that is updated with scores, etc. I would like to become more progressive with social media and plan to utilize it to better serve our school community.
- Turned off by the negativity found in social media - so it's a personal choice.
- People don't TALK. But I do!
- I do not believe in social media. Social media takes up too much time from our day and I want my children to work not be on a phone all day.
- This is my first year at this school so it was due to time. I do plan on using it for the 14-15 school year.
- Too much bad information. People post items that are unusable or things that are not helpful to me.
- Fearful of negative impact.
- Difficulty accessing from within school.
- We just haven't as a corporation embraced it. Well, I have looked at Pinterest and Googled a few topics.
- We communicate via paper, phone, e-mail, text, or in person.
- I do not feel comfortable using Facebook or Twitter personally, therefore I feel completely unable to do it in a professional capacity.

- I don't see the need to do so.
- Not helpful.

- There are other ways to communicate. Why would a school open itself to the negativity that social media encourages?

If you selected "other" as your response in question 2 please share the social media site(s) you use most frequently in the text box below.

- School Website.
- E-mail.
- Staff has a 'text list' that we give school closing announcements --- replaced the old 'phone tree'.
- Twitter occasionally.
- Our school website.
- My Big Campus.
- We use a messaging system to communicate with parents.
- Google Docs.
- My Big Campus.
- My Big Campus.
- Daily newsletter by mass e-mail to subscribers and we have a TV station.
- I do not use it to respond about topics, I look at comments sent out and some discussion that goes on.
- We page blogging.

If you selected "Other" on question 3 please share the ways in which you use social media as a professional tool in your current administrative position in the text box below.

- I google what I need.
- I do not use social media.
- Promoting/Recognizing positive student performance.
- I sometimes use Facebook to determine the "temperature" of the community and the misinformation that is floating out there.
- Cell phone texting.
- Promote school activities and student achievement.
- Pinterest - educational ideas (i.e., Bulletins boards, etc.).
- Connect with alumni, business colleagues, & community service organizations.
- Don't use it.
- Do not use social media outside of texting.
- None used.
- Stay current with what stakeholders are saying.

- "Branding" and bragging about our school which I think goes beyond sharing of information.
- Do background checks on potential staff members.
- Social media messaging is completed at the corporation level.
- Data organization.
- I use Twitter as PR tool for the good things going on at our school.
- Get students excited about attending school events and promoting students that are participating in activities.
- Look at school twitter account and give suggestion on what to put out.
- Share successes and communicate celebrations.

In your opinion, what future social media studies should be conducted as it relates to education or educational leadership?

- Student social media usage and it's negative impact on school performance and school culture.
- I biggest problem is the amount of junk that you have to sort through to locate what you might want to see, the swift change of the "in" thing and the technology to keep up with the current job. Most of my fellow administrators do not seem to use social media for educational purposes as much as they do for their private lives.
- It might be great to have our districts support principals in some of these studies and equip us to use social media as another tool to share our vision/mission, etc.
- No opinion.
- Benefits and risks of using social media in the classroom.
- Accessibility for all families.
- I am not sure.
- How can we get devices in the hands of all students?
- Best use and better integration, how to best connect with our community.
- It would be interesting to find what changes have been implemented in your district after discovering on a social media site.
- Not sure, I would love to learn more about it but can't find classes or PD to support my needs.
- Effects of current uses on development of teachers and administrators.
- Correlation between amount of time students spend on social media and their engagement in extra-curriculars and their academic achievement (esp. reading

and writing skills).

- I feel the effectiveness of social media should be studied.
- How administrators actually use and implement professional development from social media.
- It will continue to grow as a way to deliver information to our constituents and our colleagues.
- Social media does have the potential to be a useful tool. Unfortunately, in a community that does not have money or access to computers / smart phones, social media has not proven to be as effective as one would hope. In a more affluent community (such as Carmel), social media is likely quite useful, but to say that it makes a school administrator effective or not is irrelevant, as it depends on the needs / wants of the community.
- Use of social media by stakeholders.
- Not sure.
- How students use it to in their educational pursuits.
- Who benefits from our social media.
- The value or effectiveness of the use.
- Quantitative studies showing a link between social media and school recruitment, test scores or customer satisfaction.
- Cyber bullying' effect on student achievement.
- Social media studies should focus on the influence of social median in relation to classroom instruction and learning modalities.
- How to control parents from using social media to air concerns about their child's school.
- Studies which look at the degree to which families and the public use social media to determine their opinion of the school/district.
- How to have dynamic interactions with educators and the public they serve?
- No thoughts at this time.
- Are we too connected as professionals?
- Not sure.
- Dispelling rumors, positive info.
- How effectively these tools enhance the positive image and transparency of schools.
- How social media is used effectively as a teaching tool in elementary classrooms.

- It will eventually be number in delivery of education.
- Effect on school culture using social media.
- How many parents and students (on free and reduced lunch) have internet access?
- How many students have smart phones?
- Are teachers using smart phones for educational benefits?
- My biggest concern is that public schools were set up to represent the district in which they exist. As we open up public schools to people outside the districts and tie money to it, people will use social media as a recruiting tool and it will eventually shift into the same formula we see in politics with corruption and slander because money is involved. I don't believe that education was ever meant to be about money. It is meant to be about preparing young people to be citizens of character with skills to be productive. At this time I believe that this can be accomplished without social media and the baggage that comes with it.
- What social media is the most used by our constituents to reach the most stakeholders.
- Results from use of social media - how effective is it in regard to communicating with stakeholders, networking with professionals, professional development, etc.
- We need to try and stay current with the technology used by our students.
- See how many families actually use social media...most low income families don't have a computer.
- Using social media to teach courses in their entirety.
- Are users reaching the desired audience?
- How are classroom teachers utilizing social media in the classroom?
- Students that utilize social media and participation in extracurricular activities.
- To what degree are communities/school districts receiving the social media communication? What impact is it having?
- Is it effective for students in their learning?
- How can administrators effectively communicate with students using social media?
- I would think that a replication of this study should be done as Twitter takes a greater role in communications between principals, superintendents and their school communities. There are many research possibilities with social media playing a larger role in the lives of our students.
- How much does student use of social media interferes with a positive school climate?
- A future social media study could focus on the use of social media to improve

educational processes in schools.

- The effectiveness it actually has and to what degree we are losing out on face-to-face -- "real" relationships.
- Does the use of social media to communicate with families increase the level of involvement families?
- How it negatively impacts students behaviors and interactions.
- How is social media imposing on the lives of administrators.
- I'm not sure specifically, but would be interested to see the results of this survey.
- Types of issues encountered, time spent addressing these issues.
- Effectiveness and availability vs. lack of state and federal funding.
- The ill effects of social media . . .
- Be careful has ruined careers.
- Social media use = Increased student scores?
- It's impact on culture.
- How parents utilize social media in selecting school choose.
- There needs to be a study done to determine to what degree stakeholders actually use social media to gather info vs. to share opinions and how much of those opinions are positive vs. negative.
- Over-representation of strongly opinionated patrons (lunatic fringe) drowning out main stream patrons.
- I guess I wonder how effective it is. It's great for parents and community members using that site, but if they don't like/use the chosen social media site, it's not reaching them.
- I'd be interested in sites that really invest in school leadership. There are very few at this time.
- Which social media site is the most effective or efficient for schools?
- Parents' frequency for reading/using social media by school leaders.
- Perspectives of stakeholders, effectiveness of use.
- Ask those who are administrating the technology the number of followers, hits or a combination of both. Statistics for social media from end users would be good.
- Although social media is one outlet, we must be careful to guard the communication online and to ensure all families receive information. I have seen superintendents and principals who use social media as the primary communication tool and too many families do not have access to social media.

Facebook can also be a loose cannon if not monitored properly. Effective principals use the tools, but do not rely on them. Effective use of social media is the key. I have seen more damage than good lately.

- How does the increase in use of social media as a communication tool effects the English Learner parent?
- Use of social media for professional development.
- How is social media used within the classroom?
- Use of social media in the classrooms.
- Most of my exposure with social media has been dealing with student inappropriate use. Unfortunately, I have only witnessed the downside of social media. I have worked with a lot of students who have been hurt by other students (and some parents) with insensitive words and/or pictures. With cyber bullying being a huge concern in our society, I have had to deal with lots of immaturity, hurt, and ignorance with social media use. It has allowed our tabloid society to have a larger stage.
- Effectiveness on the quality of instruction and student engagement.
- Effective use, legality, and training.
- How does social media support teachers and students to achieve high levels of success on state mandated tests?
- Effectiveness of student/teacher interactions with social media.
- Impact on student learning. Impact on marketing schools

- Does it improve student achievement?
- The number of parents connected to established school social media sites.
- Effective ways to communicate outside of social media.
- What percentage of students use social media for things they shouldn't? Are digital citizenship lessons working?
- The positive and negative interactions between students, teachers and administrators on social media.
- What is the impact of social media in connecting to stakeholders? Does the use of social media impact connectedness of students, staff, parents, and community members?
- Since many are using social media, what impact is it really having or not having?